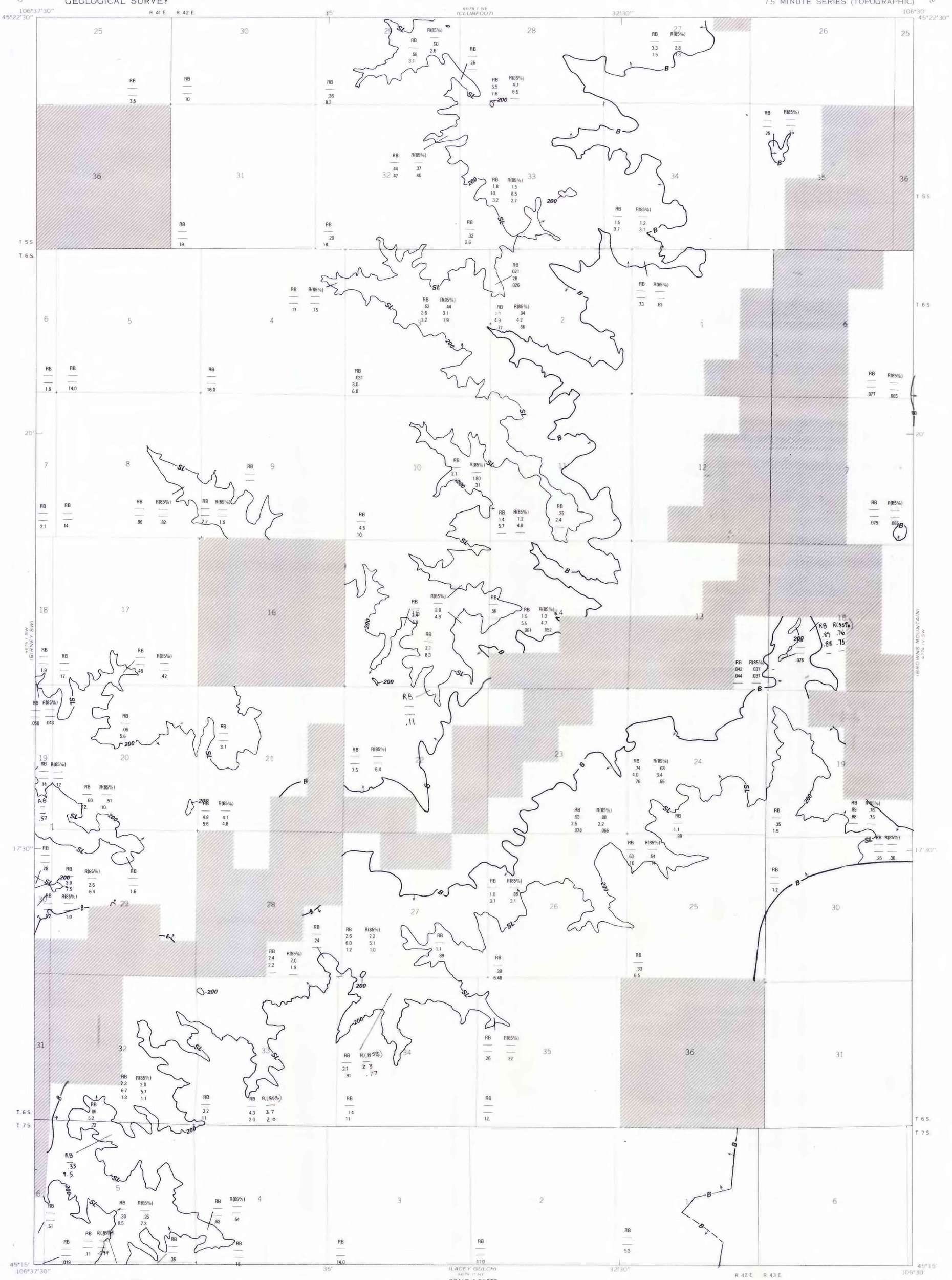
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BIRNEY QUADRANGLE
MONTANA–ROSEBUD CO
7.5 MINUTE SERIES (TOPOGRAPHIC)



Base from U.S. Geological Survey, 1967

Compiled in 1977

SCALE 1:24 000

1 MILE
7000 FEET
1 KILOMETER

GN
MN
1°07'
20 MILS
15½°
276 MILS

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

MONTANA

QUADRANGLE LOCATION

OPEN-FILE REPORT

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

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PLATE 18 OF 44

EXPLANATION

NON-FEDERAL COAL LAND—Land for which the Federal Government does not own the coal rights.

B

BOUNDARY OF RESERVE BASE COAL—Drawn along the outcrop of coal bed or the contact between burned and unburned coal, the 5-foot (1.5-m) coal isopach, and an arc 3 miles (4.8 km) from nearest complete measurement of coal bed. Arrows point toward area of Reserve Base coal.

SL

STRIPPING-LIMIT LINE—Boundary for surface mining of the Brewster-Arnold coal bed (in this quadrangle, the 200-foot-overburden isopach). Arrows point toward the area suitable for surface mining. Recovery factor of 85 percent within that area in this quadrangle.

RB	R(85%)	
1.0	.85	(Measured resources)
3.7	3.10	(Indicated resources)

IDENTIFIED STRIPPABLE COAL RESOURCES—Showing totals for Reserve Base (RB) and Reserves (R), in millions of short tons, for each section or parts(s) of section of Federal coal land within the stripping-limit line. Dash indicates no resources in that category. Reserve Base (RB) x the Recovery Factor (85 percent)=Reserves (R). Rounded to two significant figures.

RB	
.38	(Measured resources)
6.40	(Indicated resources)

IDENTIFIED NON-STRIPPABLE COAL RESOURCES—Showing totals for Reserve Base (RB), in millions of short tons, for each section or part(s) of section of Federal coal land outside the stripping-limit line. Dash indicates no resources in that category. Rounded to two significant figures.

Recovery factors have not been established for underground development of the coal in this quadrangle. Therefore, Reserves (R) were not calculated for the coal bed in areas outside the stripping-limit line where the overburden thickness exceeds 200 feet (61 m).

To convert short tons to metric tons multiply short tons by 0.907.

COAL RESOURCE OCCURRENCE AND COAL DEVELOPMENT POTENTIAL MAPS OF THE BIRNEY QUADRANGLE, ROSEBUD COUNTY, MONTANA

BY

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1978

PLATE 18
IDENTIFIED RESOURCES OF THE BREWSTER-ARNOLD COAL BED