DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
W. E. WRATHER, DIRECTOR

Base: U.S. Geological Survey topographic map. Polyconic projection. 1927 North American datum. Topography was contoured from aerial photographs made in 1942. Correction has generally not been made for topographic changes resulting from strip mining or alteration of mine refuse banks since 1942.

COAL OUTCROP MAP

EXPLANATION
OUTCROP MAP

Coal outcrop
Solid where location is known, long dashes where uncertain. Number designates coal bed; L, local or leader bed; T, top split.

High-angle fault, showing dip
U, upthrown side; D, downthrown side. Fault trace is solid where accurately located, long dashes where approximately located.

Fault showing relative movement
Fault trace is solid where accurately located, long dashes where approximately located.

Thrust or reverse fault showing dip
T, upper plate. Fault trace is solid where accurately located, long dashes where approximately located.

Anticline
Showing crest line.

Syncline
Showing trough line.

A ——— A'
Structural cross section

Strip-mined area
Shaded areas covered by mine waste.

Surface opening on coal bed

Exploratory trench

Mine waste
Includes such refuse from mining and breaker operations as culm, rock banks, coal piles, back fill, and silt in settling basins.

Stream-transported mine waste

Boundary of mine

PETER JOHNS
Warranty tract
Boundaries are indicated for general orientation and identification but are not authenticated for legal purposes.

EXPLANATION
STRUCTURE MAP

Outcrop of Buck Mountain coal bed

Fault showing relative movement
Fault trace is solid where accurately located, long dashes where approximately located.

Fault cutting contoured bed showing dip of fault plane, relative position of faulted segments, and overthrust segment
Fault trace is solid where accurately located, long dashes where approximately located. Fault trace on underlying plane is indicated by short dashes where accurately located and very short dashes where approximately located; U, upthrown segment; D, downthrown segment; T, overthrust segment.

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.

Contours on the bottom of the Buck Mountain coal bed
Solid in mined areas; long dashes in unmined areas; in those places where the top of the bed lies beneath another part of the same bed short dashes are used in mined areas, and very short dashes in unmined areas. Contour interval 100 feet. Datum is mean sea level.

A ——— A'
Structural cross section

Barrier pillar in Buck Mountain coal bed

Boundary of mine

PETER JOHNS
Warranty tract
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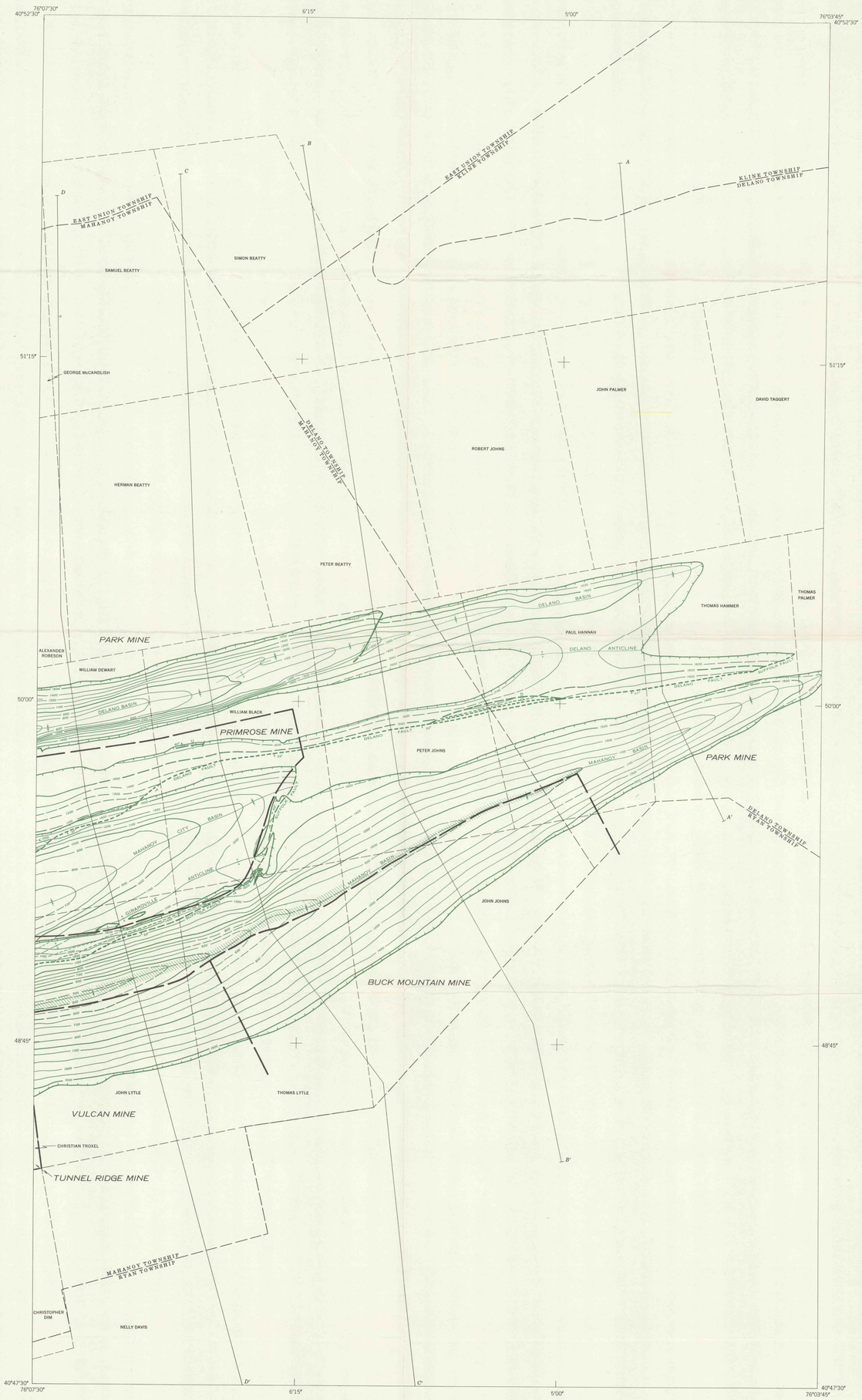

STRUCTURE MAP OF THE BUCK MOUNTAIN COAL BED

Prepared in 1952 from data supplied by the Lehigh Valley Coal Company with modifications by the U. S. Geological Survey.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1955

Scale 1:12 000
1000 0 1000 2000 3000 4000 5000 6000 Feet

Topographic contour interval is 20 feet.
Structure contour interval is 100 feet.
Datum is mean sea level.

DIAGRAM OF A TOPOGRAPHIC QUADRANGLE SHOWING THE AREA INCLUDED IN THIS MAP

INTERIOR—GEOLOGICAL SURVEY—WASHINGTON, D. C.—M R-5215
For sale by U. S. Geological Survey, price $1.00 per set

GEOLOGY OF ANTHRACITE IN THE WESTERN PART OF THE DELANO QUADRANGLE, PENNSYLVANIA

By
John A. Maxwell and Howard E. Rothrock

1955

1886