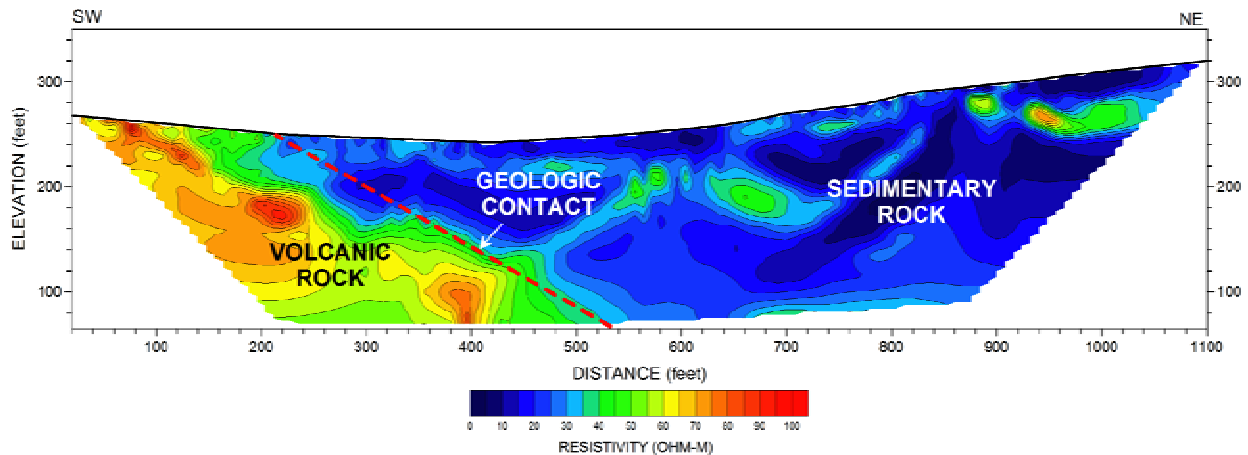


ELECTRICAL RESISTIVITY PROFILING



Electrical resistivity profiling measures subsurface electrical properties related to lithologic variations. For example, fine grained silts and clays have lower electrical resistivities than coarser grained sands and gravels, and more resistive bedrock. The apparent resistivity of subsurface materials is determined by transmitting electrical current into the ground through metal electrodes placed along a traverse and measuring the resulting voltage. The electrical resistivity profiles derived from these measurements provide information regarding the thickness and continuity of fill, clay/silt and sand/gravel zones, and bedrock structural features. Survey depths can range from less than 50 feet to several hundred feet.



Electrical resistivity profiles can provide information regarding:

- Thickness and extent of permeable zones
- Depth to impermeable clay zones
- Extent of gravel deposits
- Thickness of fill materials and debris
- Delineation of shear zones and fault features

Electrical resistivity surveys can be used for:

- Groundwater development
- Groundwater migration/contamination studies
- Quarry evaluations
- Levee investigations
- Landfill Studies