UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PEARL SCHOOL QUADRANGLE
MONTANA—BIG HORN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 79-776
PLATE 1A OF 41
SHEET 1 OF 2

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

NOTE: See plate 1B for drill hole data

EXPLANATION

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

(9) ● GL 4110
NR 360
R 96
C 33 (An)
R 3
C 45 ($D_{2,3}$)
R 102
C 16 (Cy)
R 112

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

(20) ○ GL 4059
R 27
C 13 (Ro)
R 170
C 18 (Sm)
R 201
C 32 (An)
R 3
C 44 ($D_{2,3}$)
R 1
TD 509

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
RR —Red Rock (scoria or clinker)
C —Coal interval
TD —Total depth

DRILL-HOLE DATA SYMBOLS

Ro—Roland (Baker, 1929)
L—Local
Sm—Smith
An—Anderson
D_2—Dietz 2
D_3—Dietz 3
Cy—Canyon
Ck—Cook
W—Wall
BA—Brewster-Arnold
Ki—King
Ke—Kendrick

COAL BED SYMBOLS AND NAMES

C 2.5 (Sm)
R 0.5
C 2.1 (Sm)
R 4.7
C 3.5+ (L)
10.6 / 4.5
6.4+ — Sm

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. 1 and 4) to fit modern topographic map.

13° — STRIKE AND DIP OF BED

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.

× 7.0+ — COAL PROSPECT—Showing coal thickness, in feet.

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

To convert feet to meters, multiply feet by 0.3048.

REFERENCES FOR NONINDEXED DATA POINTS

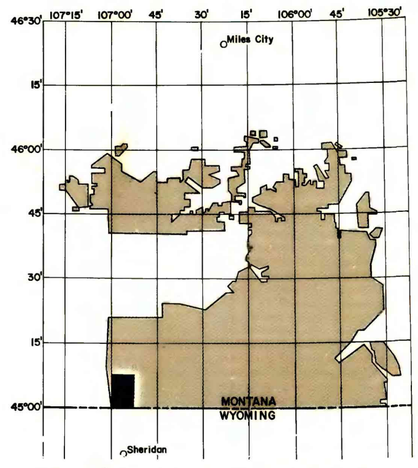
BAKER, A.A., 1929, The northward extension of the Sheridan coal field, Big Horn and Rosebud Counties, Montana: U.S. Geol. Survey Bull. 806, Pt. 2, p. 15-67.

GALYARDT, G.L. and MURRAY, F.N., Geologic map and coal deposits of Pearl School quadrangle and eastern portion of Bar V Ranch quadrangle, Big Horn County, Montana: U.S. Geol. Survey. (Unpublished report.)

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.

Montana Bureau of Mines and Geology, 1977, Open File Report.

Peter Kiewit Sons' Co., written communication, 1977.



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

Base map from U.S. Geological Survey, 1967

Compiled in 1977

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

MONTANA
QUADRANGLE LOCATION

COAL RESOURCE OCCURRENCE MAP OF THE PEARL SCHOOL QUADRANGLE, BIG HORN COUNTY, MONTANA

BY

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979

PLATE 1A

COAL DATA MAP