

ABSTRACT

The forming process of coal deposit in the swamp area occurred on particular conditions. At the present in Kalimantan, marsh are still common, especially in the mining concession areas, so that when there is a part of the mining pit is an area of the marsh. This marsh area is lying areas where the water contains a lot of material that would find difficulty in forming slopes and slope stability itself. Material marsh with material conditions saturated with water is a very difficult period in the rock formation in the mine slope. Slope stability is a very important factor in open pit mines, this is because dealing with human safety, production costs, security, mechanical and general sustainability of the mine itself. In the soil or rock in a state of nature have worked vertical and horizontal stresses and pore water pressure. All those conditions have an important role in shaping the slope stability. While the soil or rock itself has certain physical properties, such as shear angle in, the cohesive forces and bulk density also plays an important role in determining the strength of the soil and also affects the stability of the slope. The study discussed the process of mining area dry swamp or marsh that has potential economic coal reserves are located in the Coal Mine Pit ALB Blocks 9 KP PT. Alhasanie, SangasangaKutai regency of East Kalimantan, where the levels are in the form of dry swamp area to avoid spiraling stripping ratio. Making embankment (bundwall) at the outer limit of the mine pit aims to prevent water entering directly into the mining area. In practice, treatment marsh in the making and forming embankment slopes requires caution, besides the marsh material, the material will be used for strengthening of embankments and slopes marsh and the selection of appropriate mechanical device, so that the activity will go according to plan expected. Marsh area studied is a tidal marsh, which will dry in wet or drought conditions and watering during the rainy season. Research areas that are swampy areas or have a lithology soft materials, it is necessary to strengthen the slope in order to remain stable. Analysis for single and the overall slopes using limit equilibrium method with Bishop Simplified by Slide V.5.