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## BACTERIOLOGICAL PROPERTIES OF GROUNDWATER IN PARTS OF NIGER STATE, NIGERIA

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### ABSTRACT

*Bacteriological analysis of groundwater from newly drilled boreholes in hospital environments in towns and villages in central Nigeria, has revealed that groundwater can be contaminated by microorganisms, even in a seemingly well-designed and constructed water well, particularly if the wells are located in urban areas or in public sanitary places such as hospitals or health centers. Microorganisms can gain access to boreholes through one of the following mechanisms; surface runoff, leachate migration, use of contaminated water for drilling, and improper handling of well construction materials and water supply fittings. It is not a normal practice for microbiological analysis of soils to be carried out in groundwater exploration program. However, the findings in this study suggest that buried feces or damaged sewers could be potential sources of contamination to the groundwater system, if wells are inadvertently sited in such areas. It is suggested that in developing countries, microbiological analysis of soil deposits be included in the exploration program for selection of a suitable drilling site, and in the general quality assessment for potability of water, particularly in urban areas that may be suspected to host potential contaminant sources.*

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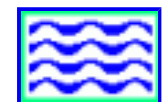
*Reference: Shekwolo, P.D. and M.O. Brisbe; Bacteriological Properties of Groundwater in Parts of Niger State, Nigeria, Journal of Environmental Hydrology, Vol. 7, Paper 12, September 1999.*

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