UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BIRNEY SW QUADRANGLE
MONTANA
7.5 MINUTE SERIES (TOPOGRAPHIC)

Base map from U.S. Geological Survey, 1967

Compiled in 1977

SCALE 1:24 000

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

COAL RESOURCE OCCURRENCE MAP OF THE BIRNEY S W QUADRANGLE, ROSEBUD AND BIG HORN COUNTIES, MONTANA

BY

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1979

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

EXPLANATION

INDEX NUMBER OF MEASURED SECTION SHOWN ON PLATE 3 OF CRO MAP—Coal section measured at point of triangle.

GL 3505
NR 24
R 111
C 3 (Cl)
R 37
C 3 (L)
R 88

OIL AND GAS TEST HOLE—Showing index number of hole shown on plate 3 of CRO map and drill-hole data, in feet.

GL 3543
NR 360
R 545
C 4 (L)
R 10+

OIL AND GAS TEST HOLE—Showing drill-hole data, in feet.

GL 3601
R 35
C 49 (W)
R 81
TD 165

COAL TEST HOLE—Showing index number of hole shown on plate 3 of CRO map, and drill-hole data, in feet.

GL— Ground elevation
NR— No Record
R— Rock interval
C— Coal interval
TD— Total depth

DRILL-HOLE DATA SYMBOLS

An—Anderson (Dietz 1)
D_2—Dietz 2
L—Local
Cy—Canyon
W—Wall
Cl—Carlson
BA—Brewster-Arnold
F-G—Flowers-Goodale

COAL BED SYMBOLS AND NAMES

C 10.6 (Cy)
R 5.6
C 3.1 (L)
7.2+
6.0/1.3

TRACE OF COAL BED OUTCROP—Dashed where approximately located; short dashed where inferred. Showing thickness of coal, or coal-rock intervals, in feet, measured at triangle. Where a thickness fraction is shown, it indicates the net coal thickness (upper number) and net partings thickness (lower number). Letters designate the name of the coal bed as listed above. Arrows point toward coal-bearing area. Trace of coal outcrop has been modified from Baker, A.A. (1929, pl. 28) and Matson, R.E., and Blumer, J.W. (1973, pl. 6) to fit modern topographic map.

BURNED AND CLINKERED COAL BED—Showing area of baked and fused rock (v symbol). Dotted line indicates the inferred limit of burning.

U
D

FAULT—Dashed where approximtately located. U, upthrown side; D, downthrown side.

× 4.6

COAL PROSPECT—Showing coal thickness, in feet.

14.9/0.9

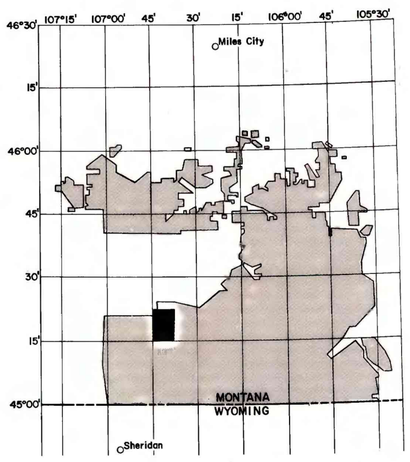
COAL MINE—Showing thickness of coal bed, in feet.

To convert feet to meters, multiply feet by 0.3048.

REFERENCES FOR NONINDEXED DATA POINTS

Baker, A. A., 1929, The northward extension of the Sheridan coal field, Big Horn and Rosebud Counties, Montana: U. S. Geol. Survey Bull. 806-B, p. 15-67.

Matson, R. E. and Blumer, J. W., 1973, Quality and reserves of strippable coal, selected deposits, southeastern Montana: Mont. Bur. Mines and Geol. Bull. 91, 135 p. [Original logs of drill holes were released as Montana Bureau of Mines and Geology open file reports (and as an appendix to Bull. 91) which contain more complete information than is shown in Bull. 91.]



INDEX MAP—Showing location of the Birney SW quadrangle and the Northern Powder River Basin Known Recoverable Coal Resource Area (stippled), Montana.

PLATE 1

COAL DATA MAP