



GEOPHYSICAL LOGGING PROBES

Magnetic Susceptibility

MEASUREMENT PRINCIPLE

Magnetic susceptibility is a measure of the degree to which a rock may be magnetised. The probe has a transmitter, a receiver coil and produces an oscillating magnetic field which induces primary and secondary currents in the rock surrounding the borehole. The secondary field is measured at the receiver coil where the “in phase” component represents the magnetic susceptibility.

The transmitter coil frequency is 2 KHz and the receiver spacing is 25cm.

Ideally suited for:

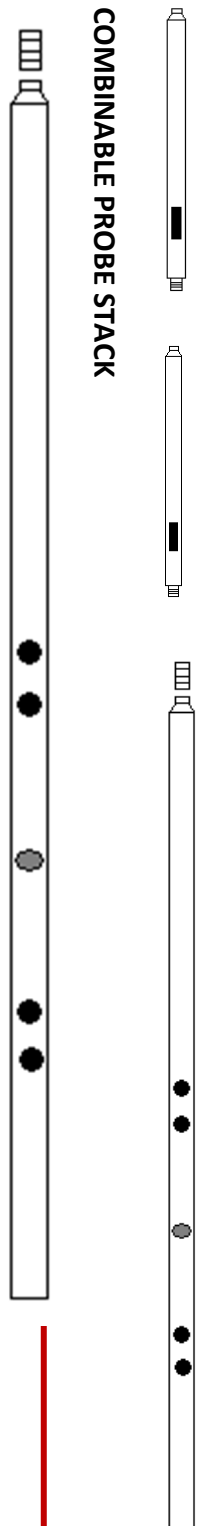
- Identification of magnetic ground.
- Iron Ore exploration and mining.
- Magnetite exploration and mining.
- Base metals exploration and mining.

Operations & Calibration:

- Minimum borehole diameter of 50mm.
- Air or fluid filled borehole.
- Normally run in open borehole conditions.
- Typically recorded in an uphole logging direction at logging speeds of 5 – 7 m/min. (Downhole logging can be recorded for QA purposes)
- Final curve units can be counts per second or SI E-5 units.
- Calibration via magnetic blocks and/or local project borehole.
- Probes can be stacked to the top of the probe. Typical combinations are: Gamma, gamma & magnetic deviation, dual laterolog.

SINGLE PROBE RUN

COMBINABLE PROBE STACK



PHYSICAL SPECIFICATIONS

Weight	5.0kg
Length	1.05m
Diameter	45mm
TX—RX Spacing	25cm
Frequency	2kHz
Susceptibility Range	1x10 ³ to 1 SI Units
Maximum Pressure	20 MPa
Maximum Temperature	80°C

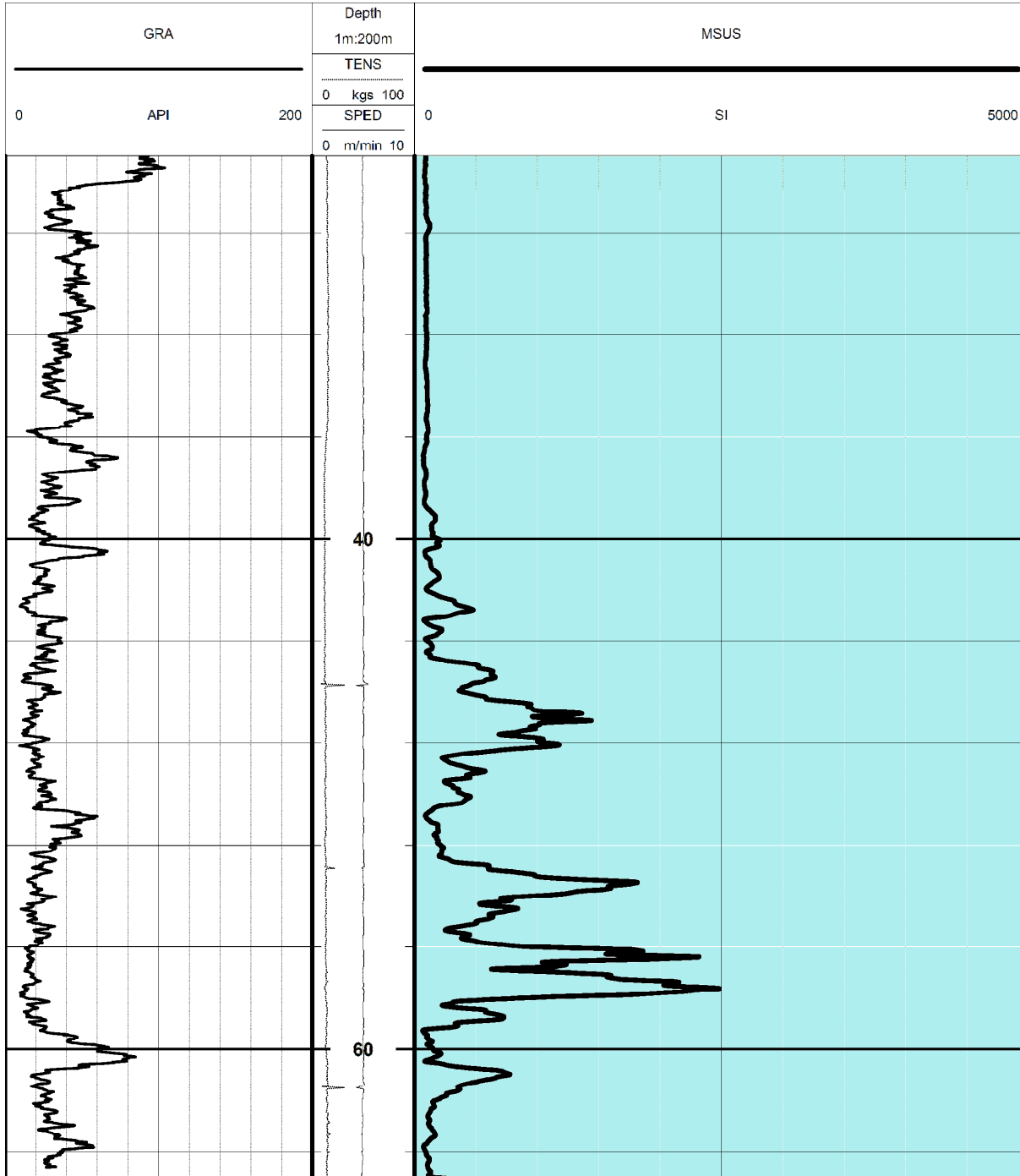




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