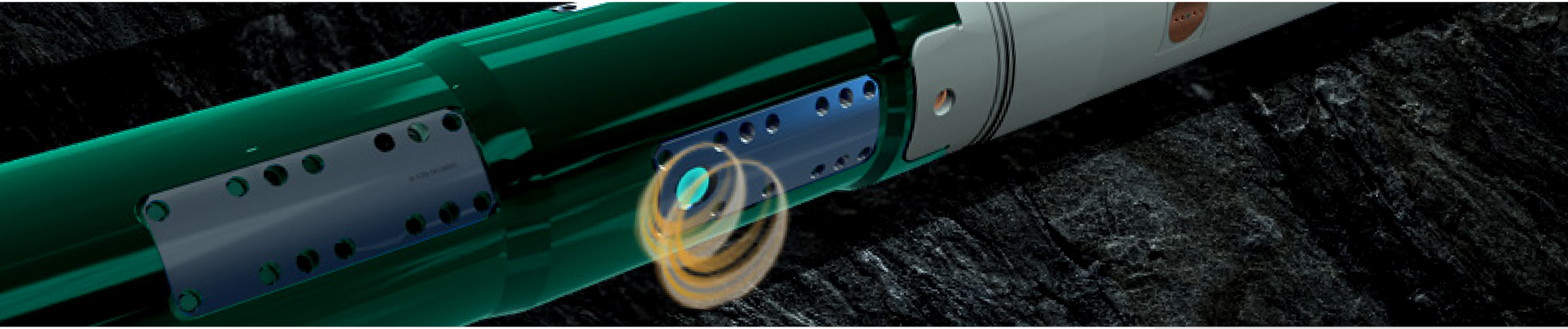

Make faster, more informed well development decisions with industry-leading acoustic images

ImageTrak UHD ultrasonic borehole imaging service

Real-time access to ultra high-resolution borehole images is crucial for supporting informed decisions regarding borehole integrity management, wellbore placement, geological evaluation, and structural characterization. However, acquiring images in unstable formations, complex well paths, or thinly bedded formations can be risky or even impossible for wireline logging services.

The **ImageTrak™ UHD ultrasonic borehole imaging service** from Baker Hughes offers a proven and reliable logging while drilling solution for acquiring borehole images. The ImageTrak UHD service uses ultrasonic transducers operating in pulse-echo mode to capture amplitude and travel-time images of the borehole wall in both water-based and oil-based mud systems.

GAIN HIGH-RESOLUTION RESERVOIR INSIGHTS IN REAL TIME

As an integral part of the bottomhole assembly (BHA), the ImageTrak UHD service rotates during drilling to capture high-resolution measurements across the entire circumference of the wellbore. This allows full borehole wall imaging—even at very high rates of penetration (ROP) of up to 400 ft/hr—without sacrificing quality.

The ImageTrak UHD service integrates seamlessly with other services in a typical triple-combo BHA, without adding to the length or number of components in the assembly, thereby eliminating the financial and technical risk associated with additional BHA components including bit to sensor offsets.

This advanced service delivers images with an industry-leading vertical resolution at 0.25 in. (0.64 cm) and **samples at intervals of 0.5 seconds.** With the capability to capture 256 sectors in dedicated memory and 64 sectors in real time, the service delivers ultra-high-definition wellbore images to guide more informed decisions.

By enabling imaging while drilling, ImageTrak UHD provides a range of information on the wellbore's condition and the geology of the surrounding formation. This information enables advanced analysis, including formation dip and strike, structural mapping, and well-to-well correlation, as well as formation fracture studies, high-resolution borehole geometry, and secondary porosity distribution in carbonates. Insights from these images provide valuable guidance on drilling, completion, and production decisions at the wellsite.

APPLICATIONS

- Formation dip and strike
- Structural mapping and well-to-well correlation
- Detailed formation fracture studies
- Hydraulic fracturing optimization
- Wellbore stability and geomechanical studies
- High-resolution borehole geometry
- Secondary porosity distribution in carbonates

BENEFITS

- Acquire clear, high-resolution images in water- and oil-based mud systems while drilling
- Optimize completion and casing designs
- Enhance production through fracture identification
- Reduce wellbore stability risks
- Samples intervals at 0.5 seconds

OPTIMIZE COMPLETION AND CASING DESIGNS

ImageTrak UHD reduces completion costs, risks, and nonproductive time (NPT) by identifying trouble zones for setting packers or casing. Operators can then make informed decisions based on hole conditions for subsequent rig operations.

ENHANCE PRODUCTION THROUGH SHARPER FRACTURE IDENTIFICATION

In unconventional reservoirs, the ImageTrak UHD provides detailed insights into the types of fractures (natural vs. induced, open vs. closed), which is crucial for ensuring the economic success of a well.

The service's high-resolution imaging helps identify hydraulic fractures and refine stimulation strategies to optimize perforation zones. The service also helps maximize production and reduce per-barrel production costs by minimizing connectivity to aquifers or nearby wells.

REDUCE WELLBORE STABILITY RISKS

The ImageTrak UHD service helps determine hole quality and the presence of drilling-induced damage and the mud weight is maintained within the window between the fracture gradient and pore pressure.

With this information readily available in real time, operators can save costs and reduce risks by preventing extended casing operations, avoiding lost-in-hole or stuck-pipe events, and optimizing BHA designs to minimize undulations in the lateral.

Contact Baker Hughes to learn why the ImageTrak UHD is the predictable, productive, and profitable borehole imaging choice when detailed reservoir characterization, structural interpretation, and wellbore integrity management are critical.

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