ABSTRACT

The research was conducted in Blok Arga PT. ANTAM (Persero) Tbk. Geomin Unit. The study site has an area of ± 825.000 m², located at the region Sarolangun district, Jambi province. This research is important because gold mineralization mapping needed prior to the next exploration stage.

Gold is commonly associated with sulfide minerals in a very fine size so that the estimation of the mineralization zones was measured by geophysical induced polarization method (IP). Data acquisition process using the line spacing 100 m, 25 m for electrodes and the configuration used is dipole - dipole. There are seven lines, BL -1600, BL -1700, BL -1800, BL -1900, BL -2000, BL -2100, and BL -2200, with the direction N 90° E applied to get IP data.

The processing of field data using the Earth Imager 2D software, Microsoft Excel, Geosoft and Surfer 10. Processing data obtained a digital map, solid model, and line cross section. The next process is to conduct integrated interpretation from geophysical and geological data.

The trend of mineralization zone obtained relatively developed from West to East with an area $\pm 284.000 \text{ m}^2$ and Eastern area of research wide is $\pm 27.166 \text{ m}^2$. There are three boreholes drilled in the mineralization zone, in line BL -1700 and BL -2000.