

ABSTRACT

Coal is one of the minerals that are widely used to steam power plant. PT. Hamparan Mulya meets the needs of the coal by conducting the mining in Village Hajak, District Teweh, North Barito Regency, Central Borneo.

The mining system used is the strip mine. The mining activities are carried out by excavation using a back hoe. The loading is done by one unit of a back hoe komatsu PC650-5 to serve seven units of Dump Trucks Volvo FMX 520.

The target production for the coal mining is 3,800 tons/day. According to the fact, a coal production reached only 2.447,72 tons/day, still less 1.352,28 tons/day.

The production target is not reached due to the large number of effective working time which is lost because of the obstacles that occur, both avoidable obstacles or obstacles that cannot be avoided. The amount of Effective Utilization (EU) affects the EU production for 77.85% dig tools and 74.59% of transport tools.

The achievement of the target of production was done by increasing the Working-time Effective (WE) by performing the prevention or reduction of e lost time due to the obstacles that occur at loading and transportation activities. A working time of mining was 14.5 hours/days after having reduced by the obstacles of Working-time Effective (WE) become 11.32 hours/day with the production of 2,940.41 tons/day. By increasing the working time from the obstacles that can be avoided then the Working-time Effective (WE) increased to 12.73 hours/day with the production of 3,306.66 tons/day. In the system of work tools, there has been a waiting time for a back hoe PC650-5 which is 2.68 minutes. Due to the raising of Working-time Effective which is not achieve by the target production, then requires the addition of transport tools which are 2 units of Dump Truck Volvo FMX 520 gained the increase production of 944,76 tons/day. By the addition of the transport tools, so the total production become $3.306,66 \text{ tons/day} + 944,76 \text{ tons/day} = 4.251,42 \text{ tons/day}$, then the target production which is 3.800 tons/day can be reached.