

ABSTRACT

PT. Newmont Nusa Tenggara (PT. NNT) conduct gold and copper ore mining by using open pit system and using open pit methods. Rock demolition is done by blasting. To facilitate the activities of loading and transporting process, should be supported also by the condition of the flat level floor and not wavy. Condition of the floor level of the broken or uneven due to the reduced depth of the hole explosive (silting) so that the stuffing explosives into uneven especially with the conditions of silting that occurred up to one to two meters, whereas the company tolerate silting drill holes should not be more than 0, 5 m. Therefore, further study of changes in the depth of the drill hole (silting) to know what causes and how much influential in floor level.

The study was conducted at 12 sites scattered drilling in the area Domain Software (*soft rock*), Domain Medium (*medium Rock*) and Domain hard (*Hard Rock*). Domain The term itself is used by PT. NNT to divide the region with the lowest to highest rock strength is based on research that has been done before. Parameters to be measured is the actual drill hole data for comparison with the drilling plan. Data retrieval drill holes performed twice, at the time of drilling and the time shortly prior to the charging of explosives (Loading). Based on the results of the study after the data obtained grouped region experienced silting Domain Software average of 0.6 m from the initial plan as deep as 16.8 m to 16.2 m. Domain Medium experiencing an average silting of 0.8 m from the initial plan as deep as 16.2 m to 15.4 m. Domain silting hard experience an average of 0.1 m from the initial plan of 14.2 m to 14.1 m. Factors that cause the silting up came from the quality of the rock that has a value of *Rock Quality Designation* (RQD) is bad, then the erosion caused by rain with high intensity and ground water that flows through the level of drilling so that overflow onto the floor surface drilling. The next cause of which is the charging time of explosives (Loading) is too long so that the drill holes are left open too long, and the next due to factors that are often disrupted tools and human error

Silting in drill holes affect the amount of explosives that is inserted into the hole, where the quantity of explosives entered experienced a reduction is not according to plan. Reduction of explosives which is not in accordance with the plan resulted in floor level after blasting as on a Domain soft perforated pattern 210 363, 285 499 Domains currently experiencing overbreak pattern, and the pattern of hard Domain 270 485 which makes corrugated floor level.