

ABSTRACT

PT. Harita Prima Abadi mineral (Persero), Tbk is a company located in West Kalimantan in purpose to do bauxite mine. The exact research place located in Kediuk Stockpile, Kendawangan Site, Sukaria, Kedadawangan district, Ketapang regency, West Kalimantan. PT. Harita prima Abadi Mineral.

In the process after mining, the bauxite ore should be washed before carried to the stockpile in Kediuk port. From here the bauxite ore will be carried with mechanical device to the conveyor belt and finally taken with barge. Production targets that must be transported is of 300,000 tons / month.

Activities of loading and hauling is done using a mechanical device, ie 2 and 8 pieces backhoe tipping trucks that work on 2 different places. At first stockpile tool we used 1 loading vehicle and 4 hauling vehicle, and the second stockpile we used the same amount of vehicle. Currently production is produced 263,887.372 tons / month, can say that the production is derived not achieve the production target.

Problems that occur when this is not the achievement of production targets due to the incompatibility of the service level load tool (backhoe) with the arrival of the conveyance (dump truck) which resulted in the amount of waiting time. Efforts were made to optimize the performance of the work of a mechanical device current by adjusting the existing loading pattern and reduce the number of units of equipment, as well as transportation scheduling done without affecting the planned production targets.

With the first alternative, namely adjusting the loading pattern of the previous one by using a single back up back up to double the production rates are achieved as 338,305.805 tons / month. By adjusting the number of alternative means of conveyance, from 8 units to 6 units, production has not yet reached the target that should be done despite the scheduling of transportation but on the time of conveyance sooner. After rescheduling the conveyance of these alternative production increased to 357,370.092 tons / month. By doing alternative adjustments numbers of loading vehicle from 8 units to 6 units, each of which should have hit the target although it has done in scheduling transportation. But the cycling time increased a little. By using this combine of alternative of loading pattern and adjusting hauling vehicle, the amount of target production is 315,074.101 tons / month. After rescheduling the hauling vehicle the amount of target production is 358,975.588 tons / month.

By using this alternatives, the amount target production should be reached the goal.