Application of Electrical Prospecting Methods in Search for Polymetallic Mineralization in Marec Region, Kosovo

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Abstract: The Marec region is located in Artana locality, in the eastern part of Kosovo. Geologically it takes part to Vardar tectonic zone, where important polymetallic ore deposits are found. Electrical Prospecting with Induced Polarization (IP) and Resistivity methods were used with “Real Section” technique as test survey in this region, located about 1.5 km NW of Artana ore deposit. The IP/Resistivity “Real Section” survey detected two interesting anomalies which should be further followed up on strike and at depth with this technique. The first anomaly is located in the NW part of the section, starting from near-surface and continuing at depth while the second one is located at a depth below 200 m from surface, in the centre of section. Both anomalies remain open at depth and are associated by low resistivity values, making them interesting as regard to searching for concentrated polymetallic mineralization. The anomalies should be verified by drillings. The experimental work with IP/Resistivity “Real Section” technique proved to be effective in search for polymetallic mineralization in this region and should be used in similar geological situations in Eastern Kosovo.

Keywords: Polymetallic mineralization, IP/Resistivity “Real Section”, IP/Resistivity anomalies.

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