

ACOUSTIC IMAGER (TELEVIEWER) TOOL

The Acoustic Imager produces an image of the borehole wall using the travel time and amplitude of an acoustic signal transmitted and received by a rotating ultrasonic sensor in the tool. The variance of the acoustic properties of the formation and associated features enable the nature of fractures, fissures, veins, bedding planes and lithology changes to be determined.

The acoustic image on the right shows both fractures and bedding.

The image is then orientated to Magnetic North and displayed as an unwrapped image log. This enables a detailed structural interpretations to be made.

Images and associated data are viewed in real time during the data acquisition. The orientation system employs a 3 axis magnetometer and 3 accelerometers.

In unstable boreholes an acoustic image can be recorded through plastic casings.

The image on the left shows an acoustic amplitude log through plastic casing. The upper section of the borehole was very broken and prone to collapse, so the borehole was lined with plastic casing and the imaging carried out through the plastic.

1160 x 60mm

Specifications

Size: Weight: Tilt: Azimuth: Vertical resolution: Horizontal resolution:

Rotation speed: Caliper resolution: Max. temperature: Max.pressure: 6kg 0° - 90° 0° - 360° User defined up to 0.5mm User defined up to 288 measurements/revolution up to 10 revolutions per second 0.08mm 80°C 20MPa



Logging Conditions

0.5 - 2 m/min Centralased

Borehole Conditions

Minimum diameter 76mm Maximum diameter 500mm Cored or rotary drilled boreholes Fluid or mud filled Open hole or Plastic cased

EUROPEAN GEOPHYSICAL SERVICES LTD 22 The Stables, Sansaw Business Park, Hadnall, Shrewsbury, Shropshire. SY4 4AS T: 01939 210710 / F:01939 210532 / E:eurogeophys@europeangeophysical.com www.europeangeophysical.com