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Hydro-Geoelectrical Investigation for the Potential of Underground Water Storage along the lower reaches of King Abdullah Canal-Deir Alla Area/Jordan

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ABSTRACT

In this article the potential stoarativity of groundwater in the alluvial deposits along the King Abdullah Canal (KAC) in Deir Alla-Sulikhat area is studied. In this study geological, geoelectrical and Hydro-geochemical methods were used with the aim of storing some water of the Canal during water excess times in the underground to be extracted for use as drinking source for human during shortages in the Canal water and in emergency causes of Canal water pollution. The results show the existence of appropriate underground space in the alluvial deposits for water storage and that the water/ water and water/rock interactions are also be minimal and will not present and detriment to the different groundwater bodies. Implementing groundwater artificial recharge in the Jordan Valley area to create storage for King Abdullah Canal (KAC) water will enhance the drinking water supply during the dry season and it will also serve as a reserve for emergency causes, especially pollution accidents in King Abdullah Canal (KAC), such as those taking place almost every year.

KEYWORDS

Jordan Valley; Geo-Electrical; King Abdullah Canal (KAC)

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