

Induced Polarisation Probe

The Induced Polarization Probe measures formation resistivity and chargeability. Formations with high chargeability and low resistivity indicate potential areas of mineralization.

The Geovista Induced Polarisation (IP) Probe comprises four electrodes in AB-MN Wenner configuration. A high DC voltage with alternating polarity is periodically applied to the outer two electrodes. This voltage is applied for a fixed time and then the decaying voltage is measured at the inner two electrodes after a brief delay. The polarizability of different materials is dependent on the electronic configuration. In strata containing metals, the difference in the rate of electrolytic reactions when a current passes across conductive metal grains causes polarisation. An IP effect is also evident when a current is applied to certain clay minerals with surficial negative charges.

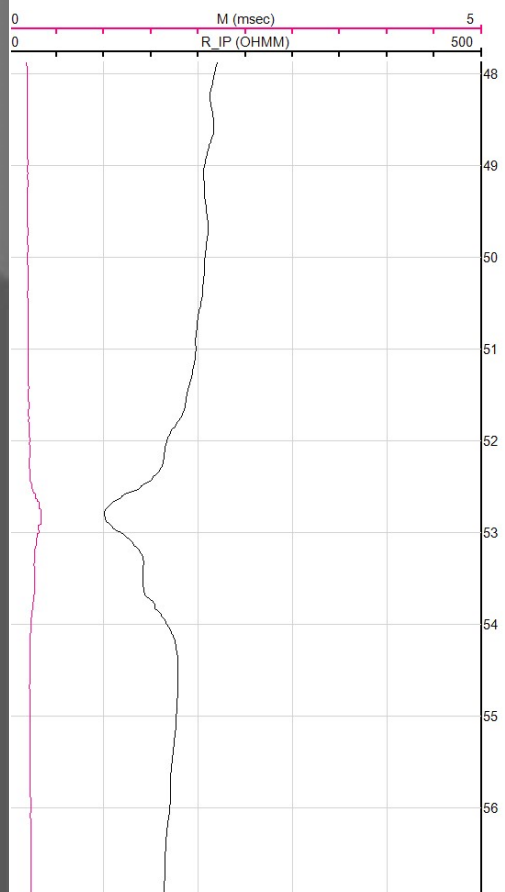
The IP probe is an important tool in mineral exploration and is commonly used when prospecting for elements that commonly occur in sulphides like iron, copper, nickel, lead, cobalt, silver, and zinc.

KEY FEATURES

- Fully combinable, digital probe

APPLICATIONS

- Delineation of mineralised formations with disseminated metallic sulphides and oxides
- Pyrite detection
- Identification clay-rich zones



SPECIFICATIONS

	IP Sonde
Weight (kg)	8.0
Length (m)	2.08
Diameter (mm)	42
Electrode spacing (cm)	40
Chargeability measurement	Time Domain with 220ms cycle time
Resistivity Range (Ohm m)	0.2 to 1000
Max. Pressure (MPa)	20
Max. Temp. (°C)	80
Borehole Condition	Water filled/open hole

Accessories: Test and calibration box

