

ABSTRACT

PT. International Nickel Indonesia Tbk (PT INCO, Tbk) is the largest nickel mining company in Indonesia, located in Sorowako District Nuha East Luwu of south Sulawesi. Mining activities are divided into two blocks namely Block Petea (East Block) and Block Sorowako (West Block). Surface mining system uses the method of Open Cast. The operations of nickel mining in Block Petea, PT. INCO, Tbk using mechanical devices, 1 unit Backhoe PC 800 SE-6 combined with 9 unit conveyances Dump Truck Komatsu HD 785.

Problems today arise when the production of nickel-Block Petea is not in objective achievement. Target production of nickel ore mining in Block Petea PT. INCO, Tbk is the 75,000 tons / week, while the production achieved is 46.929,70 tons / week. This failure to achieve production targets due to the farther location of filtering station and ineffective work time due to the barriers which could reduce the provided work time. Reduced working time effectively will reduce the efficiency of the work. Efficiency digging tools fit is 78 % and transportation equipment was 78,32%.

The efforts that made to increase production is trying to reduce the time constraints of work that occurs in mining nickel ore thereby increasing work efficiency. Efficiency-trencher-load increased up to 82,81 % and conveyances up to 83,86 %. After the increase in work efficiency, production tools for dig-load increased to 75.397,80 tons / week and production of transport equipment to 53.796,02 tons / week, but the production target has not been achieved.

Further efforts to get the production target is to improve the cycle time of transportation by increasing the speed of conveyances. After repair the cycle time on the conveyances, transport equipment production increased to 75.267,14 tons / week, so that the target production can be achieved