

ABSTRACT

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The location of this research area is in the PIT "Pasopati" mining business license owned by PT. Borneo Indobara, with PT. Cipta Kridatama as the contractor company. With its location in the Mangkalapi Area, Kusan Hulu District, Tanah Bumbu Regency, South Kalimantan Province. The research area is geographically included in Zone 50S coordinates UTM-WGS 1984. The research methods used consist of field mapping, field data processing, laboratory analysis, literature studies and survey data. The geomorphology of the research area is the form of denudational plain land (D1), volcanic intrusion (V1), mine opening area/pit (A1), mine embankment (A2). The stratigraphy of the research area is composed of three rock units included in the Tanjung Formation, from old to young, namely the Tanjung mudstone unit, the andesite intrusion unit and the colluvial deposit unit. The Tanjung mudstone unit is of Eocene age which is deposited on the Transitional lower delta plain with Channel and Levee subenvironments, and the andesite intrusion unit is the youngest unit. The research area is controlled by structures Reverse Right Slip Fault at LP 50, Normal Left Slip Faults at LP 49, and shear fractures at LP 74 and LP 46. In the kinematic analysis of slope stability, the research area has 3 probabilities of landslide types, namely wedge, toppling and planar. Each slope has a percentage of wedge landslides of 10.20% - 12.01%, toppling landslides of 1.96% - 4.17% and only scanline 2 has the possibility of planar landslides with a percentage of 5.26%.

Keywords:*Kinematic Analysis, Geology, Tanjung Formation, Slope Stability.*