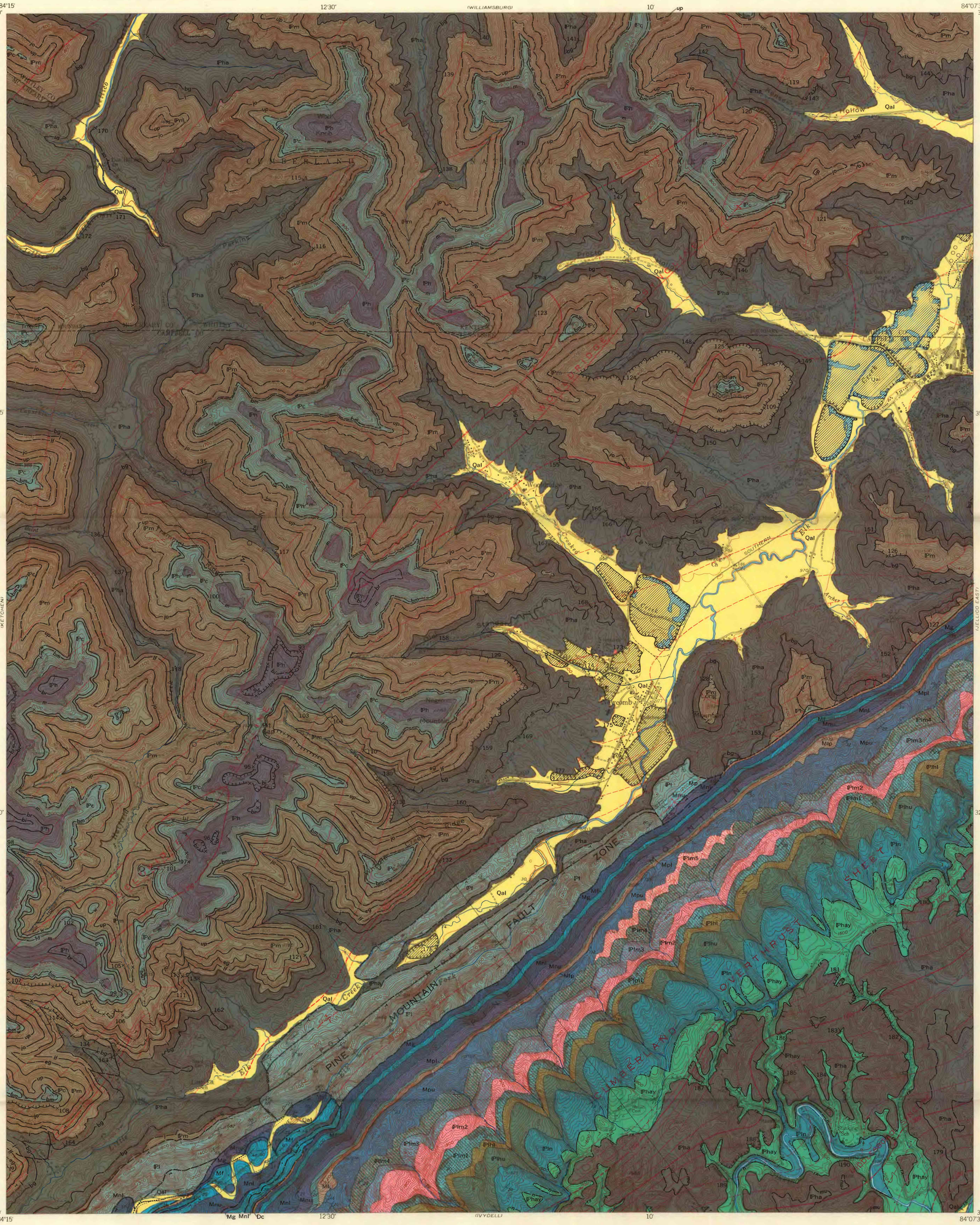


Base by U.S. Geological Survey, 1953

Geology by K. J. Englund, 1955–56 and 1962

MAGNETIC NORTH
TRUE NORTH
APPROXIMATE MEAN DECLINATION, 1968

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

EXPLANATION

QUATERNARY

Qal — Alluvium

PENNSYLVANIAN — Breathitt Group

Middle Pennsylvanian

bi, br, m — Hignite Formation
bi, Big Wheel coal bed
br, Braden Mountain coal bed
m, base of Magoffin Beds of Morse (1931)

ht, bm, w — Catron Formation
ht, Hatfield coal bed
bm, Big Mary coal bed
w, Windrock coal bed

up, jo, ℙm, eg, lf, j — Mingo Formation
up, Upper Pioneer coal bed
jo, Jordan coal bed
eg, Elk Gap coal bed
lf, Lick Fork coal bed
j, Jellico coal bed

