

ABSTRACT

PT. Pamapersada is a private company which has entered into an employment contract in a coal mine in Tanjung Enim with PT. Bukit Asam (Persero) Tbk. TAL research locations are in the South (MT4). Mining system applied is an open pit mine system. PT. Pamapersada in the process of mining overburden layers in South TAL (MT4) using 1 unit Hydraulic Excavator Komatsu PC 1250SP-8, 1 unit Hydraulic Excavator Komatsu PC 2000-8 and some Dump Truck Komatsu HD 785-7 with \pm 4200 meters distance to disposal.

The problem that occurs is not the fulfillment of the target of 600,000 BCM of overburden stripping/month. The actual total overburden stripping produced today only at 577,278.90 BCM/month. Efforts were made in order to increase the overburden stripping targets can be achieved, namely by improving the circulation time and improve the value of the match factor.

Efforts to achieve the target of overburden stripping is done by improving the circulation time of the conveyance of 629,263.50 BCM/month. From these results it is known that the target can be met overburden stripping.

Other efforts in achieving the target of overburden stripping is done by fixing the value of the match factor in order to obtain the value of the match factor = 1 by adding 3 conveyances to serve Hydraulic Excavator Komatsu PC 2000-8 and add 2 conveyance to serve Hydraulic Excavator Komatsu PC 1250SP-8 can produce a total of 748,681.40 stripping BCM/month. From these results can also be seen that the target can be met overburden stripping. Judging from the cost and benefits can be in adding a conveyance on each tool fit, there is a loss on the addition of 2 conveyance to serve Hydraulic Excavator Komatsu PC 1250SP-8 in the amount of \$ 1,671.18/month and the addition of 3 conveyances to serve Hydraulic Excavator Komatsu PC 2000-8 occur losses of \$ 12,389.52/month.

Having analyzed the addition of conveyance to serve Hydraulic Excavator Komatsu PC 2000-8, should only be done increase of 2 conveyances which will result in a gain of \$ 10,132.31/month and the addition of conveyance to serve Hydraulic Excavator Komatsu PC 1250SP-8 , should only be done increase of 1 conveyances which will result in a gain of \$ 11,539.41/month. Production generated by adding adding one conveyance to serve Hydraulic Excavator Komatsu PC 1250SP-8 and 2 conveyance to serve Hydraulic Excavator Komatsu PC 2000-8 in the amount of 692,163.90 BCM/month. From these results it can be seen that the target can be met despite stripping overburden match factor value \neq 1.