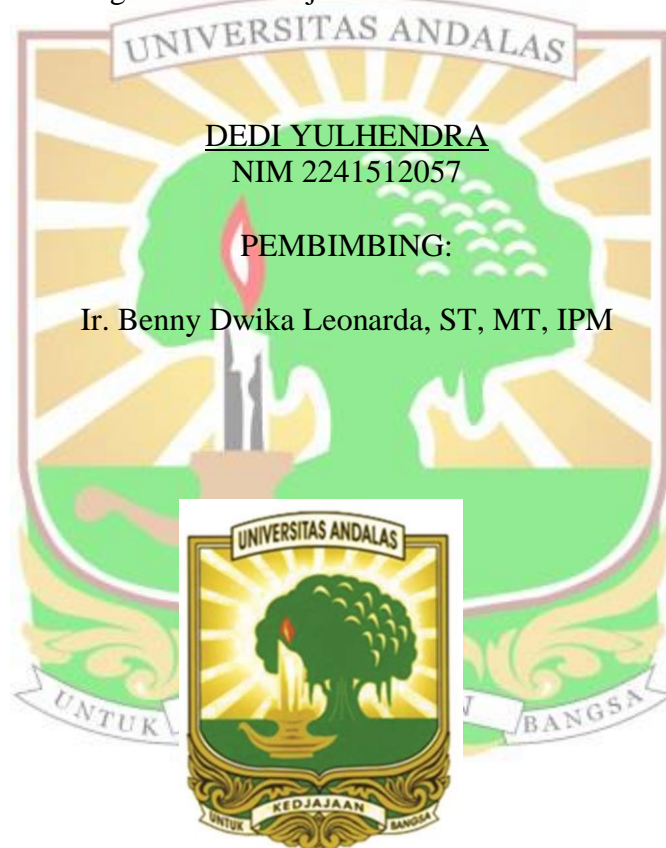


**EVALUASI TEKNIS GEOMETRI PELEDAKAN TERHADAP
FRAGMENTASI BATUAN ANDESIT PT KOTO ALAM SEJAHTERA**

LAPORAN PENELITIAN

Sebagai Salah Satu Syarat Untuk Menyelesaikan Program Profesi
Pada Program Profesi Insinyur
Program Pasca Sarjana Universitas Andalas



**POGRAM STUDI PROGRAM PROFESI INSINYUR
PROGRAM PASCA SARJANA
UNIVERSITAS ANDALAS
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ABSTRACT

Dedi Yulhendra :Evaluation of Explosion Geometry to Achieve 20,000 Ton Production Target In April 2017 At Andesite Stone Mine Location PT. Koto Alam Sejahtera Jorong Polong Duo Nagari Koto Alam, Koto Baru Pangkalan Sub-district, Lima Puluh Kota District, West Sumatra.

PT. Koto Alam Sejahtera is a company engaged in Andesite stone mining. Andesite Stone mining uses open pit system with Quarry method, located in Jorong Polong Duo Kenagarian Koto Alam area, Pangkalan Koto Baru Subdistrict, Lima Puluh Kota District, West Sumatra.

To take andesite stone first stripping the cover. Due to the harsh rock conditions, the process of stripping is done by drilling and blasting method which is an effective and economical way of rocking.

The blasting process is an activity to render rocks from its parent rock. Geometry applied by PT. Koto Alam Sejahtera is Burden 2 m, Spacing 2 m, Depth hole 6 m, Stemming 2 m, Subdrilling 0 m, and Length of explosive material 4 m, height 5,5 m level with 3 inch hole diameter.

The average data obtained writer field with burden 2,02 m, Spacing 2,08 m, the depth of 5,77 m explosion hole, the number of holes 287, the average fragmentation of 24,33 cm blast results and monthly explosive volume 17.976,46 Ton < 20.000 Tons / Month.

From the theoretical calculation according to R. L. Ash theory, the burden is 1.9 m, 2.2 m spacing, 6m explosive hole depth, 310 hole number, 24,06 cm blast detonation rate and monthly blast volume 20.214,48 Ton / Month.

Keywords: Blasting geometry, fragmentation, Production