

PRODUCT SPEC SHEET

SCI - QUEST™ PROPAGATION RESISTIVITY

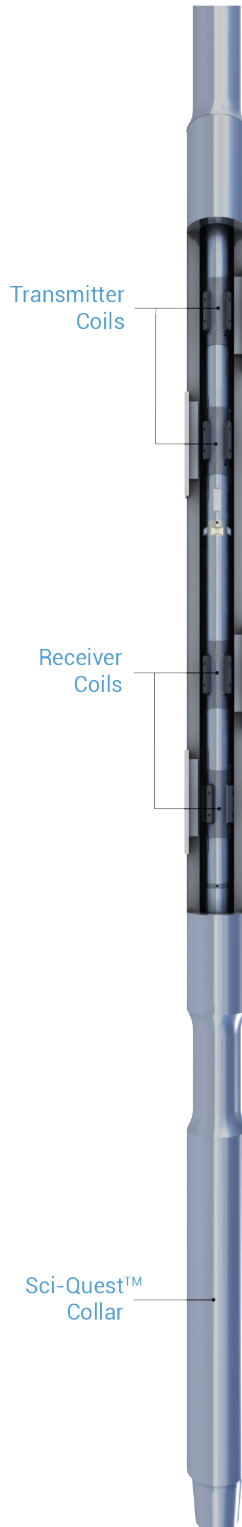
Scientific Drilling's Sci-Quest Resistivity tool was designed with the customer's needs in mind. Sci-Quest is a probe-based, dual spacing (23 in. and 33 in.), 2 MHz resistivity tool that provides four resistivity curves (two phase and two attenuation) with multiple depths of investigation.

DELIVERING THE ULTIMATE VALUE

- Operates real time with mud pulse or electromagnetic MWD systems
- Operates in stand-alone memory logging mode for Measurement After Drilling (MAD) applications
- Dedicated battery power independent of MWD battery ensures long run times
- Data acquisition as fast as one reading per second in memory mode
- Operates in all mud types
- Large memory capacity for high resolution data logging over long runs
- Probe interchangeable with all four collar sizes, reducing the number of tools needed on location

TARGETING WHAT'S IMPORTANT

- Formation correlation
- Payzone indicators
- Kickoff point determination
- Geosteering
- Picking casing and coring points
- Correlation with offset well logs
- Pore pressure evaluation



TECHNICAL SPECIFICATIONS				
GENERAL SPECIFICATIONS				
Collar OD	4.75 in.	6.5 in.	6.75 in.	8 in.
Max Dog Leg - Rotating (°/100 ft)	10	8	8	6
Max Dog Leg - Sliding (°/100 ft)	26	19	16	12
Max Flow Rate (Gal/Min)	330	600	750	1,000
Max Weight on Bit (lbf)	15,000	40,000	40,000	52,000
Max Rotary Torque (lbf)	4,000	7,800	7,800	7,800
Collar Length	15 ft. (MWD/LWD in separate collars) 30 ft. (MWD/LWD in same collar)			
Power Source and Operating Hours	Lithium Batteries - 150 plus run hours			
Maximum Working Pressure	18,000 PSI			
Maximum Differential Pressure	1,500 PSI [up to 270°F (132°C)], 1,200 PSI [up to 302°F (150°C)]			
Maximum Temperature	302°F (150°C)			
Sonde OD and Length	1.75 in. Diameter, 55 in. Long			
Memory Capacity	2 GB			
MEASUREMENT SPECIFICATIONS				
Operating Frequency	2 MHz			
Measurement Spacing	23 in. and 33 in.			
Measurement	Range	Accuracy		
Phase Shift Resistivity	23 in.	0.2 to 20 ohm-m	± 0.3%	
		20 to 80 ohm-m	± 1.0%	
		80 to 1,000 ohm-m	± 0.1 mS/m	
	33 in.	0.2 to 20 ohm-m	± 0.2%	
		20 to 80 ohm-m	± 0.5%	
		80 to 1,000 ohm-m	± 0.1 mS/m	
Attenuation Resistivity	23 in.	0.2 to 20 ohm-m	± 0.6%	
		20 to 80 ohm-m	± 3.0%	
		80 to 1,000 ohm-m	± 0.6 mS/m	
	33 in.	0.2 to 20 ohm-m	± 0.5%	
		20 to 80 ohm-m	± 2.0%	
		80 to 1,000 ohm-m	± 0.25 mS/m	
Vertical Resolution	Phase		Attenuation	
Measurement Spacing	23 in.	33 in.	23 in.	33 in.
R = 0.2 ohm-m	10	10	11	10
R = 1.0 ohm-m	11	10	14	13
R = 10 ohm-m	13	13	52	61
R = 20 ohm-m	14	14	60	71
Depth of Investigation	Phase		Attenuation	
Measurement Spacing	23 in.	33 in.	23 in.	33 in.
R = 0.2 ohm-m	9	10	14	17
R = 1.0 ohm-m	12	15	20	24
R = 10 ohm-m	20	25	37	43
R = 20 ohm-m	23	29	46	53
Borehole Correction Charts	Available upon request			

Specifications are subject to change without notice.

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