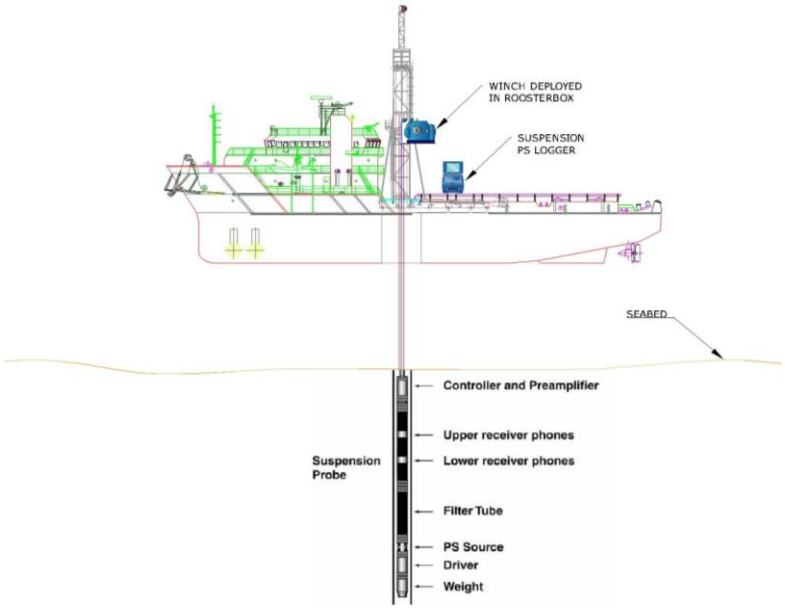
TRUSTED OFFSHORE GEOTECHNICAL SOLUTIONS

OYO Logger



Introduction

The OYO PS suspension logging method measures compression and shear velocities of surrounding rock and soil from deep uncased boreholes.

Application

The probe has around 100x the output energy of a conventional borehole sonic. This makes it highly effective in soft soils and other attenuating formations where conventional full-waveform sonics often perform poorly.

Operation

The system uses a seven metre probe, containing a source and two receivers placed one metre apart and suspended on a cable, which also acts as the data umbilical to the receiver/control device on the surface.
The probe is lowered in to the borehole to the specified depth, where the source generates a pressure wave in the borehole fluid. The pressure wave is converted into seismic waves at the borehole wall. Along the wall at each receiver location the seismic waves are converted back into pressure waves in the fluid and received by the geophones that send the data to the recorder on the surface.

OYO Logger
This method is the only one that obtains both P- and S-wave velocity data reliably in single holes at depths greater than 60 metres and has been used down to 600 metres.
Data is in high resolution (typically 1m) and can therefore be used to resolve thin layers that can have a dramatic effect on surface response.
Requires only one hole.