ABSTRACT

PT.Cipta Kridatama (PT.CK) is part of the Marga Trakindo Group Company, focused on overburden removal services and cooperate with Mahakam Sumber Jaya (MSJ). Located in Makarti village, east Kalimantan. Located research in Pit C0-1 Blok E with open pit mining system and with a production target of 3,174,603,1 LCM/month. Stripping overburden with 1 unit backhoe lieber type R984C capacity of 8 m$^3$, 3 units backhoe lieber type R9250 capacity of 17 m$^3$, and 1 unit backhoe lieber type R9350 capacity 18 m$^3$. Combination 1 unit backhoe lieber type R984C no Ce161 with 6 units trucks Cat 773 E, Combination 1 unit backhoe lieber type R9250C no Ce178 with 7 units trucks Cat 777 D, Combination 1 unit backhoe lieber type R9250C no Ce179 with 7 units trucks Cat 777 D, Combination 1 unit backhoe lieber type R9250C no Ce221 with 7 units trucks Cat 777 D, and Combination 1 unit backhoe lieber type R9350C no Ce134 with 7 units trucks 777 D.

The problem today is the production of overburden removal is not optimal, production overburden today is 2,855,139,6 LCM/month. Based on calculation production excavator is 3,160,300,2 LCM/month and hauling production is 2,854,041,6 LCM/month.

Efforts to increase production by improving work efficiency so that the work efficiency excavator increased from 61,9 % to 64,2 % and excavator production overburden increased to 3,279,000,0 LCM/month and efficiency hauling increased from 62,6 % to 64,5 % and production overburden increased to 2,948,476,8 LCM/month. Further increasing production by improving cycle time that production increased to 3,178,006,8 LCM/month, so the production target is reached.

Match factor after the repair cycle time, combination 6 units Cat 773E with 1 unit backhoe lieber type R984C no Ce161 is 0,8, combination 7 units Cat 777D with 1 unit backhoe lieber type R9250 no Ce178 is 0,97, combination 7 units Cat 777D with 1 unit backhoe lieber type R9250 no Ce179 is 0,99, combination 7 units Cat 777D with 1 unit backhoe lieber type R9250 no Ce221 is 0,98, and combination 7 units Cat 777D with 1 unit backhoe lieber type R9350 no Ce134 is 0,98.