ABSTRACT

PT. Batu Anugrah Mineral Resources is a mining company located in Batuah Village, Loa Janan District, Kutai Kartanegara Regency, East Kalimantan Province. Mining system applied is the open pit system (Surface Mining). Overburden removal activities are done using backhoe Komatsu PC 400 and transported using Nissan CWB45.

The problem is not fulfilling the overburden stripping production target of 160.000 BCM / month, while the actual production is obtained for 118,805 BCM / month. Not achieving production targets due to the low effective working time resulting from the existing constraints resulting in low equipment efficiency.

Efforts to meet the production target of overburden stripping can be achieved with several alternatives. The first alternative is by reducing the barrier time that can be avoided, from the reduction of the barrier time, increasing the work efficiency of the loading tool 67.91% to 74.69% and the carrier 64.96% to 71.83%. With the increase of working efficiency time from the loading and hauling tools increased the production of the load-hauling equipment to 161.196,15 BCM / month while the transportation means becomes 131,371,33 BCM / month. The second alternative is the increase of effective working time and the addition of bulk on the means of transportation after the repairation then the obtained production capability of 169,253.41 BCM / month.

To be able to achieve production objectives should be supervised on the work time that has been set to prevent barriers that occur during the work and the need for the standard calculation of time barriers so as to facilitate control.