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A Hydrogeophysical Model of the Relationship between Goelectric and Hydraulic Parameters, Central Jordan

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ABSTRACT

Goelectrical soundings using the Schlumberger array were carried out in the vicinity of 23 pumping test sites to determine aquifer parameters, central Jordan. On the basis of aquifer geometry, the area has been di-vided into two hydraulic units: the northern flood plain and the flood plain to its south. Field resistivity data are interpreted in terms of the true resistivity and thickness of subsurface layers. These parameters are then correlated with the available pumping test data. Significant correlations between the transmissivity and modified transverse resistance as well as between the hydraulic conductivity and formation factor were ob-tained for the two hydraulic units, in central Jordan are presented here.

KEYWORDS

Aquifer Parameters, Electrical Parameters, Goelectrical Soundings, Jordan

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