

OPEN-FILE REPORT  
This report has not been edited for conformity with  
U.S. Geological Survey editorial standards or  
stratigraphic nomenclature.

EXPLANATION

  
OVERBURDEN ISOPACH—Showing thickness of overburden, in feet, from the surface to the top of the coal bed. Overburden isopachs within the stripping limit are omitted where they are too close to a mining-ratio contour for map readability. Isopach interval 100 feet (30.5 m).

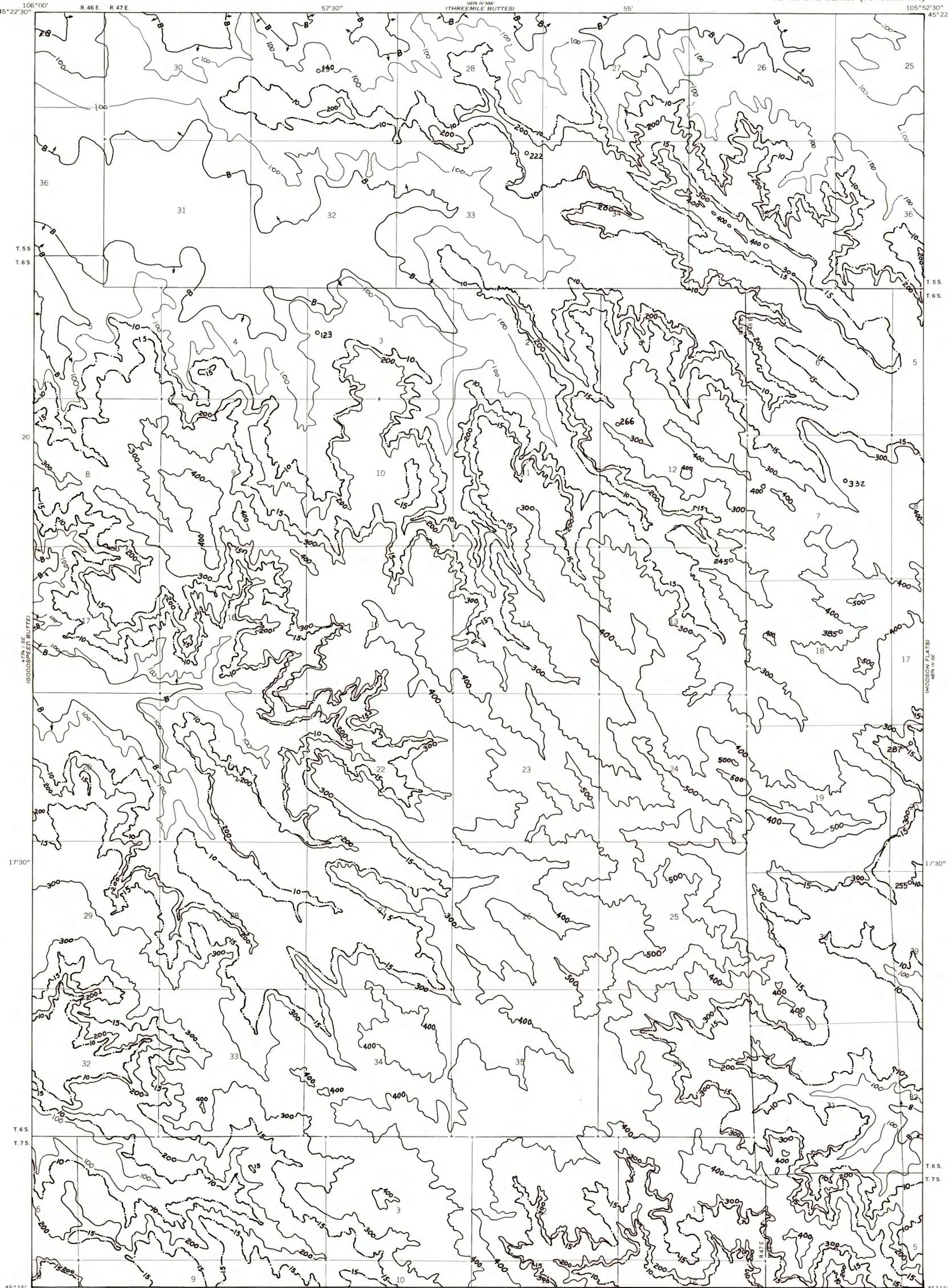
  
BOUNDARY OF COAL 5 FEET OR MORE THICK—  
Drawn along the outcrop of coal bed and/or the inferred contact between burned and unburned coal and/or the 5-foot coal isopach. Arrows point toward area of coal 5 feet or more thick.

  
DRILL HOLE—Showing thickness of overburden, in feet, from the surface to the top of the coal bed.

  
MINING-RATIO CONTOUR—Number indicates cubic yards of overburden per short ton of recoverable coal by surface-mining methods. Contours shown only in areas suitable for surface mining within the stripping limits.

To convert feet to meters, multiply feet by 0.3048.

To convert yds<sup>3</sup>/ton to m<sup>3</sup>/metric ton, multiply yds<sup>3</sup>/ton by 0.842.



Base map from U.S. Geological Survey, 1966

Compiled in 1977

**COAL RESOURCE OCCURRENCE MAP OF THE PHILLIPS BUTTE QUADRANGLE,  
POWDER RIVER COUNTY, MONTANA  
BY  
COLORADO SCHOOL OF MINES RESEARCH INSTITUTE  
1979**