

## Pemanfaatan Metode Geolistrik Untuk Penentuan Sumber Anomali Geomagnet di Kota Mataram, Pulau Lombok, Provinsi NTB

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### Abstrak

The previous research used geomagnetic method on 36 sample located in Mataram with radius 5x5 kms<sup>2</sup>, have resulted isogram map that clearly indicated extreme magnetic dipole of 70.383,4nT (03535 '05, 34 " LS 116° 07' 22,8" BT at Karang Kemong) and -26\_395,5m" (01° 37' 5,2" LS 116° 05 '1 L6 " BT at Asrama Haji, Jalan Lingkar Selatan). This value has been corrected with IGRF of 45.000nT. This paper will report the results of advance research to identify the sources of the extreme geomagnetic anomaly. The method used in this research is making a comparison between geomagnetic anomaly value and gravity anomaly value (Bouguer anomaly); also the values of geomagnetic anomaly recorded in several places that have been predicted or proven had mineral/ores potency. Besides that, a geologic prediction will be made based on geo-electric survey at center of positive and negative anomaly. This research shows that there is correlation between low Bouguer anomaly (140mGaU and positive geomagnetic anomaly (70.3 83, 4nT), in the other hand high Bouguer anomaly (1 50mGaU correlated with positive geomagnetic anomaly (-26.395,5nD. Besides that, the value of geomagnetic anomaly in Mataram higher than those of other locations that have been predicted or proven had mineral/ores potency. Geo-electric method applied on bath maximum points of anomaly give a result that the most probable source of geomagnetic anomaly in Mataram is substructure that contains much fresh water (highly productive aquifer) or specific structure of stone with magnetic property that must be studied intensively.