

# Verticality

Probe Head



1.66m  
(63.3")

Natural  
Gamma

Accelerometer &  
Magnetometer

Verticality Probe

The Verticality probe provides accurate, continuous measurements of borehole inclination and direction.

These are output directly as log traces or may be processed further to produce tabular and graphical outputs of borehole position, borehole drift and true vertical depth.

### Principle of Measurement:

The probe includes a triaxial magnetometer to determine the bearing of a reference in the probe relative to magnetic North and three accelerometers to measure inclination. The outputs from the transducers are processed by a downhole microprocessor to give final borehole inclination and azimuth data in real time.

## SPECIFICATION:

### Features

- Small diameter for slimhole operations
- Continuous borehole orientation log
- Suitable for all borehole inclinations and directions

### Measurements

- Borehole inclination
- Borehole direction
- Borehole drift
- True vertical depth
- Natural Gamma

### Applications

#### Minerals / Water / Engineering

- Bed-thickness estimation
- Surveying and deviation checks
- True seam depth

### Operating Conditions

- Borehole type: open/plastic-cased, water/air-filled
- Centralisation: non-magnetic centralisers required
- Recommended Logging Speed: 4m/min

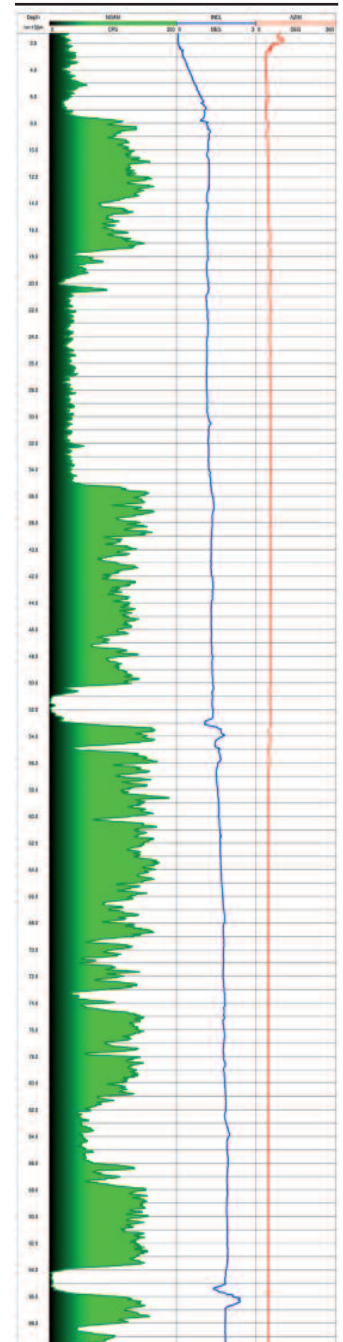
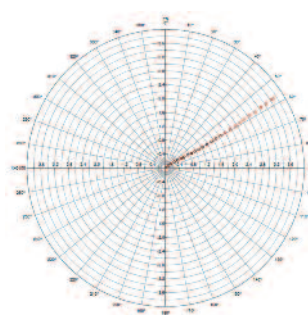
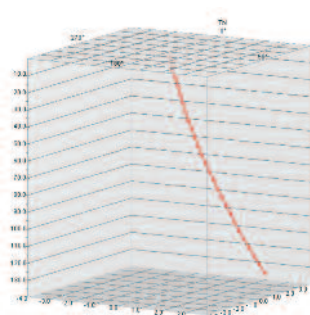
The operation of the probe is limited in steel casing or in the presence of magnetic minerals which affect the magnetometer. Under such conditions, only borehole inclination (without directional information) can be logged. The Gyro probe should be used in preference to the standard verticality probe in such cases.

### Specifications

- Diameter: 42mm
- Length: 1.66m
- Weight: 5.5kg
- Temperature: 0-70°C (extended ranges available)
- Max. pressure: 20MPa
- Inclination range: Horizontal +/- 90°
- Azimuth range: 0 to 360°

### Part Numbers

- 1002141 Verticality probe with natural gamma



Examples of logging data

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