

INNOVATIVE BLASTING PRACTICE AT SANDS HILL COAL COMPANY

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ABSTRACT

Sands Hill Coal, located in Wellston, Ohio produces coal for steam generation and crushed limestone for the aggregate market in southeastern Ohio.

This paper concerns the blasting and production of the limestone which lies between the #5 and #4 coal seams. The limestone bed averages 8 to 10 feet in thickness and is overlain with 17 to 20 feet of shale from the floor of the #5 seam.

Past practice was to drill, shoot, and muck out the shale in order to clean the limestone in preparation for a second drill, blast and muck cycle in the limestone itself.

Present practice calls for drilling both the overlaying shale and the limestone bed in one drill pass. Blastholes are loaded with a solid column of explosives and both the shale and limestone are blasted in a single operation. The shale is removed from above the limestone then a separate mucking cycle sends the stone to Clinton Stone Company, the aggregate subsidiary of Sands Hill. This is accomplished with no mixing of product during the blast cycle and minimal loss of limestone from the free face. This loss in material is far outweighed by the savings realized by the elimination of a complete drill/blast sequence from the production cycle.