



**OPEN-FILE REPORT**  
This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature.  
**OPEN FILE REPORT 78-030**  
**PLATE 11 OF 44**

**EXPLANATION**

— 400 —  
— 200 —

**OVERBURDEN ISOPACHS**—Showing thickness of overburden, in feet, from the surface to the top of the coal bed. Isopach interval 200 feet (61 m).

— 10 —  
— 15 —  
— 20 —

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

— SL —

**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.

— B —

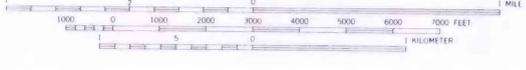
**BOUNDARY OF RESERVE BASE COAL**—Drawn along the outcrop of coal bed or the contact between burned and unburned coal where the coal bed is 5 feet (1.5 m) or more thick, and the 5-foot (1.5-m) coal isopach. Arrows point toward area of Reserve Base coal.

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.  
To convert feet to meters, multiply feet by 0.3.

Base from U.S. Geological Survey, 1967

SCALE 1:24,000

Compiled in 1977



**COAL RESOURCE OCCURRENCE AND COAL DEVELOPMENT POTENTIAL MAPS  
OF THE BIRNEY QUADRANGLE, ROSEBUD COUNTY, MONTANA**  
BY  
**W. J. MAPEL AND B. K. MARTIN**  
1978