

**ANALISIS KESTABILAN LERENG PENAMBANGAN PADA TAMBANG BATUBARA
DI PT.BOKORMAS WAHANA MAKMUR, *SITE* KARUH, KECAMATAN KINTAP,
KABUPATEN TANAH LAUT, PROVINSI KALIMANTAN SELATAN**

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PT. Bokormas Wahana Makmur contractors one of the PT.Arutmin Indonesia (PT.AI) who are conducting mining at the site Karuh, Riam Andungan Village, District Kintap, Regency of Tanah Laut, South Kalimantan Province. PT. Bokormas Wahana Makmur is a company engaged in coal mining. Currently mining is carried out by PT. Bokormas Makmur rides almost over, this is because coal reserves are mined almost gone. In the mining activities carried out by vehicle PT.Bokormas Makmur is a conventional system that uses a mechanical device that is a backhoe, so that the results of the mining operations there are tiers, to the current slope stability problems in a mining operation which includes excavation and stockpiling activities is a problem that important because of safety concerns around the slopes of the mine. In the work by way of open pit mining, the slopes are not mantab will result in landslides that disrupted production. If production stops, it will result in not achieving the planned production target. Also see the condition of the pit slopes karuh fairly high and steep, and also the absence of an analysis of the slope in the company, then in this case needs to be done so that the analysis of the slope mining in mining activities do not get the constraints that are considered dangerous to employees and production equipment in the vicinity slope mining.

Slope stability analysis is performed to determine level to slope stability at the PT. Bokormas Wahana Makmur, which almost ended its mining activities. This is done considering the location of research contained levels that were damaged. Material that existed at the study site is composed of sandstone (sandstone), mudstone (mudstone), and Coal (coal). This research was conducted with a view to knowing the value of safety factor on the slopes, especially slopes of mining. Minimum safety factor value has been established by the Department of Public Works (1994), namely 1.3 and 1.5 for single slope for the overall slope. The method used in analyzing this slope is the method of bishops, who in the application using the help of software that is Slide.V.6.0. Geometry on the ground level varies greatly, namely to have a single level of 27 m with a slope height of slope is 75 °. To have the overall slope 81 m high slope with the slope is 60 °.

The analysis performed on the original conditions, that is where the condition of the water content is almost the same as the water content at the time of extraction of samples. In general, the results of slope stability analysis in the original condition has a value of less than 1.5 safety factor. This shows that all slopes are analyzed in a state less stable. Analyses were performed at saturated conditions, this is because such a condition that is likely to occur and only happens when the slope in a state under water. This is because the material contained in the field of sandstone and mudstone which has properties very porous, so water is very easy to permeate.

To support the slope stability necessary to support its efforts to mine the slope stability. This is because there are many levels of damaged due to erosion by water and mining rocks on the slope face. Such measures may be done by creating a channel of water to levels that were damaged by water. As for the level of decision-damaged rock can be done by reducing the slope or slope angle can be made ramps. From the results of research conducted, it can be seen landslides that might happens at these sites are landslides arc, because the value of the uniaxial compressive strength of rocks on the slopes are covered by the class of soft rock or soil. Because of the slope in Block 09/08 Pit Karuh less safe or less stable with FK Overall value is 1.378 then the recommendation was made slope with slope geometry that is geometry that is considered safe altitude slopes with slopes between 70 m to 90 m and slope angles between 45 ° to 55 °