

I-Wheel™ and Articulating Hole Finder™

Extend the Range of Wireline in Thailand

Objectives

- The operator performs wireline petrophysical logging and pressures / samples from the reservoir section of most of their production wells.
- The well profiles are complex with 3D directional changes and extended tangent sections with deviation in excess of 70 degrees.
- With low running weight and consequent sensitivity to micro tortuosity and borehole irregularities, these well profiles make reaching depth with wireline logging tools very challenging.

Our Approach

- Pre-job modelling using the SMART Planner™ software showed that the tool string alone could not reach the target depth (TD).
- Adding I-Wheel™ rollers to the string design reduced the friction enough to enable the tool string to negotiate the complex profile to the reservoir interval.
- The articulating hole finder (AHF) was integrated into the tool string to provide 360-degree reactive articulation and optimize the angular deflection to further minimize the risk of hanging up and providing additional friction reduction and assurance.

Value to Customer

- Increased well logging efficiency.
- Reduced risk and cost.
- Multiple wells have been successfully logged; and the data acquisition objectives achieved.



The Weatherford articulating hole finder is a specifically engineered hole finder that incorporates responsive articulation and adjustment based on downhole conditions.

LOCATION

Thailand

HOLE SIZE

6.125 in. (155.575 mm)

AHF ROLLER NOSE SIZE

4.75 in. (120.65 mm)

I-WHEEL TYPE

Integrated

PRODUCTS/SERVICES

- Articulating Hole Finder™
- I-Wheel™
- SMART Planner™ Wireline Simulation Software

