

REMOVAL OF ELECTROMAGNETIC COUPLING EFFECT FROM IP PHASE DATA

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ABSTRACT— Since the electromagnetic (EM) coupling effect causes spurious anomalies on induced polarization (IP) pseudo-section phase data collected over metallic sulphide mineralization area, it is difficult to evaluate and to interpret as truly of these data. Coupling removal process by dividing (DAKG) IP pseudo-section data has been developed for to remove this effect on raw phase data. In this process theoretical earth model considered as has continuously varying conductivity. Apparent resistivity and EM coupling computations have been made by using mathematical expressions based on this earth model. DAKG process is applied to the real IP phase field data given by recent works in which used the "Quadratic Extrapolation" (QE) and "Complex Resistivity Interactive" (CRI) techniques. The extension of mineralization zone, is described as agrees with the results of QE and CRI techniques by interpreting of pseudo-section decoupled phase data obtained from DAKG process. Hence, it is seen that the DAKG was an useful process like QE and CRI on removing of EM coupling.