J Geol Geophys 2018, Volume 7
DOI: 10.4172/2381-8719-C1-018

Application of electrical resistivity method in investigating groundwater potential

Ofunim Nkem Bright
University of Benin, Nigeria

The study area is underlain by sedimentary rocks. The study was carried out using the electrical resistivity method with Schlumberger array configuration as a geophysical tool to gather subsurface geological information which was to define the groundwater aquifer and their thickness. Three locations were occupied. The apparent resistivities were calculated and plotted on log-log paper. The data were reduced and interpreted by computer iteration method for quantitative interpretation. The result indicates seven geo-electric at the occupied positions. The results from these layers show the depth of groundwater to be at range of about 77-137 m. Therefore, a borehole drilled at this location would reach an aquifer. Result of this investigation has shown that the resistivity methods are successful and cheaper in outlining the hydrogeological conditions of the subsurface.

ofunimb@yahoo.com

Notes: