

ABSTRACT

Rock breaking activities in PT. Amman Mineral Nusa Tenggara (PT. AMNT), West Sumbawa Regency is done by drilling and blasting. Drilling activities done before blasting activities. So, blasting activities affected by drilling activities success.

Research done on phases 7 at the pit phase of Batu Hijau PT. AMNT, to know the depth of hole deviation influence against the breaking of rocks. Drill equipment used is Atlas Copco brand type PV 351, with diameter of drill bit 311 mm hole for production. The quality of PT. AMNT copper (Cu) is 0.5% and the gold (Au) is 0.4 ppm.

When the depth of the hole is less than explosive plan, it is called under drilled and in the depth of the hole over the explosive plan called over drilled. Measurement of the depth of the hole after drilling explosive called drill hole depth while the depth of hole being measured before the explosive inserted explosives called blast hole depth. The average value of under drilled in drill hole depth is 1.3m and average value of over drilled is 0.9m while the average value of under drilled and over drilled on blast hole depth is 1m .

Based on the research above, there is discrepancy occurs between the planned explosive hole depth and realized in the field (actual) that exceeds the limits of tolerance of the company that is 0.5 m. The existence of such discrepancy will result in the amount of stuffing the explosives used, the explosives used in the 12 times blasting explosive holes with 2,686 hole, for the use of explosives that is less than the plan 127,112.3 kg/completely blasting explosives over the plan amounted to 38,966.0 kg/ completely blasting. The existence of the difference in depth between the explosive plans and explosive result also affects the existence of the floor uneven level or Undulasi formed.

Efforts that can be done to reduce the causes of inaccurate of the depth hole are: Maximizing the leveling ground using dozer shovel with a rubber tire and a grader, the mark in elevation based on the topography of drill pad, recounting the explosive hole which will be filled by explosives.