ABSTRACT

United Coal Indonesia Company (PT. UCI) is a company which focuses on coal mining service that has located mining effort permission (IUP) at Gandrung Village, Paku District, East Barito Regency, Central Borneo Province.

Mechanical equipment series at United Coal Indonesia Company, has production target for breaking off the overburden is 3,000,000 bcm/year with monthly production target is 250,000 bcm/month. Mechanical equipment series consists of 1 excavator doosan 500LCV combination with 3 articulated dump truck HM400 and 1 excavator komatsu PC300-E29 with 3 dump truck nissan cwb 45A and 1 excavator komatsu PC300-E30 with 3 units dump truck nissan cwb 45A. This mechanical equipment works at three working benches. Loading pattern that applied was top loading with loading position single back up.

Actual production of breaking off the overburden in June, that produced by mechanical equipment is 205,855 bcm so production target of breaking off the overburden as 250,000 bcm not reached. The troubleshoot in this time is less the optimal production from loader equipment and hauler equipment, because working time is not effective with obstacle time existence on mining activity, and truck basin admission filling not yet optimal.

The efforts carried out to increase mechanical equipment production so production target can reached with:

1. Strive for increasing effective working times with decrease or depress obstacle time existence can be avoided so happen increasing effective working times bulldozer as 85,43%; excavator doosan 500LCV as 86,23%; excavator PC300-E29 as 73,98%; excavator PC300-E30 as 73,77%; articulated dump truck HM400 as 87,79%; dump truck cwb 45A-E29 as 75,54% and dump truck cwb 45A-E30 as 75,34%. Mechanical equipment production after increasing effective working time is 241,310,64 bcm.

2. Strive for increasing effective working times and optimize admission filling in truck basin with do increasing bucket loading when loading overburden into truck basin, so production of hauler equipment can be optimized. Mechanical equipment production after increasing effective working times and increasing bucket loading is 273,173,42 bcm.

Therefore, through the increasing effective working times efforts with decrease or depress obstacle time existence can be avoided and optimize admission filling in truck basin with increasing bucket loading, so production target is 250,000 bcm/month can reached.