



AEM Survey in Artana Deposits - Kosovo

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Abstract: The Airborne Electromagnetic (AEM) method is used in Kosovo to locate good conductors (i.e., polymetallic sulphide ore deposits). The surveyed results of the secondary electromagnetic fields using a four-frequency system (0.9 kHz, 3 kHz, 12 kHz and 25 kHz) and the calculation of respective apparent resistivity (ρ_a) values in the region of Artane polymetallic ore deposit, Kosovo, indicate that in known deposits and in some other areas around, these values decrease. The decreased values of AEM anomalies are connected to the presence of massive sulphide ore bodies of good electrical conductivity at a certain depth. The presented study reveals the good correlation between airborne geophysical anomalies and the presence of known ore deposits at depth down to 120 m. It indicates also that based on other AEM anomalies of the same character, obtained in surrounding areas, the perspective in searching for massive polymetallic ore deposits remains open.

Keywords: *Airborne Electromagnetic(AEM) survey, geophysical anomalies, Artane polymetallic ore deposits.*

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