ABSTRACT

PT. Kaltim Prima Coal is located in Sangata sub-district, Kutai Timur regency, Kalimantan Timur Province. PT. Kaltim Prima Coal is a coal mine company that applies strip mine method for the coal mining process.

In accordance with the stages of mining activity the deeper the mining activity goes, the further the hauling distance become. PT. Kaltim Prima Coal will do something in order to cut down the hauling distance.

The solution to cut down the hauling distance are embankment slope failing and making a pond in the crest dumping area. The pond is made to hold the water so it can be used to saturate the soil so the slope will fail. The pond’s dimension are 2 m on the bottom surface area, 6 m on the top surface area and 5 m on height.

Water is the media that used in the slope failing activities. The water come from K-West well with 0.19 m3/second flow. To canalize the water in to the pond, pump and pipe are being used. After the pond is filled by the water, the pump will be shut down and the slope movement will be monitored by slope stability radar.

Based on the slope stability radar, the slope movement is classified as slow category because the average of slope movement is only 1.5 m/month.