

Sharper insight. Smarter steering. Confident completion.

StarTrak UHD high-resolution
electrical imaging service

See the reservoir— clearly—while you drill

The **StarTrak™ UHD high-resolution electrical borehole imaging service** from Baker Hughes delivers ultra-high-resolution electrical borehole images in real time, providing the structural and sedimentological insight needed to steer precisely, manage risk, and maximize reservoir contact. By capturing circumferential microresistivity measurements as the BHA rotates, StarTrak UHD reveals formation detail that closely correlates with core—without slowing down drilling.

Ultra-high-definition electrical imaging while drilling

The StarTrak UHD is an advanced formation evaluation service that provides high resolution, 360° electrical borehole images while drilling. With up to 120 azimuthal sectors and a 0.25 in × 0.25 in (6.35 mm × 6.35 mm) pixel resolution, the service enables detailed visualization of bedding, fractures, and structural features traditionally only visible in core or wireline images.

High fidelity measurements, seamlessly integrated into the BHA

The service uses a direct current, laterolog-type microresistivity sensor

to measure formation resistivity around the full borehole circumference as the BHA rotates. The technology is delivered in a modular imaging sub that integrates seamlessly with the **AutoTrak™ rotary steerable systems** or motor BHAs, enabling real-time structural interpretation and geosteering.

Azimuthal microresistivity measurements are converted into high-definition electrical images that clearly resolve:

- Bed boundaries and dip changes
- Faults and fractures
- Sedimentary fabrics and textures

This clarity supports proactive drilling decisions related to mud weight, wellbore stability management, and optimal well placement—while drilling, not after the fact.

Actionable structural insight

The ultra-high resolution of the StarTrak UHD improves net-to-gross estimations, particularly in thin-bedded and structurally complex intervals, and strengthens structural interpretation for more accurate reservoir models. Clear identification of fractures and faults provides critical input for completion and stimulation design, especially in shale gas and unconventional developments.

Applications

- Complex or thin-bedded reservoirs
- Real-time geosteering
- Wellbore stability monitoring
- Shale gas and unconventional plays
- Extended reach and high-angle wells

Benefits

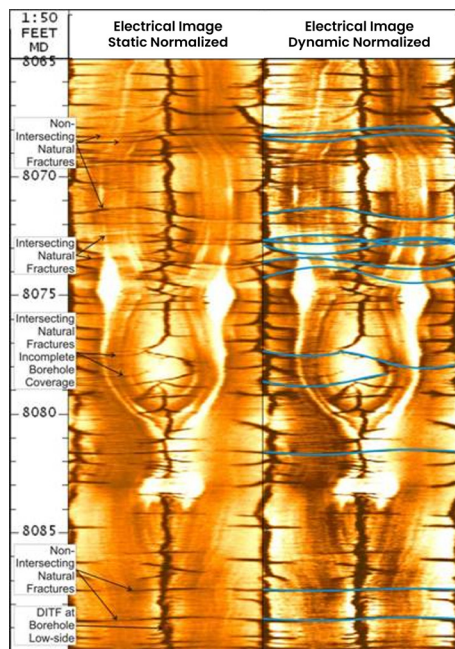
- Real-time images delivered through Baker Hughes **Kantori™ remote service monitoring**
- Core like structural and sedimentological detail while drilling
- High resolution imaging at ROPs up to 150 ft/hr (45 m/hr)
- Clear identification of faults and fractures
- Early warning of wellbore stability issues
- High tolerance to moderate stick/slip and challenging mud formation resistivity environments

The StarTrak UHD service consistently delivers high quality images at penetration rates up to 150 ft/hr (45 m/hr) and remains robust across a wide range of formation and mud resistivities—even in moderate stick/slip conditions.

Real time steering and wellbore stability monitoring

The StarTrak UHD service provides real-time electrical imaging with 16, 32, or 64 azimuthal sectors, depending on telemetry. When run with wired pipe, the full 120 sector image can be transmitted to the surface in real time.

These real-time images enable early detection of drilling induced fractures, breakouts, and other stability indicators, allowing operators to take corrective action before issues escalate.



From insight to impact

Gain earlier structural insight, steer with precision, and complete with confidence using the StarTrak UHD high-resolution electrical borehole imaging service.

Connect with your Baker Hughes representative to learn how the StarTrak UHD service can enhance performance on your next operation.

