

ABSTRACT

PT. Adaro is one of the coal mining located in South Borneo. The mining method which is used by PT. Adaro Indonesia is surface mining. One of the consequences of surface mining is the uncovering of the soil cover (overburden) caused by unloaded insitu materials. The unloading of the soil cover materials activities are done by blasting.

The overburden loading in Paringin Pit using mechanical devices. On March, 2014 the overburden loading at low wall using Excavator Komatsu PC 4000-06 with bucket capacity of 22 m³

Loading target of the overburden is 1.350 bcm/hour. The production of the mechanical devices based on the research are, the Excavator Komatsu PC 4000-6 EXKM 41002 produces 1.208,78 BCM/hour, EXKM 41003 produces 1.243,69 BCM/hour, EXKM 41005 produces 1.194,56 BCM/hour. While the theoretical result from the field condition which considering the correction factor and the conversion factor are, EXKM 41002 produces 1.214,49 BCM/jam, EXKM 41003 1.267,99 produces BCM/jam, EXKM 41005 1.203,96 produces BCM/jam.

The way to increase the production of the overburden in order to reach the target is, optimizing the mechanical device by technical correction so the cycle time could be optimal and the correction of work efficiency by pressing the time.

After doing the improvement, the loading capacity was increased. It can be seen from the theoretical loading capacity for EXKM 41002 from 1.214,49 BCM/hour increase to 1.394,79 BCM/hour, EXKM 41003 from 1.267,99 BCM/hour increase to 1.398,04 BCM/hour, EXKM 41005 1.203,96 BCM/hour increase to 1.402,7 BCM/hour. And the loading target of 1.350 bcm/hour has complete.