



APPLICATION OF MINE TRANSIENT ELECTROMAGNETIC METHOD IN FORECASTING GOAF WATER

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ABSTRACT

The principle of mine transient electromagnetic method (MTEM) is introduced. The method was used to forecast the goaf water in the course of the No.2 main return airway driven in a coal mine. The results show that the position of the goaf water can be found out accurately and rapidly by MTEM, the operation is convenient and it can be applied to do the real-time prediction continuously, the qualitative analysis of the water can be done, but the quantitative analysis cannot, the abnormal area is larger than the real region filled with the water in the map of the apparent resistivity isoline, the data of the side wall of the drift is influenced easily by the blotting with wire mesh and the blind zone in short distance cannot be avoided.

Key words:.