

ABSTRACT

PT. Pesona Khatulistiwa Nusantara is a mining company located in Tanjung Selor Subdistrict, Bulungan District, North Kalimantan Province. The research location is at Pit A Site Sekayan Mine Operation. The mining system applied is an open pit system.

PT. Pesona Kusulistiwa Nusantara set an overburden production target for Pit A Site Sekayan Mine Operation of 5.000bcm / Day. Mining process of overburden material using mechanical device 1 unit Volvo EC 750D serving 8 units Articulated dump truck Volvo A40F, Articulated dump truck Volvo a40 f with distance of 1,115 meter to disposal.

The loading pattern used in the field is based on the excavation level between the loading and hauling equipment using the top loading pattern ie the loading tool does the loading by placing itself above the level or truck under the loading tool. The loading pattern based on the number of truck placements is single back up, ie the truck positioned itself to be loaded in one place, while the next truck waits for the first truck loaded to full, after the first truck departs the second truck positioning itself to be loaded and so on.

The problems that occur are the unfulfilled production of loading and transport equipment so that the production target has not been reached, especially at Pit A Site Sekayan Mine Operation. The current production capability is 4,674 Bcm / day, while the target is 5,000 bcm / day for Pit A Site Sekayan Mine Operation. Not achieving production goals, because of the amount of work time wasted due to work barriers both avoidable barriers and unavoidable obstacles. With these barriers will minimize effective working time causing low work efficiency.

Efforts to increase production can be done by increasing the effective working time, 16,000 hours / day effective work time for loading and 16.3 hours / day for conveyance equipment and can be increased effective working time by suppressing existing obstacles.

Measures that can be achieved so that the production target of land cover can be achieved that is by increasing the effective working time and work efficiency of the tool increases. After repairing at the time of effective work found increased production of cover soil of 5.014bcm / day.