

ABSTRACT

Prediction of the spread of iron ore in the region of PT. Kolvingkas the place in Sukanegara village, Tanjung Bintang, Lampung, using geoelectric and geomagnetic methods. Geoelectric measurements using a resistivity meter model of ARES (Automatic Resistivity) and geomagnetic measurements using a magnetometer GEM SYSTEM.

In principle, geoelectric measurements is to obtain resistivity values of the constituent rock bedding under the surface , while the geomagnetic measurement is to determine the value of the magnetic anomaly arising from subsurface rock constituent . With these two methods it is known the existence of iron ore.

Having in mind the existence of iron ore to the method followed by the 3 dimensional modeling to determine the form of the spread of the iron ore. This is the main objective of this research is to determine the form of iron ore dissemination of the research sites. By knowing the shape of the distribution can be used as a guide in further research, in this case is the spot drilling and geoelectric measurements to a larger area considering this study can only cover 32 hectares of the 100 hectares of existing area. Iron ore estimation results obtained while the average depth of approximately 5-10m but there is the possibility of being down to a depth of 50m.

Keyword : Iron ore, Geoelectric, Resistivity, Chargeability, Geomagnetic, 3D modeling