Identifikasisebaran potensi zona mineralisasi emas sistem epitermal sulfidasi tinggi dengan metode time domain induced polarization (TDIP) dan magnetik di daerah gunung "N" = Identification of potential distribution of gold mineralization zone of high sulfidation epithermal system with time domain induced polarization (TDIP) and magnetic method in "N" mountain area

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Abstrak

Komoditas emas yang tinggi serta lapangan poduksi Pongkor yang sudah beroperasi sejak puluhan tahun lalu membuat perlu ditemukannya zona potensi baru untuk produksi pertambangan emas. Untuk mengetahui zona mineralisasi emas dan kemenerusannya, maka dilakukan studi geofisika dengan menggunakan metode Time Domain Induced Polarization (TDIP) dan magnetik. Data TDIP yang terdiri dari data resistivitas dan chargeabilitas diinterpretasi untuk menentukan zona alterasi dan mineralisasi bawah permukaan yang dikorelasi dengan data magnetik yang telah di inversi 3D sehingga mendapatkan parameter suseptibilitas. Berdasarkan nilai resistivitas di daerah penelitian, zona alterasi argilik diduga memiliki nilai <50 Ohm.m dan zona alterasi silisifikasi diduga memiliki nilai >50 Ohm.m. Nilai chargeabilitas zona mineralisasi diindikasikan memiliki nilai 100-810 m.sec. Zona mineralisasi di daerah penelitian memiliki nilai suseptibilitas berkisar antara -0.073 hingga -0.021 cgs. Dari ketiga parameter tersebut, diduga zona mineralisasi terdapat di bagian Timur daerah penelitian dan berorientasi Utara-Selatan searah dengan orientasi sesar utama.

<hr>The high gold commodity as well as the Pongkor production field that has existed since last year made it necessary to find a new potential zone for gold mining production. To find out the zone of gold mineralization and its continuity, then conducted geophysical studies by using the methods of Time-Domain Induced Polarization (TDIP) and magnetic. TDIP data consisting of resistivity and chargeability data are interpreted to determine alteration zones and subsurface mineralization that are correlated with magnetic data that has been inversed in 3D to obtain susceptibility parameters.

Based on the value of resistivity in the area of research, the argilic alteration zones are thought to has a value of < 50 Ohm. Silisification alteration zones supposedly has the value > 50 Ohm. m. The value of the chargeability zone of mineralized indicated has a value of 100-810 m sec. Research in the area of mineralized zone have a value in the range suseptibilitas -0073 to -0.021 cgs. From those parameter of the mineralized zone, it is assumed that the mineralization zone is in the eastern part of the study area and oriented North-South direction with the orientation of the main fault.