Lower and Middle Pennsylvanian

bg, di, ℙha, sa, mu, rx, ℙhay, n — Hance Formation
bg, Blue Gem coal bed
di, Dixie coal bed
sa, Swamp Angel coal bed
mu, Murray coal bed
rx, Rex coal bed
ℙhay, Yellow Creek Sandstone Member
n, Naese coal bed

PENNSYLVANIAN — Lee Formation

Lower Pennsylvanian

ℙln — Naese Sandstone Member

UNCONFORMITY

ℙlhu, ℙlhl — Hensley Member
ℙlhu, upper sandstone bed
ℙlhl, lower sandstone bed

ℙlm1, ℙlm2, ℙlm3, ℙlm4, ℙlm5 — Middlesboro Member
ℙlm1–5, sandstone beds

ℙl — Lee Formation, undivided

MISSISSIPPIAN

Upper Mississippian

Mlp — Pinnacle Overlook Member
Intertongues with upper member of the Pennington Formation

Mp, Mpu, Mpl — Pennington Formation
Mpu, upper member
Mpl, lower member

Mn, Mnu, Mnl — Newman Limestone
Mnu, upper member
Mnl, lower member
Mn, undivided; shown in section only

Lower Mississippian

Mf — Fort Payne Chert

Mg — Grainger Formation

DEVONIAN

Upper Devonian

Dc — Chattanooga Shale

UNCONFORMITY

SILURIAN

Lower and Middle Silurian

Sr — Rockwood Formation

ORDOVICIAN

Upper Ordovician

Os — Sequatchie Formation

Or — Reedsville Shale

Middle Ordovician

Ot — Trenton Limestone

Shown in section only

Contact
Dashed where approximately located; dotted where concealed

Coal bed
Dashed where approximately located; dotted where concealed

Fault
Dashed where approximately located; dotted where concealed. Arrows show relative horizontal movement of cross fault

Thrust fault
Dashed where approximately located; dotted where concealed and dotted in red where structural horizon is displaced. T, upper plate

Anticline
Showing position of crestline. Dashed where approximately located

Syncline
Showing position of troughline. Dashed where approximately located

Strike and dip of beds

Strike and dip of overturned beds

Strike and dip of crumpled beds

Vertical beds

Approximately vertical beds

1500
Structure contours
Drawn on top of Blue Gem coal bed northwest of Pine Mountain fault zone and on top of Rex coal bed on Cumberland overthrust sheet. Long dashed where control less accurate. Short dashed where datum is above land surface. Hachures indicate closed basin. Contour interval 20 feet

—<151
Mine adit
Number refers to location of graphic section on plate 8

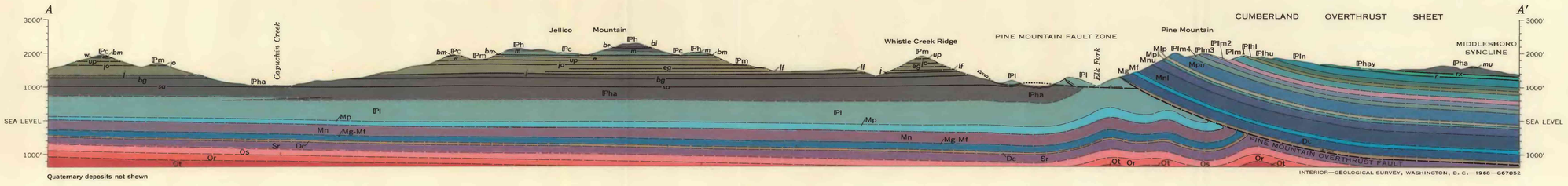
×105
Prospect or outcrop of coal bed
Number refers to location of graphic section on plate 8

Strip mine

Strip mine
Area completely stripped

Core hole

Inclined shaft



INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1968—G67052

GEOLOGIC MAP AND SECTION OF THE JELLICO WEST QUADRANGLE, TENNESSEE AND KENTUCKY