

甚低频电磁法龙头山银铅锌矿床勘查中的应用

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摘要 随着找矿、勘探与开发生产实践的不断深入, 表露矿与浅部矿渐趋减少, 找矿难度逐渐增大, 找到一种简捷、迅速的勘查、探矿方式, 迫在眉睫. 根据实践证明, 甚低频电磁法是较为理想的选择. 在运用甚低频电磁法时, 通过对所测数据进行Fraser滤波等技术处理, 并且结合矿区地质研究控矿规律及矿体赋存规律, 从而有效地圈定掩盖区异常地质体及其产状和展布方向, 预测矿体空间赋存部位, 为深部找矿提供依据.

关键词 [甚低频电磁法](#), [地球物理勘探](#), [龙头山Ag-Pb-Zn矿床](#)

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Application of VLF-EM method in the mineral exploration of Longtoushan Ag-Pb-Zn Deposit, Alukerqinqi, Inner Mongolia

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Abstract With long-term continuous search for mineral resources in the past, the opportunity in discovering the outcropped and shallow-seated deposits becomes increasingly difficult. Therefore, new methodologies in finding the concealed ores under overburden are very important and greatly required in present and future mineral exploration activities. Based on our practice, the VLF-EM method is a cost-effective and useful geophysical technology in delineating blind orebodies under cover. Through a systematic VLF-EM survey in a specific potential area, some preferred VLF anomalies that may correspond mineralized structures would be discovered. By geological modeling and cross-testing, those discovered anomalies could become potential targets for further detailed geological exploration.

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