

ABSTRACT

PT. Natarang Mining is the concession holder of the gold mining works contract (special licences) located in Tanggamus Regency, Lampung Province. The mining activities are currently entered into the stage of exploitation (production operation) with a system of underground mines. There are several methods of mining which applied the sublevel stope, shrinkage stope and the longhole stope method. At the opening of the hole Way Semuong Level 2 MH 3 and the sublevel applied methods of longhole with applying slice in normal use. With the aim of better ore can obtain maximum.

Workmanship sublevel 1 on existing demonstration of strength factor is mostly 1 and value of safety factor is < 1.2 which means that the stope is at level that not secure. On the slice in overall the strength factor, safety factor and the total displacement still in safety conditions. Sublevel 2 in workmanship shows value strength factor, safety factor and displacement is still in a state of safe. Likewise the conditions of the slice are still in a state of overall safety. Sublevel 3 value of strength factor, safety factor on existing stope unsafe value showing on the left wall and the roof. The slice workmanship also shows average values are not safe for the value of the safety factor. The sublevel 4 in workmanship done up to existing stope walls because the roof up to the level 1 foundation pillar. In overall strength factor, safety factor and total displacement still in safe condition, though there are some points which indicate the number is not secure.

Based on the assessment of the strength factor, safety factor and total displacement of the wall on any existing stope and also on stope slice are advised to use the buffer (supporting) at each stage of the application taking ore (ore extraction).