

VectorZIEL steers a 556-m, 32° angled shaft precisely to target in remote West Africa



LOCATION	APPLICATION
West Africa	Mining shaft

TECHNOLOGY

The VectorZIEL™ 800 rotary steerable system provides highly accurate inclination and azimuth hold-and-steer capability, ideal for holes and shafts that must break through on target within tight tolerance. It uses an autonomous, closed-loop steering system with precise near-bit measurements to hold the target trajectory, and can receive downlinks to set new target trajectories.

CHALLENGE

A mine in West Africa needed to drill a precise shaft from surface to an underground mine location, which required an extremely straight hole. The formation was challenging and required the ability to maintain and steer back to centerline at all times, so near-bit inclination and azimuth measurements were essential.

RESULTS

The VectorZIEL 800 RSS drilled the shaft to target depth and broke through to the underground mine within the 1.3-m tolerance barrel. The customer was then able to develop the shaft and gain easier access to the underground location.



SHAFT LENGTH	SHAFT ANGLE	TOLERANCE	RESULT
556 m	32°	1.3 m	On target

