

ABSTRACT

CV. Tirta Baru Laksana is a private company engaged in the mining of rocks, namely andesite, with a location in Hargorojo Village, Bagelen District, Purworejo Regency, Central Java Province. The mining system used is an open pit mining system using the method *Quary*.

The problems faced by CV. Tirta Baru Laksana is that the andesite production target of 7,000 m³/month has not been achieved.

This study aims to analyze the factors that affect the production of loading and conveyance equipment, to make efforts to increase andesite production by optimizing the effective working time of loading and conveying equipment after repair and to analyze the effect of effective time before and after repairs on work efficiency.

The research method used in this study is the study of literature, direct observation in the field to collect primary and secondary data. The data obtained was processed and analyzed data. Factors that affect andesite production activities are the loading method carried out by using *top loading* by loading a *single backup* which is considered faster and besides that, the working time is less effective so that it reduces work efficiency. a tool that produces a *bucket fill factor value* of 85%. Andesite mining production at CV. Tirta Baru Laksana from a production target of 7,000 m³/month for 1 unit of *excavator* Kobelco SK200 amounted to 6,280 m³/ month for 2 units of conveyances *dump truck* Hino Dutro 130HD amounted to 6,501 m³/ month

Efforts to increase production can be done by improving the efficiency of work, by minimizing the barriers of time working can be suppressed. The results of the calculation of work efficiency have increased, the loading equipment increased from 54.1% to 63.3% and transportation equipment increased from 50.5% to 61.1% with increasing work efficiency, the production capacity of loading equipment increased from 6,280 m³/month to 7,315 m³/month and transportation equipment increased from 6,501 m³/month to 7,833 m³/month.