§ 33.37 Test procedure.

(a) Roof drilling: Drilling shall be done in friable strata, similar to the roof in the Bureau’s Experimental Mine, which tends to produce large scale-like cuttings. Drill bits shall be detachable, cross type with hard inserts, and shall be sharp when starting to drill each set of 10 holes. In roof drilling, 1 3/4- and 1 1/2-inch diameter drill bits shall be used; in horizontal and down drilling, 1 1/4-inch diameter bits shall be used. The drill steel shall be 3/8-inch hexagonal and of hollow type to permit the introduction of compressed air through the drill steel when necessary to clean a hole during drilling.

(c) Rotary drilling. A hydraulic-rotary drill with a rated drilling speed of 18 feet per minute free lift, capable of rotating drill steel at 900 revolutions per minute with 100 foot-pounds torque, and having a feed force of 7,000 pounds, shall be used for roof drilling. An electric-rotary drill, supported by a post mounting, with a rated drilling speed of 30 inches per minute and powered by a 2.25 horsepower motor, shall be used for horizontal drilling. For roof drilling, the bits shall be hard-tipped, 1 3/8 and 1 1/2 inches outside diameter, and 1 1/4-inch auger-type drill steel shall be used. For horizontal drilling, the bits shall be hard-tipped, 2 inches outside diameter, and 1 3/4-inch auger-type drill steel shall be used. Drill bits shall be sharp when starting to drill each set of 10 holes.