CASE HISTORY | VECTORZIEL™ RSS

VectorZIEL drills a 1,800-m S-profile section in a single run

LOCATION
Mexico, onshore

PROFILE
S-type

MUD
OBM, 1.3 g/cm^3

TECHNOLOGY

The VectorZIEL™ automated rotary steerable system (RSS) provides precise trajectory control using near-bit measurements combined with a unique steering control system. With an integrated pulser, VectorZIEL provides near-bit MWD surveys together with continuous directional and azimuthal gamma ray measurements.

CHALLENGE

The VectorZIEL 800 RSS was deployed on an onshore well in Mexico planned as an S-type profile: vertical kickoff, a 2.5°/30-m build, a 33° tangent and a 1.5°/30-m drop. Previous wells were drilled with steerable motor BHAs, which required significant slide time to hold the trajectory in the soft formation.

RESULTS

The VectorZIEL 800 RSS showed tight control in every directional phase: kickoff, build, tangent and drop. The well plan was delivered despite the high ROP, significantly reducing drilling time compared with the previous well. The 1,800-m section was drilled in less than 40 drilling hours.

DEPTH IN / OUT	DRILLING HRS	CIRCULATING HRS	ROP	FLOW RATE	WOB
152 / 1,938 m	39.6	57.5	60 m/hr	660 gpm	10 t