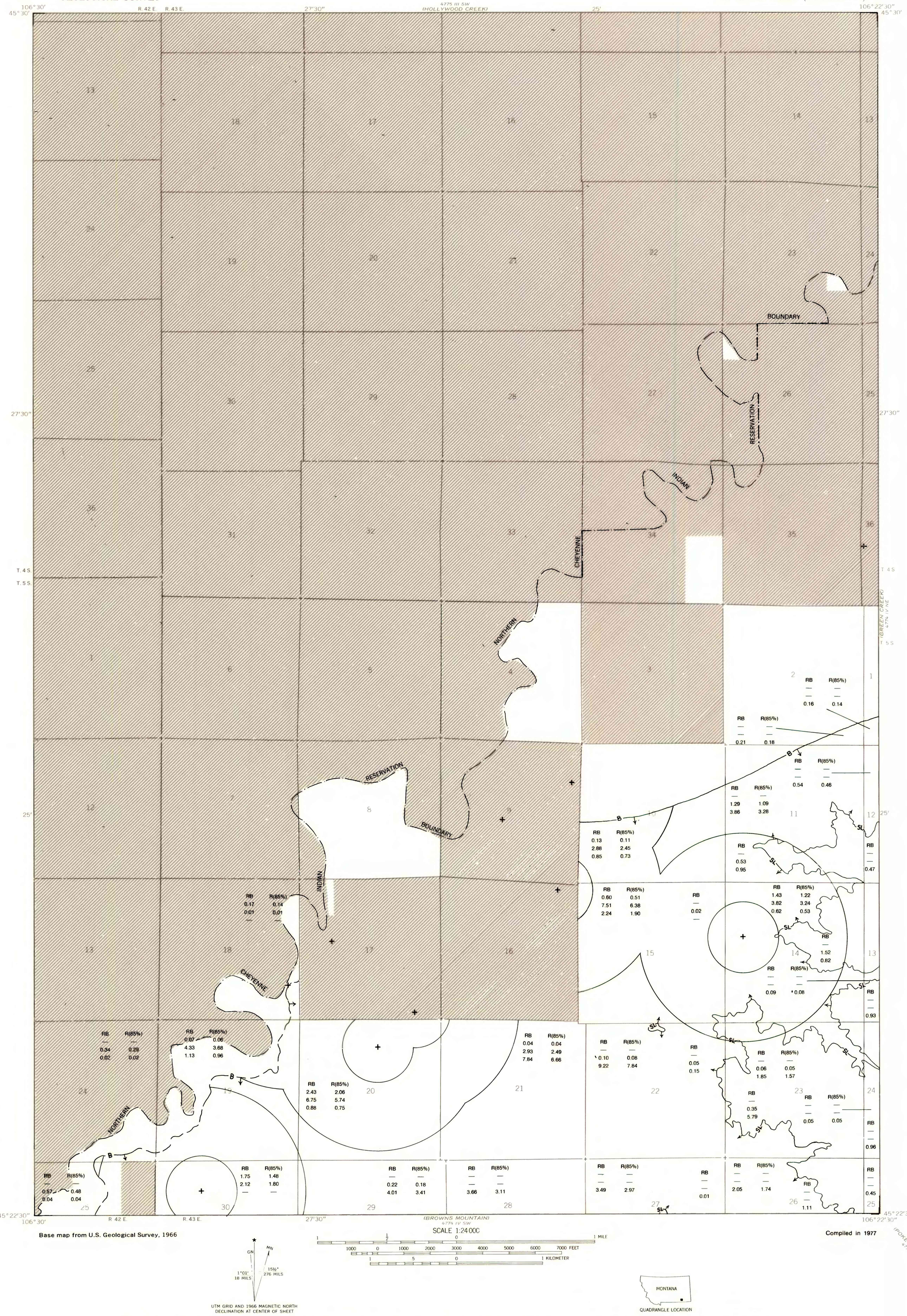
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BIRNEY DAY SCHOOL QUADRANGLE
MONTANA—ROSEBUD CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 79-080
PLATE 21 OF 34

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



EXPLANATION

SL

STRIPPING-LIMIT LINE—Boundary for surface mining of the coal bed (in this quadrangle, the 500-foot overburden isopach). Arrows point toward the area suitable for surface mining. Recovery factor of 85 percent within that area of this quadrangle.

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

B

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.

+ POINT OF MEASUREMENT ON COAL BED

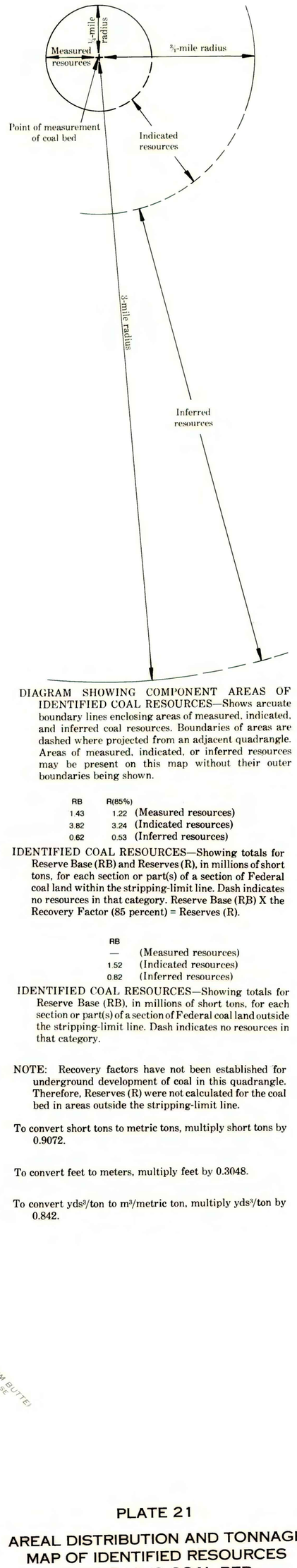


DIAGRAM SHOWING COMPONENT AREAS OF IDENTIFIED COAL RESOURCES—Shows arcuate boundary lines enclosing areas of measured, indicated, and inferred coal resources. Boundaries of areas are dashed where projected from an adjacent quadrangle. Areas of measured, indicated, or inferred resources may be present on this map without their outer boundaries being shown.

RB	R(85%)	
1.43	1.22	(Measured resources)
3.82	3.24	(Indicated resources)
0.62	0.53	(Inferred resources)

IDENTIFIED COAL RESOURCES—Showing totals for Reserve Base (RB) and Reserves (R), in millions of short tons, for each section or part(s) of a 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).

RB	
—	(Measured resources)
1.52	(Indicated resources)
0.82	(Inferred resources)

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

NOTE: Recovery factors have not been established for underground development of coal in this quadrangle. Therefore, Reserves (R) were not calculated for the coal bed in areas outside the stripping-limit line.

To convert short tons to metric tons, multiply short tons by 0.9072.

To convert feet to meters, multiply feet by 0.3048.

To convert yds³/ton to m³/metric ton, multiply yds³/ton by 0.842.

Base map from U.S. Geological Survey, 1966

Compiled in 1977

SCALE 1:24 000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

UTM GRID AND 1966 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

COAL RESOURCE OCCURRENCE MAP OF THE BIRNEY DAY SCHOOL QUADRANGLE, ROSEBUD COUNTY, MONTANA

BY

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979

PLATE 21

AREAL DISTRIBUTION AND TONNAGE MAP OF IDENTIFIED RESOURCES OF THE KING COAL BED