

THE WAITING TIME RECOVERY TEST

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ABSTRACT

The U.S. Bureau of Mines has been studying the problem of why explosives detonate weakly or misfire during blasting in underground coal mines. Cross-borehole shock wave interaction has been identified as a predominant mechanism causing explosives to function improperly (1)(Underline numbers in parenthesis refer to items in the list of references at the end of this report.). Cross-borehole shock wave interaction can be simulated in a laboratory setting, making possible the replication of tests in sufficient numbers to understand and quantify some of its effects on permissible explosives (2). The work presented here investigates the capacity of explosives to partially recover from the desensitizing influence of the shock wave. The recovery trend of different explosives can indicate optimum blasting patterns useful for minimizing borehole charge malfunctions.