

# GeoTracker\*

## Near-bit Azimuthal Propagation Resistivity Tool

The GeoTracker\* tool delivers, for the first time, compensated propagation resistivity measurement at or near the bit. With the patented side-mounted antennas, the tool provides 16 sectors of attenuation and phase-shift measurements from a rotating BHA. The depths of investigation of the measurements range from a few inches to 30 inches. The tool may be run either below a motor, right above a rotary steerable system (RSS), or as part of an RSS. When run below a motor, the measure point is as close as 12 inches from the bit. EM short-hop is available for transmitting the data across the motor to the MWD system. Like traditional propagation resistivity tools, the GeoTracker\* tool works in almost all kinds of mud.

The GeoTracker\* tool offers several important applications, including oil-water contact detection, overpressure detection, well placement in conventional and unconventional reservoirs, and especially geosteering in thinly bedded payzones. With the unprecedented depths of investigation for a near-bit tool, the GeoTracker\* tool allows earlier detection of approaching resistivity boundaries than ever before. When run with an RSS, the tool may enable truly autonomous geosteering downhole, making the RSS intelligent.

The GeoTracker\* tool is available in both 4.75" and 6.75" sizes. The nominal temperature and pressure ratings are 150°C and 20,000psi. Higher temperature and pressure ratings of 175°C and 25,000psi are also available.

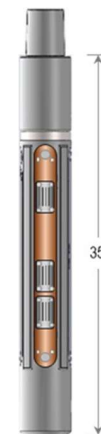


### MAIN FEATURES

- 16-sector dual-frequency attenuation and phase-shift resistivities
- Fully compensated measurements
- Depth of investigation up to 30in.
- Measure point to bit 12in.
- Combinable with motors or RSS's
- Sub length 35in. (31in. for RSS)
- Rated at 150°C/20000psi (175°C/25000psi option)

### APPLICATIONS

- Oil-water contact detection
- Overpressure detection
- Tight oil/gas drilling
- Thinly bedded reservoirs



\* Trademark of Well Resolutions Technology, Inc.

Tool Size	4.75 in	6.75 in
<b>At-bit Sub</b>		
Length	35 in	35 in
Nominal OD	5.0 in	6.75 in
Max OD	5.25 in	7.0 in
Max ID	1.313 in	2.375 in
Connection PIN Up	3-1/2 REG (IF option)	4-1/2 REG (IF option)
Connection BOX Down	3-1/2 REG	4-1/2 REG
Yield Strength	15,140 lbf-ft	29,900 lbf-ft
Make-up Torque	12,000 lbf-ft	24,000 lbf-ft
Max DLS Rotating	15°/100ft	8°/100ft
Max DLS Sliding	30°/100ft	16°/100ft
Max Downhole Drilling Torque	12,000 lbf-ft	24,000 lbf-ft
Max RPM (Downhole)	250 RPM	250 RPM
Max Flow Rate	340 gpm	750 gpm
Max Operating Pressure	20,000 psi	20,000 psi
Max Operating Temperature	150°C (175°C option)	150°C (175°C option)
Max Operating WOB	25,000 lbs	50,000 lbs
Max Sand Content	1%	1%
Max Number of Recuts	4	4
<b>Receiver Sub</b>		
Collar Gap Length	35 in	35 in
Collar Gap Max OD	4.75 in	6.75 in
Collar Gap Connection	3-1/2 IF	4-1/2 IF
Collar Gap Yield Strength	18,000 lbf-ft	34,000 lbf-ft
Collar Gap Make Up Torque	12,000 lbf-ft	24,000 lbf-ft
Receiver Electronics Housing OD	1.875 in	1.875 in
<b>Measurement</b>		
<b>Inclination @ Bit</b>		
Range	0 - 180 degrees	
Repeatability	±0.2 degrees while sliding or ±0.5 degrees while rotating	
Measure Point to Bit	12 in	
<b>Azimuthal Resistivity @ Bit</b>		
Range	0.2 – 2,000 ohmm	
Accuracy	5% (<10 ohmm) or 5 mmhos (>10 ohmm)	
Max Depth of Investigation	30 in	
Number of Sectors	16	
Measure Point to Bit	16 in	
<b>Battery Life</b>		
Nominal Operation Time (Azimuthal Gamma only)	Up to 150 Hours	
<b>Recommended Operating Parameters</b>		
RPM	Max 200 for minimum fatigue	
Formation Resistivity	2 -200 Ohmm for optimal short-hopping	
Mud Resistivity	1 ohmm or higher	
Vibration	Max 20 Grms, 50-1,000Hz	
Shock	Max 500 G, 0.5ms (z-axis), 1,000 G, 0.5ms (x- or y-axis)	
<b>Running Below a Mud Motor<sup>1,2</sup></b>		
Max Bend Setting	1.50°	1.50°
Max DLS Rotating	15°/100ft	8°/100ft
Max Surface RPM	60	60
Max Mud Motor RPM	180	180
<sup>1</sup> Do not run any motor stabilization with Inc @ Bit sub. <sup>2</sup> WOB capacity of most mud motors is higher than Inc @ Bit sub.		



## Contact

Email: [sales@enteq.com](mailto:sales@enteq.com)

Telephone: +1 (713) 944 6130

Fax: +1 (713) 944 1771

Web: [www.enteq.com](http://www.enteq.com)

## Useful links

Technical Support: [techsupport@enteq.com](mailto:techsupport@enteq.com)

Suggestions and Questions: [suggestions@enteq.com](mailto:suggestions@enteq.com)

Software Downloads: [www.enteq.com/downloads](http://www.enteq.com/downloads)

Repair Services: [www.enteq.com/mwd-support-services](http://www.enteq.com/mwd-support-services)