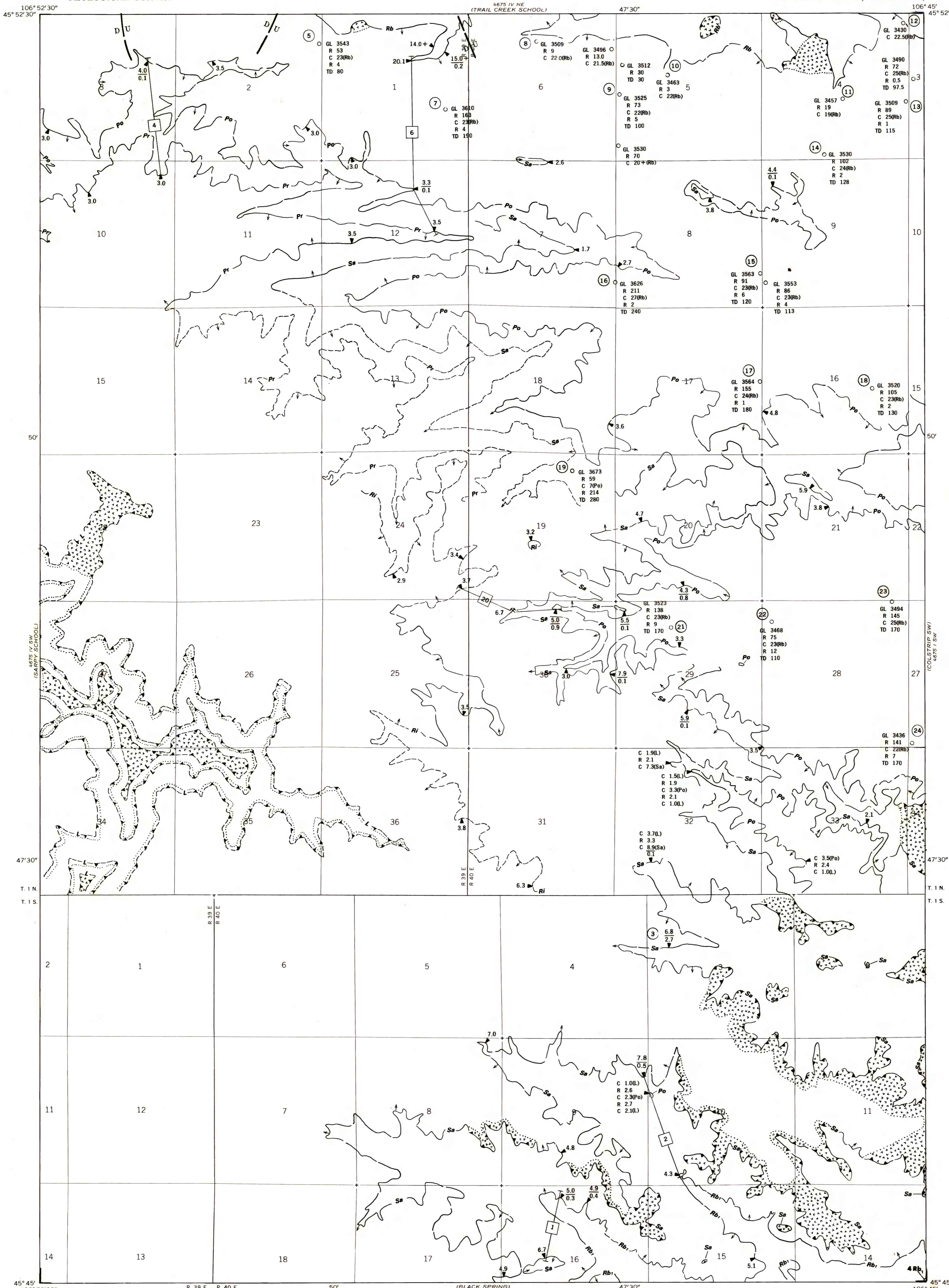


OPEN-FILE REPORT  
This report has not been edited for conformity with  
U.S. Geological Survey editorial standards or  
stratigraphic nomenclature.



EXPLANATION

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

LINE OF COMPOSITE SECTION—Showing index number of  
section shown on plate 3 of CRO map. Composite section  
is based on nearby coal bed thickness measurements.

GL 3543  
R 53  
C 23(Rb)  
R 4  
TD 80

COAL TEST HOLE—Showing index number of hole shown on  
plate 3 of CRO map, and drill-hole data, in feet. Ground  
elevations of test holes taken from plate 14 of Matson and  
Blumer (1973) have been raised 85 feet, per original author  
of plate 14 (C. M. Carmichael, oral commun., Nov., 1977).

