

ВЕЛИКИН и др.

**GEOPHYSICAL RESEARCH DURING THE STUDY OF ENGINEERING
AND GEOCRYOLOGICAL STATE OF HOST ROCKS IN THE EASTERN
MINE «NYURBA» (WESTERN YAKUTIA)**

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The most perspective and least expensive way of mining operations for a number of minerals is an open-cast mining. The primary danger during construction and operation of open-cast mines in permafrost zone is posed by degradation of frozen rocks. The last leads to instability of open-cast mine boards and landslips development. Now despite of many information received during engineering-geological study, there is a requirement for the fullest 3D representation of frozen massive structure, as well as in an objective estimation of physical parameters distribution of possible weakened zones. This can be obtained by using special investigations combined with modern tools and techniques.

Keywords: geophysical surveys, geocryology, frozen rocks, diamond quarry «Nurba».