

# Electrical Resistivity Survey

Electrical resistivity surveys offer many benefits to environmental geophysics and engineering projects. Electrical resistivity tests are used to determine the ability of a location's soil and rock to ground an electrical system. Resistivity imaging is used to process a geoelectric survey, which delineates the differing electrical conductivity with depth and imaging can be used to locate environmental contamination, water leaching through a dam or other changes in resistivity. In karst landscapes, resistivity imaging can detect anomalies that may lead to sinkholes. Self-potential surveys can be used to delineate locations where water is passing through a structure. This may be a dam that is leaking and could lead to failure or a water impoundment that is leaking into the groundwater. Conductivity surveys can be used to delineate the edges of former landfills as well as shallow environmental-contamination plumes.



## THE Applus+ SOLUTION

Applus+ has a highly trained and knowledgeable geoelectric survey specialists with experience of carrying out these types of electrical resistivity test and surveys in many different environments. We also have in-depth experience in the interpretation and analysis of the data from the electrical resistivity survey.

With experience in many types of geophysical surveys, Applus+ can provide customised surveys that are tailored to each unique site. We have a wide network of support staff and offices to help facilitate the provision of services, wherever they may be required.

Applus+ can also be of assistance in locations that already have standing master service agreements or work authorisations by demonstrating new solutions and geophysical survey methods to existing clients to help them improve their projects and facilities.

## Target customers

Environmental geophysics and electrical resistivity surveys are of relevance to a range of sectors, but are especially applicable in the energy industry. Electrical resistivity tests can be requested or required in the planning phases of expanding infrastructure projects such as new cell-phone towers, electrical substations, wind farms and power plants.

## Key customer benefits

Partnering with Applus+ RTD for solutions in electrical resistivity survey can deliver:

- High level of quality – our geophysical experts provide the best available data-collection and interpretation services.
- Cost effectiveness – we select the optimal collection parameters to collect the best data the first time.
- Professional reports – discussing both the technology used and in-depth results and interpretations.
- Advanced NDT technology
- Rapid results – most of our results are obtained in a few hours to allow for the rapid assessment of survey data.