GL—Ground elevation  
R—Rock interval  
C—Coal interval  
TD—Total depth

DRILL HOLE DATA SYMBOLS

Ri—Richard  
Pr—Proctor  
Sa—Sawyer  
Po—Popham  
Rb—Upper Rosebud (Lee)  
Rb—Rosebud  
L—Local

COAL BED SYMBOLS AND NAMES

C 1.9(L)  
R 2.1  
C 7.3(Sa)

TRACE OF COAL BED OUTCROP—Dashed where approxi-  
mately 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. Arrow points toward  
coal-bearing area. Trace of coal outcrop has been modified  
from Dobbin (1980, pl. 7), Keperle (1954, fig. 3), and  
Matson and Blumer (1973, pl. 14) to fit modern topo-  
graphic map.

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

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

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

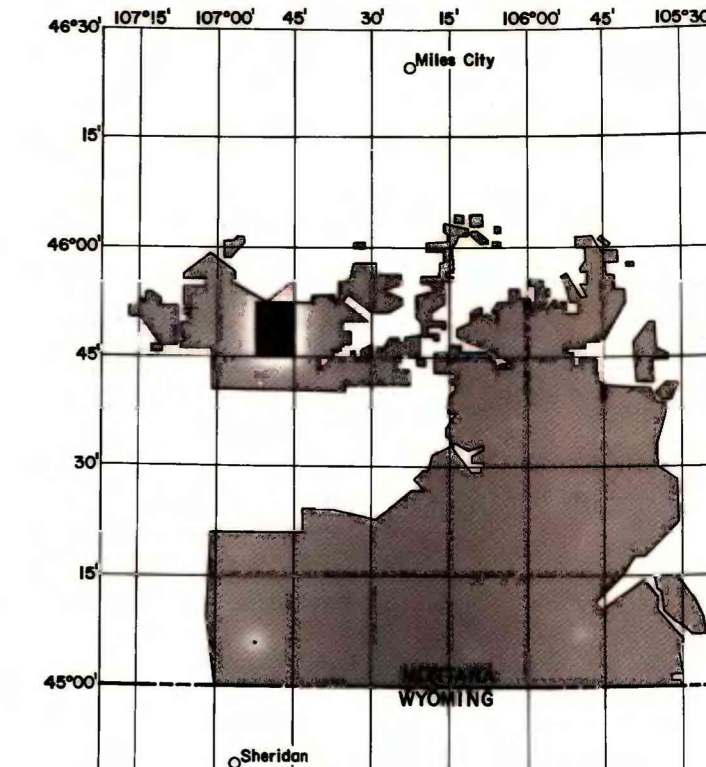
To convert feet to meters, multiply feet by 0.3048.

REFERENCES FOR NONINDEXED DATA POINTS

Dobbin, C. E., 1980, The Forsyth coal field, Rosebud, Treasure,  
and Big Horn Counties, Montana: U.S. Geol. Survey Bull.  
812-A, p. 1-55.

Keperle, R. C., 1954, Selected deposits of strippable coal in  
central Rosebud County, Montana: U.S. Geol. Survey Bull.  
995-I, p. 383-381.

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, 185 p.



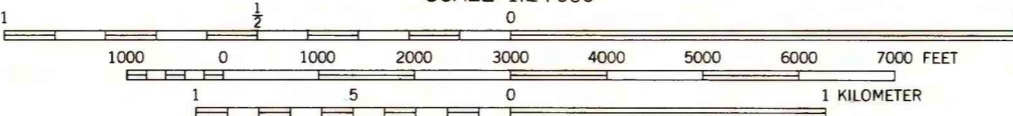
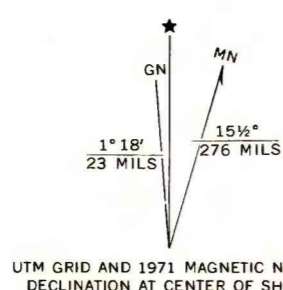
INDEX MAP—Showing location of the Rough Draw  
quadrangle and the Northern Powder River Basin Known  
Recoverable Coal Resource Area (stippled), Montana

Base map from U.S. Geological Survey, 1971

(BLACK SPRING)

SCALE 1:24,000

Compiled in 1977



COAL RESOURCE OCCURRENCE MAP OF THE ROUGH DRAW  
QUADRANGLE, ROSEBUD COUNTY, MONTANA

BY  
COLORADO SCHOOL OF MINES RESEARCH INSTITUTE  
1979

PLATE 1  
COAL DATA MAP