

APPLICATION OF ELECTRICAL RESISTIVITY METHOD FOR THE  
ASSESSMENT OF GROUNDWATER QUALITY

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## ABSTRACT

To meet the increasing demand of water for municipal and agricultural uses, the exploitation of groundwater is needed almost throughout Pakistan. The exploration of groundwater quality through drilling is very expensive and is a matter of millions of Rupees for a single project. To minimize the amount of drilling and thereby the cost of exploration, a research study has carried out for the application of surface electrical resistivity for estimating groundwater quality.

Laboratory studies were conducted to ascertain a relation of pore water quality to bulk electrical resistivity. The relation arrived at the laboratory was then applied to the field data of alluvial aquifer of Sargodha area and hence verified. The result obtained from this study will greatly help hydrologists, scientist and engineers in the estimation of groundwater quality.