



Solid where location is known, long dashes where uncertain. Number designates coal bed, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

High-angle fault, showing dip
 to left where location is known, to right where uncertain.
 Solid where location is known, long dashes where uncertain.

Fault, showing relative movement.
 Solid where location is known, long dashes where uncertain.

Thrust or low-angle reverse fault, showing dip
 to upper plate.
 Solid where location is known, long dashes where uncertain.

Anticline
 Showing crest line.

Syncline
 Showing trough line.

Overtuned anticline
 Showing crest line and direction of dip of limbs.

Overtuned syncline
 Showing trough line and direction of dip of limbs.

Structural cross section
 A ——— B

Striped area
 Shaded area covered by moraine waste.

Surface opening of coal bed

Explosion trench

Prop. all
 Collected area where surface has fallen into underground workings.

Mine waste
 The area and waste where surface has fallen into underground workings.

Stream transected waste

Boundary of mine
 JOHN B. WATKINS

Warranty tract
 Boundaries are indicated for information and identification but are not authorized for legal purposes.

Barren line

EXPLANATION
 STRUCTURE MAP

Outcrop of coal bed

Fault, showing relative movement

Fault cutting Buck Mountain coal bed, showing dip of fault plane to left, position of faulted segments, and position of segment.
 Fault trace is solid where location is known, long dashes where approximately located, dashed where location is uncertain, short dashes where approximately located, to a stream segment, D, down stream segment, to a stream segment.

Shade zone

Anticline
 Showing crest line, solid where location is known, dashed where location is uncertain.

Syncline
 Showing trough line, solid where location is known, dashed where location is uncertain.

Overtuned anticline
 Showing crest line and direction of dip of limbs.

Contours on the bottom of the Buck Mountain coal bed
 Solid in mined areas, long dashes in unmined areas, in those places where a part of the bed lies beneath another part of the same bed short dashes are used in mined areas, and a very short dash in unmined areas.

A ——— A'

Structural cross section

Barrier pillar in contoured bed

Boundary of mine
 JOHN BARBER

Warranty tract
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COAL OUTCROP MAP E. SHENANDOAH

U.S. Geological Survey, Washington, D.C. 20540
 Project No. 1000, North American Coal Geology
 This map is a reproduction of the original map made in 1911.
 The original map is in the possession of the U.S. Geological Survey.