

When The Well Path Changes, Control Can't

Integrated Directional Drilling Delivered 6,355 ft From 7-in Shoe to TD in One Bit Run With Zero NPT

Objectives

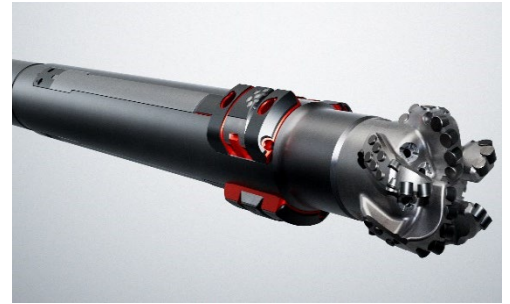
- Drill a challenging offshore 6 1/8-in directional producer section from the 7-in shoe to TD in a single bit run across 6,355 ft (1,937 m).
- Execute a complex 3D S-shaped trajectory with planned directional changes, including a drop from 61° to 12°, a build back to 47°, and a left azimuthal turn from 224° to 42°.
- Maintain precise well placement to avoid offset-well collision risk, acquire real-time and recorded LWD data, and minimize nonproductive time (NPT).

Our Approach

- Deployed Weatherford Magnus® Saker RSS 475 with integrated LWD technologies, including HEL™ hostile-environment-logging measurement-while-drilling system, BAP™ bore and annular pressure sensor, HAGR™ high-temperature azimuthal gamma ray tool, TVM™ total vibration monitor, and the IDS™ integrated directional sonde.
- Used the RSS bottomhole assembly (BHA) to improve directional control, expand the flow-rate window, support dogleg severity (DLS) capability up to 1°/30 ft (10 m) planned and 1.58°/30 ft (10 m) achieved, improve hole cleaning, reduce differential-sticking risk, and enable power sharing through a 4C M/LWD-to-RSS connection for low-flow or lost-circulation contingencies.

Value to Customer

- Reached TD in one bit run, drilling the section from 7,182 to 13,537 ft (2,189 to 4,126 m) for a total interval of 6,355 ft (1,937 m), with less than one hour required to drill the shoe.
- Delivered the longest and deepest directional 6 1/8-in section on the platform, placed the well as planned, captured 100% of required LWD data in real time, and recorded modes without NPT or BHA-component issues, and enabled a smooth casing running to the bottom.
- Achieved KPIs including max on-bottom ROP of 229.7 ft/hr (70 m/hr) and average IADC ROP of 78.7 ft/hr (24 m/hr).



The Magnus Saker RSS delivers a step-change in drilling performance by extending run length, increasing dogleg capability, and enabling real-time trajectory control in demanding environments.

LOCATION

Gulf of Thailand

WELL TYPE

Development, producer

RIG TYPE

Jackup

FORMATION

Clays and sandstones

PRODUCTS/SERVICES

- Magnus Saker RSS
- HEL system
- BAP sensor
- HAGR tool
- TVM monitor
- IDS sonde

