Defining Your Resource

Borehole Wireline

GEOPHYSICAL LOGGING PROBES

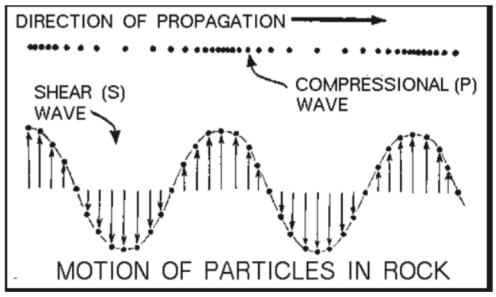
Seismic Suspension Probe
Compressional & Shear Wave Measurement

SEIS

SINGLE PROBE RUN

MEASUREMENT PRINCIPLE

The probe measures the time taken for high frequency sound waves to travel from an energy source to a series of receivers. The source is a dipole source capable of produce acoustic energy in two directions and 180° out of phase. The energy pulse is directed perpendicular to the borehole wall and is capable of generating strong shear waves.



Measurements are made in an openhole or PVC cased borehole within a fluid filled section with the probe stationary. Receiver gains, time sampling periods and source energy levels are all configurable during logging.

Data processing includes picking the compressional and shear wave arrival at each station accurately, allowing further processing to elastic rock properties (Poisson's Ratio, Young's Modulus etc).

Ideally suited for:

Geotechnical Investigation—ground conditions.
Calculation of elastic rock properties.

Operations & Calibration:

Minimum borehole diameter of 60mm.
Fluid filled borehole.
Open borehole and/or PVC cased borehole.

Stationary measurements.

PHYSICAL SPECIFICATIONS	
Weight	140kg
Length	4.1m (can be increased)
Diameter	50mm
RX Spacing	two receivers
Source	Dipole and directional
Sampling	User configured
Maximum Pressure	5 MPa
Maximum Temperature	50°C

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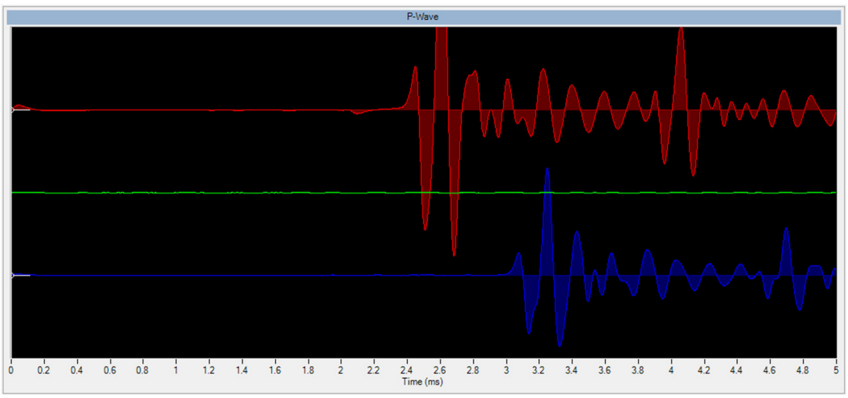
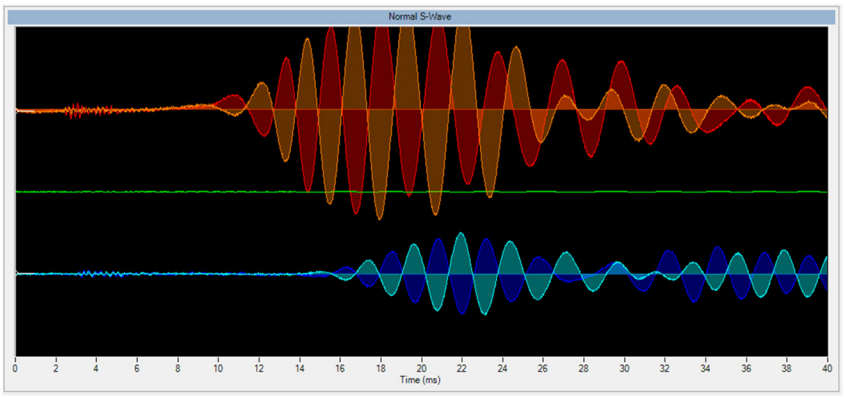
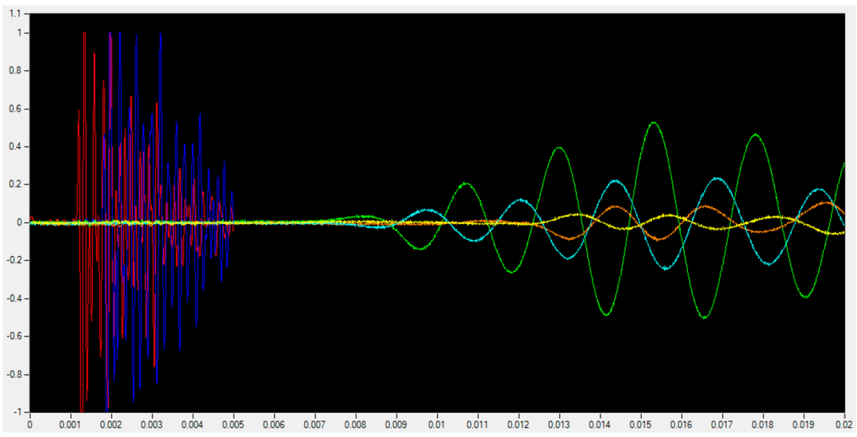
Compressional Arrival

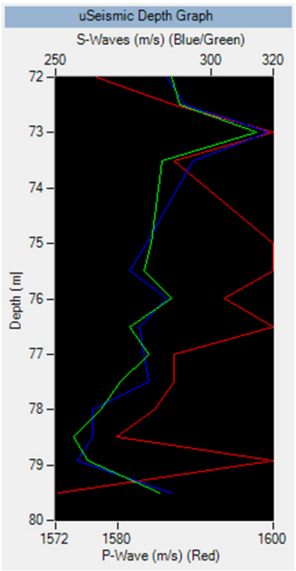


Shear Arrival



Data processing





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