

Stop reacting. Start predicting with measured confidence

TRU-ARMS Predict advanced lookahead
and geostopping services

The Baker Hughes **TRU-ARMS™ Predict service** advances reservoir mapping and navigation beyond conventional deep resistivity, delivering predictive insight ahead of the bit through measured ultra-deep electromagnetic (EM) detection. By helping reduce seismic uncertainty, it enables earlier detection, more confident decisions, and greater control during well execution.

The result is ahead of the bit detection with measured confidence, less reaction, fewer corrections, and greater certainty in complex reservoirs.

Move beyond conventional workflows

Traditional geosteering approaches depend on identifying formation changes as they are reached—leaving limited time to respond and increasing correction cycles.

TRU-ARMS Predict services provide actionable lookahead, enabling:

- Earlier boundary detection ahead of the bit
- Proactive steering decisions instead of reactive corrections

- More precise geostopping and landings
- Reduced NPT driven by late interpretation

Why these services outperform conventional ultra-deep azimuthal resistivity

Evolving from a legacy of ~ 20 years of orthogonal antennas and providing the **industry's first triaxial and collocated antennas**, we improve how data is measured, interpreted, and acted on with the TRU-ARMS Predict services delivering stronger confident decisions:

- Triaxial, full-tensor, collocated measurement
 - Directly measures resistivity components with higher signal fidelity, reducing uncertainty compared with non-collocated or derived measurements
- Transceiver modulation spacing across three sub-BHAs
 - Allows additional spacings for improved inversion outputs and flexible antenna positioning in the BHA across vertical, deviated, and horizontal wells

Applications

- Lookahead for landings, geostopping, and reservoir navigation in all inclinations
- Reservoir mapping and navigation
- Fluid and boundary mapping

Benefits

Operational impact:

- Reduces NPT by limiting reactive decision making with early hazard detection
- Optimizes geostopping and casing landings by minimizing unstable shale exposure
- Enables successful coring programs
- Eliminates the need for pilot wells in appropriate applications

Subsurface impact:

- Improves well placement to maximize reservoir contact and recovery
- Reduces the risk of sidetracks and re-drills
- Provides 3D mapping of resistivity features beyond the wellbore

Safety impact:

- Avoids unexpected formation exits
- Reduces exposure to drilling hazards
- Preserves wellbore stability

- Ultra-low frequency (<1 kHz)
 - Extends depth of investigation to detect resistivity changes earlier, supporting true ahead-of-bit visibility
- 360° multi-dimensional coverage with advanced inversion
 - Enhances boundary clarity and directional understanding around the borehole with azimuthal flexibility as a parameter of the inversions
- Integrated boundary confidence
 - Moves beyond interpretation alone by providing quantified decision support with a range of inversion appraisal tools in real time.

Stronger reservoir understanding

While conventional approaches focus on near-wellbore interpretation, TRU-ARMS Predict services extend visibility to support:

- Enable optimal landings and geostopping for improved production sections
- Earlier identification of fluid contacts and structural features
- Reduced sidetrack and re-drill risk
- More reliable reservoir models and development plans

Safer, more controlled drilling

Supporting improved well integrity and reduced operational risk, the TRU-ARMS Predict services identify subsurface changes earlier to help avoid:

- Over-pressured or depleted zones
- Faults and formation exits
- Unstable intervals exposure

Deliver wells with greater certainty

The TRU-ARMS Predict services enable earlier insight, faster decisions, and more predictable outcomes—helping operators move beyond reactive geosteering to true look ahead reservoir navigation.

Conventional approach	TRU-ARMS Predict services
Detects boundaries as they are approached or already encountered	Anticipates boundaries farther ahead of the bit for earlier decision-making
Reactive interpretation with limited time to respond	Predictive insight enables proactive geosteering and geostopping
Measurement architecture may rely on non-collocated or derived components	Triaxial, collocated full-tensor measurements improve signal fidelity and inversion reliability
Fixed or limited spacing configurations	Flexible transceiver spacing optimized for vertical, deviated, and horizontal wells
Higher-frequency limitations can constrain depth of investigation	Ultra-low frequency (<1 kHz) extends lookahead for earlier detection
Interpretation confidence varies by user and workflow	Integrated boundary confidence analysis supports consistent, high-certainty decisions
Corrections occur too close to or after boundary interaction	Earlier action reduces corrections and NPT

Advance your reservoir navigation strategy

Contact Baker Hughes to learn how TRU-ARMS Predict services can improve well placement, reduce uncertainty, and deliver more controlled drilling outcomes.