



MAKE YOUR WELL PLACEMENT DECISIONS WITH THE INDUSTRY'S FIRST AT-BIT PROPAGATION RESISTIVITY TOOL

An enabling technology for geologists, petrophysicist and drilling teams to make quick decisions while drilling.

Together with a deep azimuthal resistivity boundary mapping tool, GeoTracker eliminates the geosteering blind spot up to the bit.

Both standard version (150°C) and high-temperature version (175°C) are available.

FEATURES & BENEFITS

- Opens new horizons by providing compensated propagation resistivity and imaging right behind the bit
- Maps approaching bed boundaries or water zones up to 30 in. (0.76 m) apart
- Capable of measuring 16 sectors of attenuation and phase-shift resistivity in memory and up to 4 quadrants of each in real time
- Designed to run below motor or above RSS
- Compatible with virtually any type of muds including oil-base mud

APPLICATIONS

- Stop precisely at desired casing or coring points
- Illuminate thin beds with high-resolution resistivity images
- Detect formation heterogeneity or fluid contacts via azimuthal resistivity images near the bit
- Navigate reservoirs with 3D bedding variations
- Improve well placement reaction time with less risk of drill-out

At-Bit Azimuthal Propagation Resistivity Tool

GeoTracker provides near-bit azimuthal resistivity measurements for earlier warning of approaching bed or fluid boundaries.

GeoTracker provides bulk resistivity measurements near the bit which may give early indication of an overpressured zone.

GeoTracker, when run below a mud motor, transmits data across the motor, via a field-proven EM short-hop communication system, to the MWD system above the motor for further transmission to the surface in real time.

GeoTracker performs in virtually any type of wells drilled with water-base mud, oil-base mud, or other types of drilling fluids.

TOOL FEATURE HIGHLIGHTS

- Compatible with virtually any type of muds, which makes it a suitable choice to run in complex hole conditions
- Very short length (2.92 ft. or 0.89 m) enables very close sensor-to-bit distance
- High-capacity tool memory to record days of measurement data
- Drop-in EM short-hop receiver module retains MWD tool string retrievability
- Available in 4-3/4 in. and 6-3/4 in. collar sizes

SPECIFICATIONS

Tool Size	4.75 in. (120.65mm)	6.75 in. (171.45mm)	8 in. (203.2mm)
Length	35 in. (889mm)		
Nominal OD/MAX OD/MAX ID	5.0 in. / 5-1/4 in. / 1.313 in.	6-3/4 in. / 7 in. / 2.375 in.	8 in. / 8-1/4 in. / 3-1/4 in.
Connection Pin Up	3-1/2 REG (IF Option)	4-1/2 REG (IF Option)	5-1/2 REG (IF Option)
Connection Box Down	3-1/2 REG	4-1/2 REG	5-1/2 REG
Yield Strength	15,140 lbf-ft.	29,900 lbf-ft.	50,000 lbf-ft.
Make-Up Torque	12,000 lbf-ft.	24,000 lbf-ft.	46,000 lbf-ft.
Max DLS	Rotating	15°/100 ft.	8°/100 ft.
	Sliding	30°/100 ft.	16°/100 ft.
Max Downhole Drilling Torque	12,000 lbf-ft.	24,000 lbf-ft.	46,000 lbf-ft.
Max RPM (Downhole)	200		
Max Flow Rate	340 gpm	750 gpm	1,000 gpm
Max Operating WOB	25,000 lbs.	50,000 lbs.	75,000 lbs
Max Sand Content	<1%		
Max Number of Recuts	4		

RECEIVER SUB

Collar Gap Length	35 in. (889mm)		
Collar Gap Max OD	4.75 in.	6.75 in.	8 in.
Collar Gap Connection	3-1/2 IF	4-1/2 IF	5-1/2 IF
Collar Gap Yield Strength	18,000 lbf-ft.	34,000 lbf-ft.	75,000 lbf-ft.
Collar Gap Make-Up Torque	12,000 lbf-ft.	24,000 lbf-ft.	58,000 lbf-ft.
Receiver Electronics Housing OD	1.875 in.		

MEASUREMENT

Inclination @ Bit	
Range	0 – 180 degrees
Accuracy	±0.2 degrees (sliding)
Measurement Point to Bit	12 in.
Azimuthal Res. @ Bit	
Resistivity Range	0.1 – 200 ohmm
Mud Res. Range (for Optimum Measurement)	1 ohmm or higher
Azimuthal Resolution (for Res. contrast 10:1 or higher)	150 degrees
Max Depth of Investigation (for Res. contrast 100:1 or higher)	30 in. (75cm)
Number of Sectors	16
Measure Point to Bit	14 in.

RECOMMENDED OPERATING PARAMETERS

Battery Life	Up to 150 Hours
RPM	Max 200 for Minimum Fatigue
Formation/Mud Resistivity	2 – 200 ohmm for optimal short-hopping
Vibration	Max 20 Grms, 50 – 100 Hz

1. Do not run any motor stabilization with GeoTracker sub.
2. WOB capacity of most mud motors is higher than Payzone Tracker sub.