



Natural Power offers a full range of geophysical services, utilising, the latest industry leading technologies.

Offering high resolution sub-surface imaging and data acquisition to provide a full understanding of new and existing project sites.

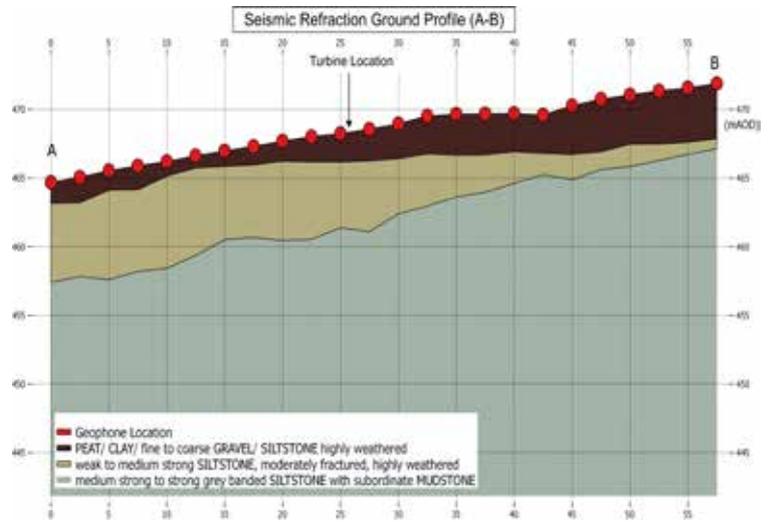
Geophysics is an important site investigation tool, offering accurate civil/structural design parameters, reducing project risk and supporting site design and optimisation at the earliest opportunity.

Seismic Refraction

This is a surface technique that is used to locate changes in acoustic properties of the ground.

Key applications include:

- Identifying stratigraphic boundaries
- Identify geological units
- Depth to rock head
- Excavatability assessments



Seismic Surface Wave Ground Stiffness (MASW)

This survey is used to determine small strain stiffness of the ground and can be implemented on the surface without the use of a borehole therefore eliminating the need for breaking ground. Ultimately this method allows for a rigorous understanding of how the ground will deform under construction loads.

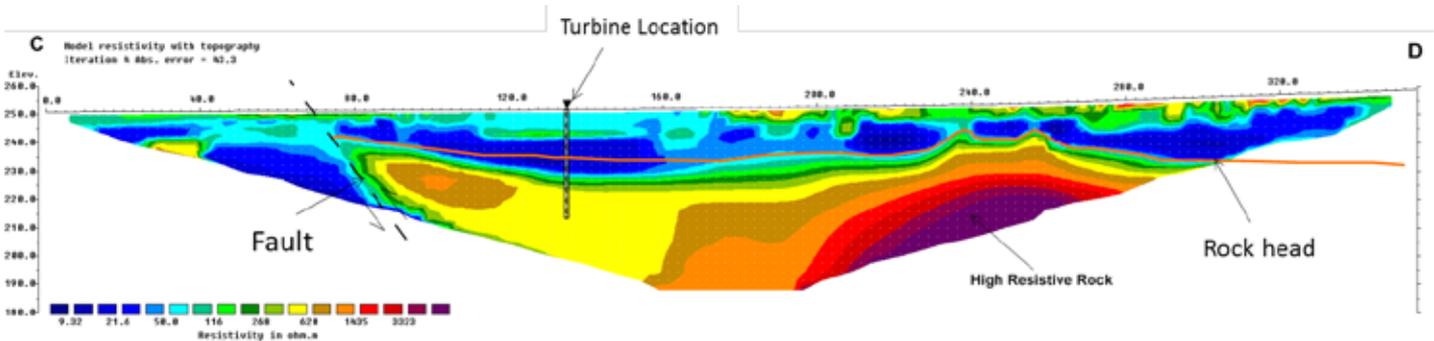
Key applications include:

- Soil Stiffness, particularly applicable for structures with dynamic/cyclic loading such as wind turbine foundation design
- Ground improvement validation
- Identifying stratigraphic boundaries
- Cavity and void locating

Wenner Testing/Earthing

Wenner array 1D resistivity sounding, in accordance with British Standard 7430 2011 for electrical earthing design.





Electrical Resistivity Imaging/Tomography

This automated method uses a multi-electrode array to record hundreds of resistivity readings producing a 2D resistivity profile of the ground.

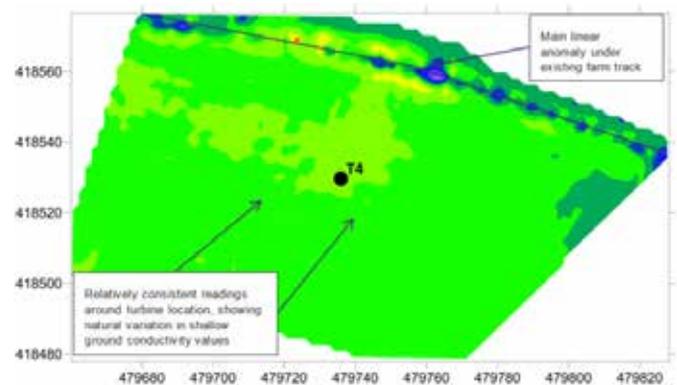
Key applications include:

- Depth to rock head
- Identifying stratigraphic boundaries
- Cavity and void location e.g. for mining or karst features.
- Geological mapping, identification of features such as faults and dykes
- Extent of aquifers and ground water levels.
- Location of objects such as storage tanks or pipelines
- Tracking and modeling of groundwater and mobile sub-surface pollutants

Ground Penetrating Radar (GPR)

Key applications include:

- Utility search
- Peat depth mapping
- Depth to bedrock
- Location of buried objects such as storage tanks or foundations



Electromagnetic

This survey technique is an efficient and cost effective way to map conductivity variations in the ground.

Key applications include:

- Utility Mapping
- Location of buried objects such as storage tanks, pipelines or foundations
- Geological mapping
- Mapping of voids e.g. karst formations
- Groundwater investigations
- Salinity Mapping



For more information contact:

Rachel Precious
Business Development Manager

rachelp@naturalpower.com