

EXPLORING GROUNDWATER OCCURRENCE IN TANDAVA RIVER BASIN

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ABSTRACT

No one is questioning water potability when the resource is under stress. The researchers aspire to identifying groundwater occurrences in the river basin. In order to reach, we applied geology, geomorphology and lineament map that generated from Visakhapatnam and East Godavari district geology and mineral map of 1:500,000 scale and IRS-P6 LISS III (path-141 and row- 48) acquired on 11th January 2011 in order to undertake groundwater investigation. In the study area alluvial, quaternary, gondawana Archedians and migmatite lithological groups are found and lineament intersection observed in the upper catchment which has very good to excellent aquifer potential. The result shows Alluvial plain, beach ridge and intermountain valley has good groundwater potential zones; pediment inselberg complex has poor groundwater potential whereas structural hill with lineament intersection and pediplain weathered has moderate groundwater potential zone. Therefore, such result will help as a water resource pillar for water deficient area in the river basin.

KEYWORDS: Groundwater, Lineament, Geomorphology, Hydrogeology