## **ABSTRACT**

Hargomulyo village has a potential mining area of Andesite quarry material. The research location is located in Hargomulyo Village, Kokap District, Kulon Progo Regency, Special Region of Yogyakarta. This area is adjacent to the new international airport development area in Yogyakarta, so it is expected to fill up the needs of andesite materials as airport foundation. Based on the results of the exploration that has been done, the Andesite potential in the research area has the prospect to be carried out by the company.

The result of volumes obtained from the calculation of andesit reserves in the research area is using cross section method with rule of gradual change is 16.070.804,03 m3, while with contour method is 26,391,799.45 m3.

Based on the results of research and discussion that have been done to determine the potential of Andesite Reserves, it can be concluded as follows:

- 1. a. The andesite reserve volume with the cross section method is calculated from elevation 145 m below sea level to elevation 30 m below sea level is 16,070,804.03 m3.
  - b. The andesite reserve volume with the contour method from elevation 149 m below sea level to elevation 9 m below sea level is 26,391,799.44 m3.
- 2. Based on SNI 13-4726-1998 on the classification of resources and reserves, the Andesite reserve volume in the study area is included in the Probable Reserve.