

**OPEN-FILE REPORT**  
This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature.  
**OPEN-FILE REPORT 78-652**

**PLATE 11 OF 64**

**EXPLANATION**

**BOUNDARY OF RESERVE BASE**  
COAL—Drawn along the outcrop of the coal bed, the contact between burned and unburned coal, and the fault boundary of the coal where the coal bed is 5 feet (1.5 m) or more thick; and the 5-foot (1.5 m) coal isopach. Arrows point toward area of Reserve Base coal.

**OVERBURDEN ISOPACHS**—Showing thickness of overburden, in feet, from surface to top of coal bed, at thicknesses of 200, 300, 500, and 700 feet.

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

**MINING-RATIO CONTOUR**—Number indicates cubic yards of overburden per short ton of recoverable coal by surface mining methods. Contours shown only within the stripping limit.

**STRIPPING LIMIT LINE**—Boundary for surface mining of the coal bed (in this quadrangle, the 200-foot-overburden isopach). Arrows point toward the area suitable for surface mining.

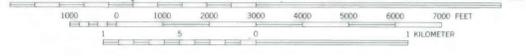
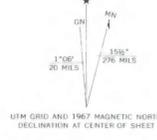
To convert feet to meters, multiply by 0.3. To convert cubic yards of overburden per short ton of recoverable coal to cubic meters of overburden per metric ton of recoverable coal, multiply by 0.84.

Base from U.S. Geological Survey, 1967

SCALE 1:24,000

R. 42 E. R. 43 E.

Compiled in 1977



**COAL RESOURCE OCCURRENCE AND COAL DEVELOPMENT POTENTIAL MAPS  
OF THE PINE BUTTE SCHOOL QUADRANGLE, BIG HORN COUNTY, MONTANA**

By  
**W. C. CULBERTSON, L. N. ROBINSON AND T. M. GAFFKE**  
1978

**PLATE 11**  
**OVERBURDEN ISOPACH AND**  
**MINING-RATIO MAP, OF**  
**THE SMITH COAL BED**