

SUMMARY

Jambi City is mostly lowland with an altitude of 10 – 70 meters. The relatively flat topographic conditions are mostly found around the Batanghari river area which results in frequent flooding in this area. Basically, groundwater potential is very dependent on geological condition, especially those related to aquifer configuration, geological structure, geomorphology, and rainfall. This study aims to determine the potential of groundwater in Talang Gulo Village, Kota Baru Subdistrict, Jambi Province, and to determine the subsurface lithology of the area. The method used is the sounding method with a track length at each point of AB 300 meters. The results obtained are suspected that the research area is composed of sandstone, claystone, and siltstone lithology. The thickness of the aquifer layer ranges from 1,39 meters – 36,4 meters and the depth of aquifer ranges from 5 meters to 50 meters. Vegetation density related to land use has a role in the availability of groundwater potential because lush vegetation affects water storage capacity and increases overall water storage capacity. Rainfall is the main factor affecting groundwater potential, where the higher the rainfall, the more groundwater reserves are stored, and vice versa. The wells at the research point consist of dug wells and drilled wells. Dug wells at the measurement point range from 5 – 12 meters. While boreholes at the research site have depths ranging from 10 – 20 meters.