

# BLASTING AS A METHOD FOR ABANDONED MINE LAND RECLAMATION

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## ABSTRACT

Blasting methods have been proposed for reclaiming abandoned underground coal mine sites having unstable conditions. The objective of blasting is twofold: the permanent stabilization of an area by the collapse of underground workings to prevent any future subsidence, and the use of blasting to close existing sinkholes.

This paper presents the results of two research projects funded by the Bureau of Mines Abandoned Mine Land Research Program to investigate the feasibility of blasting to assist in the reclamation of shallow abandoned coal mine sites. Blasting tests were conducted at Beulah, North Dakota and at Scobey, Montana, involving different configurations. The first test was a 10-acre site where blasting was used to collapse regular room and pillar panels for which good mine layout information was available. The second test involved a one acre site containing very irregular workings for which there was little available information. Finally, blasting techniques were used to close 13 individual vertical

Abandoned Mine Land (AML) depths to the road use the three 60 lb or less at vertical sites) Tj-0.0018 Tc 1.in The depof shallowde