

THE SIGNIFICANCE OF MEGASTRUCTURES IN GROUNDWATER RECHARGE OF AQUIFERS

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This study deals with the correlation of morphotectonic features of a part of the Kandy-Kurunegala District with its hydrogeology. The $0^{\circ}\text{N}-30^{\circ}\text{W}$ fracture system of the area appears to be hydrologically promising and yields more than 400 L/minute. This important fracture system is very well developed on the crest region of a major anticline the fractures being of the tensional type. The $0^{\circ}\text{N} - 30^{\circ}\text{E}$ trending fracture system however, is of the shear type and this has only a low groundwater potential of 60 per Litre yield. Most of such fractures are tight and have a low water bearing capacity. The presence of mylonites and serpentized material confirms the shearing activity associated with this fracture system. The high yielding fractures are in most instances associated with the charnockites prevalent in the area under investigation. The structural study carried out points to a block rotation which opened up highly tight fractures enabling them to act as potential aquifers.

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