

## **ABSTRACT**

PT. ANTAM (PERSERO) Tbk is a nickel mining company that has local operations in Kolaka district, Southeast Sulawesi. The nickel mining operation is located in North mining site, Bukit 6. Mining system that used in this company is open pit mining system.

PT. ANTAM (PERSERO) Tbk production target is 60.000 ton/month. In this site, nickel mining process using mechanical devices that is 1 units of excavator Komatsu PC 200 and 5 units dump truck as a transport equipment Nissan CWT 432 HTRA. The distance from mining front to stock yard is 6,5 kilometers.

The production of this mechanical equipment combination is not reach the company production target. Current production capability is 41.377 ton/month. This happened because a lot of wasted work time, which could be avoided and can not be avoided. These constraints reduce work time effectively so that efficiency is low.

Improving production can be done by improving the effective working time, addition of mechanical equipment or change the mechanical. With the addition of 2 unit Nissan CWT 432 HTRA dumptruck conveyance increased to 60.269,55 ton/month. Monitoring the schedule time in order to achieve the desired production targets should be done so that the production target would be reached.