ABSTRAK

IDENTIFIKASI POTENSI ZONA MINERALISASI MENGGUNAKAN METODE *INDUCED POLARIZATION* (IP) KONFIGURASI DIPOLE-DIPOLE PADA DAERAH "X", KABUPATEN BENGKAYANG, PROVINSI KALIMANTAN BARAT

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Pengukuran menggunakan metode *Induced Polarization* (IP) konfigurasi dipole -dipole telah dilakukan pada daerah "X", Kabupaten Bengkayang, Provinsi Kalimantan Barat untuk mendapatkan gambaran bawah permukaan mengenai mineralisasi yang terjadi pada daerah penelitian dan pola penyebarannya. Lintasan pengukuran sebanyak 36 lintasan dengan panjang lintasan 500 meter, spasi antar lintasan 65 meter, spasi elektroda 10 meter, dan azimuth lintasan pada umumnya 90°. Pengolahan data dilakukan menggunakan MS Excel, RES2DINV, dan ROCKWORKS.

Dari hasil interpretasi penampang 2D resistivitas dan studi geologi terdahulu pada daerah penelitian dapat kita ketahui bahwa daerah penelitian tersusun atas beberapa litologi, yaitu endapan aluvial dengan resistivitas 0-500 Ohm.m, batuan sedimen dengan resistivitas 500-1000 Ohm.m, andesit dengan resistivitas 1000-4000 Ohm.m, dan intrusi granodiorit dengan resistivitas >4000 Ohm.m. Penampang *chargeability* menunjukkan alterasi yang berkembang, yaitu alterasi argilik (<100 msec), alterasi silisifikasi (100-200 msec), dan alterasi potasik (>200 msec). Dari penampang resistivitas dan *chargeability* pada masing – masing lintasan, dibuatlah peta penyebaran dengan berbagai nilai kedalaman untuk melihat pola penyebaran zona mineralisasi. Terlihat bahwa mineralisasi menyebar hampir di semua lintasan pengukuran, namun zona mineralisasi kuat berada di bagian baratdaya dan timur dari daerah penelitian.

Kata kunci: *Induced Polarization*, dipole - dipole, *chargeability*, zona mineralisasi.

ABSTRACT

IDENTIFICATION OF MINERALIZATION ZONE POTENTIAL USING INDUCED POLARIZATION METHOD (IP) DIPOLE – DIPOLE CONFIGURATION AT "X" AREA, BENGKAYANG DISTRICT, WEST KALIMANTAN PROVINCE

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An Induced Polarization measurements with dipole – dipole configuration had been held at "X" area, Bengkayang District, West Kalimantan Province to get well interpreted image of underground about the mineralization and its distribution. The amount of measurement lines used in this research are 36 lines, the length of each line is 500 metres, with 65 metres of space between lines, 10 metres of electrodes spacing, and 90° of azimuth in general. Data processing were using MS Excel, RES2DINV, and ROCKWORKS.

From the interpretation of 2D pseudodepth section of each line and geological study of object area, we may know some informations about the lithology of the area which are alluvial with 0-500 Ohm.m of resistivity, sedimentary rocks with 500-1000 Ohm.m of resistivity, andecite with 1000-4000 Ohm.m of resistivity, and granodiorite intrusion with >4000 Ohm.m of resistivity. On chargeability sections we might see there are several alterations that composed of argilic (<100 msec), silicification (100-200 msec), and potasic (>200 msec). By using those sections of resistivity and chargeability, we can create distribution maps of resistivity and chargeability at various depths to see the distribution of mineralization zone. The mineralizations are found almost at entire area, but the strong ones are found at southwest and eastern area.

Keyword : Induced polarization, dipole - dipole, chargeability, mineralization zone.