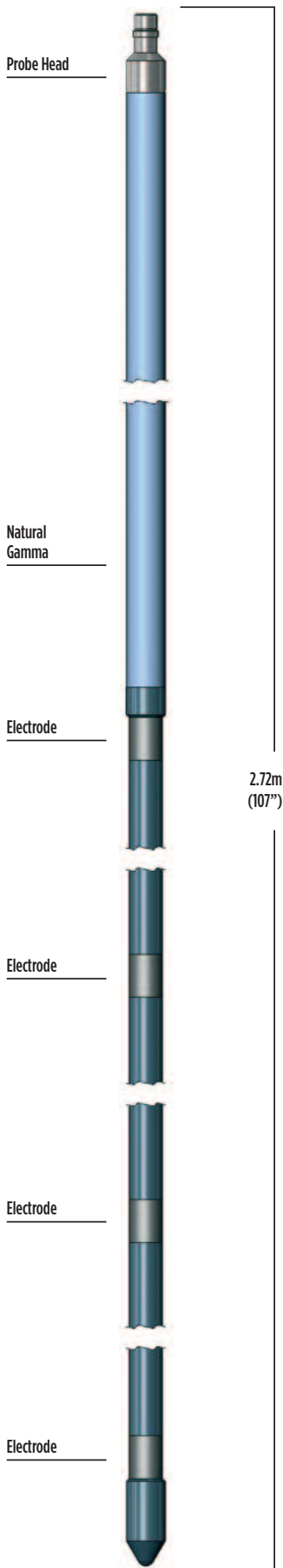


Induced Polarisation



Induced Polarisation Probe

The Induced Polarisation probe measures the charge separation or 'chargeability' in porous, water-saturated, mineralised rocks caused by the passage of a low-frequency alternating current.

The main cause of induced polarisation is a current-induced electron-transfer reaction between ions of an electrolyte in contact with grains of semi-conducting metallic minerals.

Principle of Measurement:

The probe passes a controlled current through the formation between two outer electrodes and detects the variation with time of the resulting voltage measured between two inner electrodes after the device is removed. The integrated area under the voltage-time curve is a measure of chargeability.

SPECIFICATION:

Features

- Microprocessor-controlled drive voltage
- Down-hole integration and ratio computation

Measurements

- Chargeability
- Formation resistance
- Natural Gamma

Applications

Minerals

- Indication of mineralisation, particularly of disseminated sulphides
- Differentiation of haematite and magnetite

Water

- Qualitative permeability studies

Operating Conditions

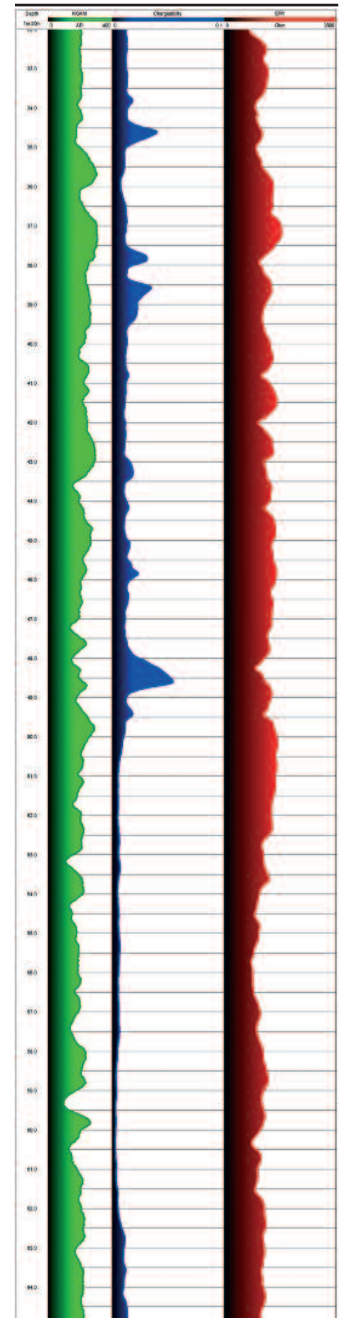
- Borehole type: open-hole, water-filled
- Recommended Logging Speed: 3m/min

Specifications

- Diameter: 45mm
- Length: 2.72m
- Weight: 11kg
- Temperature: 0-70°C (extended ranges available)
- Max. pressure: 20MPa

Part Numbers

- 1002102 Induced Polarisation probe with natural gamma



Example of logging data