ABSTRACT

PT. Victor Dua Tiga Mega makes mining planning starting from annual, quarterly, monthly, weekly and daily plans. In its realization, discrepancies are often found between plans and actual conditions in the field. This discrepancy is known after an analysis in the field. The purpose of analyzing a mining plan is to find out why and where the discrepancies have occurred. The production change tool is an important parameter in efforts to target productivity. The mechanical tools that play a role are digging and hauling equipment. To find out the production results, it is necessary to calculate the productivity of the mechanical device.

The methodology used in this study is the actual measurement method in the field, aiming to get current results. The actual measurement method is implemented in three steps. The first step is studying and reading various sources of information such as books, previous theses, and journals. The second step, data collection is carried out in two ways, namely field observations and the use of company data, the third step provides recommendations and simulations in order to get the desired results.

The inference obtained on the productivity of the Hitachi 1200-6 excavator is 472 Bcm/hour and the Doosan 800 excavator is 373.5 Bcm/hour. The target productivity for the Hitachi 1200-6 Excavator is 490 Bcm/hour and the Doosan 800 Excavator is 400 Bcm/hour. The results obtained have not reached the target, so improvements must be made in order to achieve the company's target. This study aims to analyze the productivity of loading and unloading equipment obtained using actual calculations. Based on the results of the research and analysis that has been done, the average overburden removal productivity with the Hitachi 1200-6 Excavator unit is 572 BCM/hour and the Doosan 800 Excavator unit is 430.5 BCM/hour. Factors causing the productivity target not to be achieved are the low effective working time and working efficiency of the equipment. Efforts that can be made to achieve productivity targets, namely increasing effective working time by reducing time constraints that can be avoided, optimizing work efficiency of tools.

Keywords: Mining, productivity, production, overburden.