

7.2 JOINT APPLICATION OF ELECTROMAGNETIC PROSPECTING METHODS FOR MINERAL EXPLORATION: CASE STUDIES

A. Solovyeva^{1*}, D. Epishkin¹, V. Kulikov¹, D. Yakovlev¹ and N. Zorin¹

¹*Nord-West Limited, Moscow, Russia*

*Corresponding author e-mail: soloway.msu@gmail.com

ABSTRACT

Electromagnetic geophysical methods allow determining the spatial distribution of the low-frequency resistive (electrical resistivity) and capacitive (chargeability) characteristics of rocks. Since both properties are affected by lithology, pore fluid chemistry, water, graphite and ore mineral content, some combinations of electromagnetic methods could be especially useful in mineral exploration. In this paper we consider several examples of electromagnetic method application in mineral exploration performed by Nord-West company.

KEYWORDS: resistivity, induced polarization, magnetotellurics