



## P&S WAVE $\mu$ SEISMIC TOOL

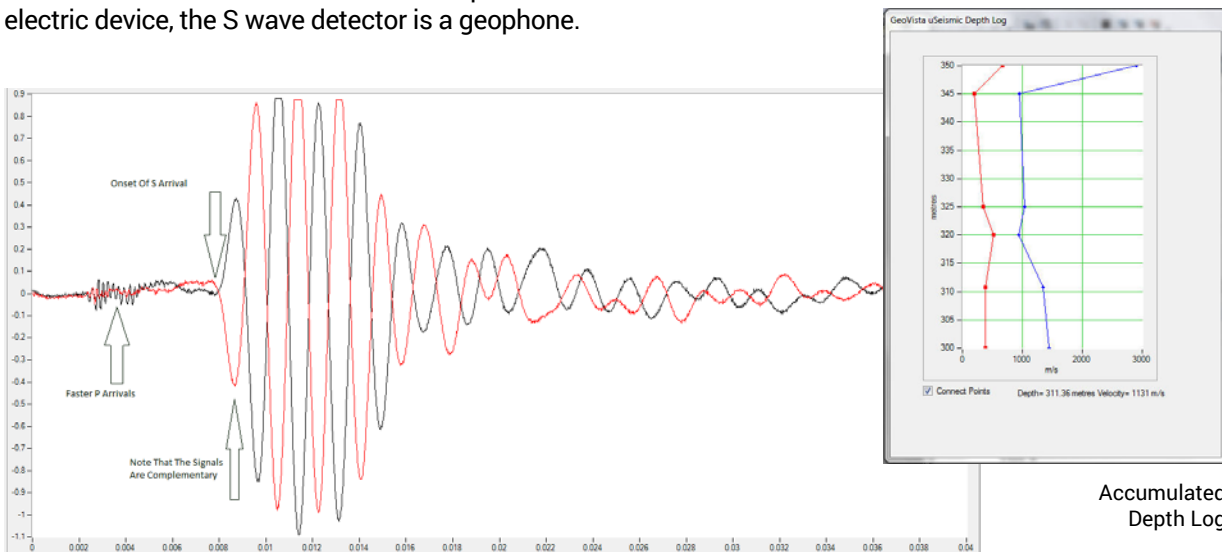
The  $\mu$ Seismic Tool allows simultaneous measurement of P&S wave velocities. This method gives better accuracy and resolution than other seismic methods. The performance of the system is engineered to give good results in the slower formations found at shallow depth, while also performing well in deeper formations with higher velocities.

The  $\mu$ Seismic sonde is constructed with two receiver modules. These receivers each contain two transducers, one for the detection of the compressional waves and the other for the detection of shear waves. The P wave detector is a piezo electric device, the S wave detector is a geophone.

The energy source operates as a dipole source, in that the energy is directional. It also produces energy in two directions, 180° out of phase. In both cases the energy pulse is directed perpendicular to the borehole wall. This type of source generates strong shear waves within the formation.

The data acquired by the system is recorded in the industry standard SEG2 file format.

**This log can only be achieved in fluid filled unlined boreholes.**



Example Shear (near receiver) Arrivals

### Specifications

Size: 4.1m or 5.0m x 50mm  
Weight: 14kg  
Acquisition Period: Variable (5 - 80ms)  
Max. temperature: 50Bar  
Max.pressure: 80°C

### Borehole Conditions

Diameter 75 to 300mm  
Water / Mud filled  
Unlined

### Logging Conditions

Centralised