ABSTRACT

This research was conducted in Dredges 11 Karimata PT. Timah Tbk, Matras, Bangka regency. Dredgers 11 Karimata has a target rate of transfer of land overburden 820 m$^3$/h and on land leaded to 400 m$^3$/h while the realization of the field in May the rate of transfer of land per hour can be achieved on the top soil is 763.6 m$^3$/h while for leaded soil reaches only 376 m$^3$/h, in this case a layer of soil excavation was leaded by land leaded excavations did not reach production excavation company. Production of subsoil excavation was leaded by leaded soil can be improved by changing methods of excavation and pull wire speed side.

The method used in the dredges 11 Karimata is a method of short face to the ground layer is not leaded and leaded coating. Short face methods can not meet the production target excavation company.

The steps can increase the rate of removal of land are:

1. Changing the method of extracting the layers was leaded by the method of extracting long face while land leaded method is replaced by a combination method (method long face and short face method), replacement method of research is increasing the rate of soil removal was leaded from 800 m$^3$/h to 840 m$^3$/h and leaded soil layer increased from 376 m$^3$/h to 387.9 m$^3$/h, because leaded soil layer has not reached the target rate of removal of land that is leaded 400 m$^3$/h, then made an effort to improve the speed of the wire pull side.

2. Increase the speed of the drop wire on the side of leaded soil layer when using long face can increase the rate of transfer of land to the land of leaded than 376 m$^3$/h to 416.2 m$^3$/h while using a combination of methods.

Land transfer rate can be improved by changing the method of excavation and pull wire speed side.

Keyword: dredge, long face, short face