

## *Directional Drilling - It's What's Up Front that Counts"*

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### ABSTRACT

Longhole directional drilling is a valuable tool available to the underground coal mining industry for the prevention of inundations. This technique is a proven and acceptable alternative by MSHA under CFR 75.388. The roots of this technology were started through methane drainage applications. The reliability and accuracy of directional drilling has been developed and improved over the past twenty years. Longhole directional drilling is commonly used for pre-mining methane drainage, water drainage, and various exploration applications.

REI Drilling, Inc. ("REI"), with over twenty years of experience, has six longhole directional drill units that operate in various coal mines across the United States. A longhole drill unit generally consists of a permissible, high thrust drill and power unit, drill rods, hydraulic driven downhole motor, water pumps, and steering tools. These tools coupled with experienced operators allow the accurate placement of long, horizontal boreholes.

Coal mine operators have used REI services to directionally drill long in-seam boreholes in advance of projected mine workings to delineate the absence of old workings. This presentation will review the tools of our trade, case history applications, and results of the projects.