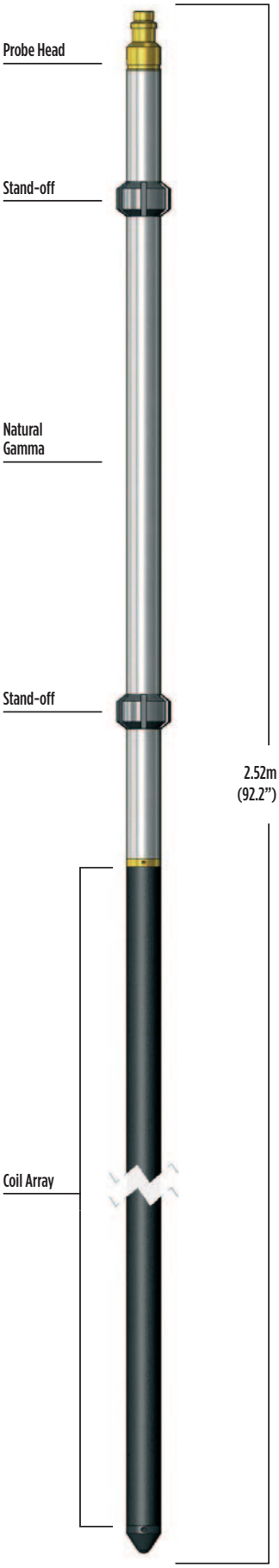
PROBES

DUAL FOCUSSED INDUCTION



Dual Focussed Induction Probe

The Dual Focussed Induction probe provides two simultaneous conductivity logs, corresponding to "medium" and "deep" radii of investigation into the formation.

The two depths of penetration are useful in porous, permeable formations where displacement of formation fluids by drilling mud creates an "invasion zone" with different electrical properties. The 1" focussed induction probe produces a single medium penetration conductivity log. It finds particular application in small-diameter dry or plastic-lined boreholes used for mineral exploration and for conductivity/resistivity in dry holes.

Principle of Measurement:

An oscillating high-frequency magnetic field from a transmitter coil within the probe induces an alternating electrical current within the surrounding conductive formation. This current, in turn, induces voltages within receiver coils proportional to the formation conductivity. The transmitter-receiver spacings determine the depth of investigation of the measurements. Additional focussing coils minimise the contribution of the borehole signal.

SPECIFICATION:

Features

- Formation conductivity measurement in wet/dry boreholes or through plastic casing
- Separate deep and medium penetrating measurements give information on invaded zone
- Focussed measurements for minimum borehole signal PSD (phase-sensitive detector) discriminates between magnetic susceptibility and conductivity signals

Measurements

- Deep formation conductivity
- Medium formation conductivity
- Natural Gamma

Applications

Water

- Indicator of permeable zones and porosity
- Formation water salinity
- Long-term well monitoring

Mineral/Engineering

- Ore identification and quality
- Correlation

Other

- Indication of hydrocarbons

Operating Conditions

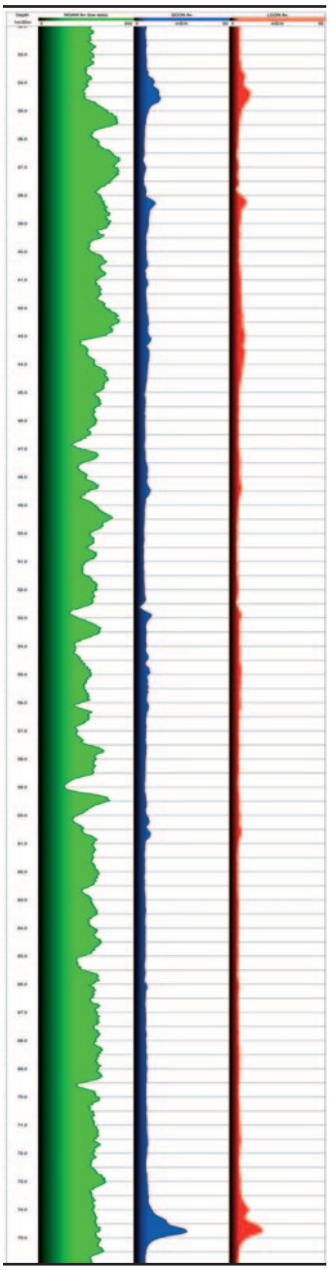
Borehole type:	open/plastic or grp cased, air/water-filled
Recommended Logging Speed:	5m/min

Specifications

Diameter:	43mm
Length:	2.52m
Weight:	8.6kg
Temperature:	0-70°C (extended ranges available)
Max. pressure:	20MPa
Number of coils:	6 coils: Tx and Ref, Bucking1, Reciever1, Bucking2, Reciever2
TX-RX spacings:	ILM 50cm (20"), ILD 81cm (32")
Conductivity range:	3 to 3300mS/m

Part Numbers

I002087	Dual Focussed Induction probe with natural gamma



Example of logging data

CLICK HERE FOR ENQUIRY FORM