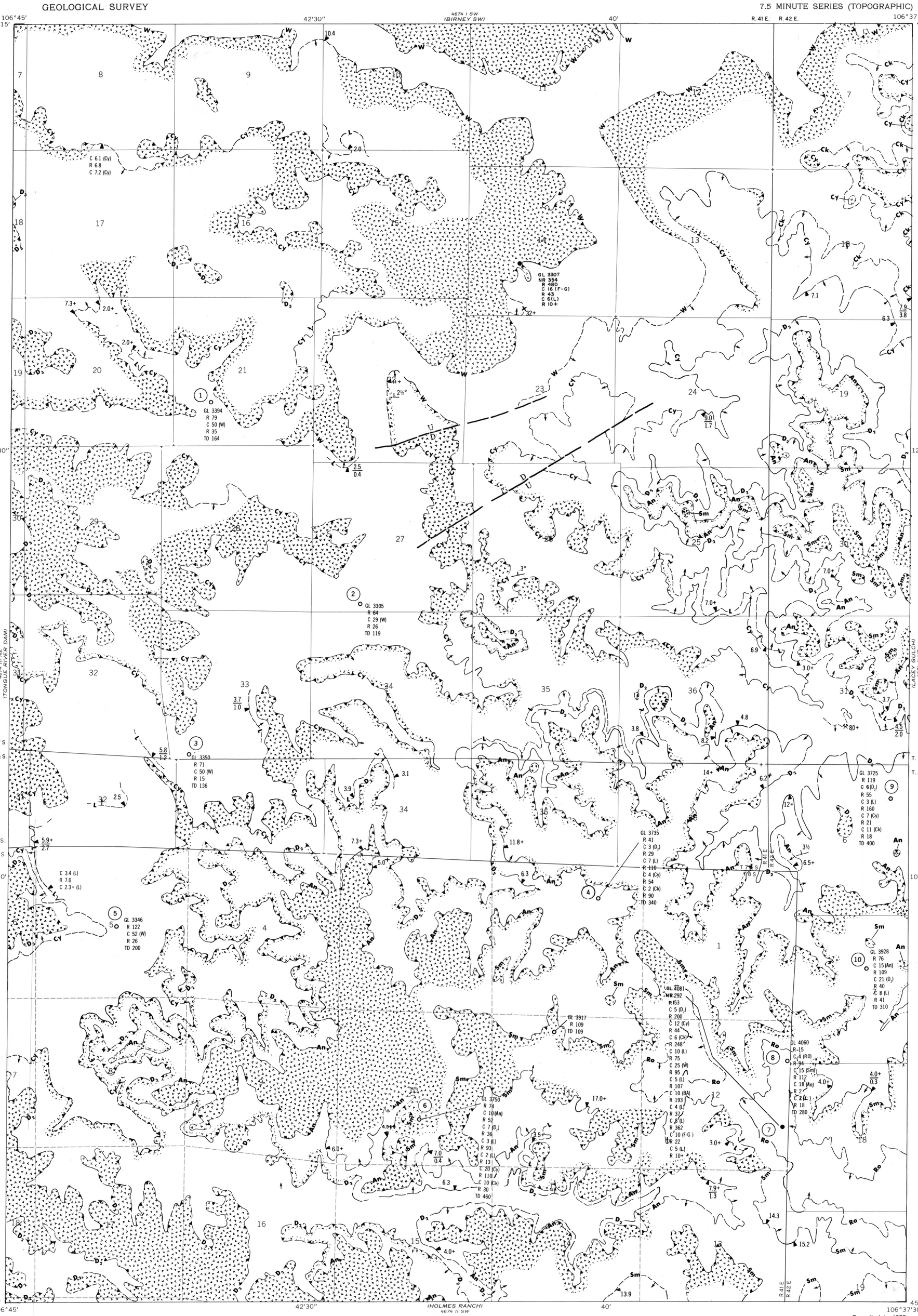
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SPRING GULCH QUADRANGLE
MONTANA
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 79-778
PLATE 1 OF 32



Base map from U.S. Geological Survey, 1967

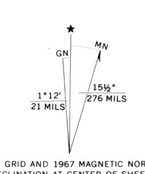
SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Compiled in 1977



UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

OPEN-FILE REPORT

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

EXPLANATION

● GL 3307
NR 354
R 480
C 16 (F-G)
R 43
C 6 (L)
R 10+

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

(7) ● GL 4081
NR 292
R 153
C 5 (D2)
R 200

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

(4) ○ GL 3735
R 41
C 3 (D2)
R 29
C 7 (L)
R 110
C 4 (Cy)
R 54
C 2 (Ck)
R 90
TD 340

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

Ro—Roland Baker (1929)
Sm—Smith
An—Anderson (Dietz 1)
D_2—Dietz 2 (Same as Dietz 1 of Matson and Blumer, 1973)
L—Local
D_3—Dietz 3 (Same as Dietz 2 of Matson and Blumer, 1973)
Cy—Canyon
Ck—Cook
W—Wall
BA—Brewster-Arnold
F-G—Flowers-Goodale

COAL BED SYMBOLS AND NAMES

2.5 — 5.9+ / 2.7 — C 3.4 (L) R 7.0 C 2.3+ (L)

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 (1929, pls. 28 and 29) and Matson and Blumer (1973, pl. 6) to fit modern topographic map.

2 ½°

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.

× 32+

COAL PROSPECT—Showing coal thickness, in feet.

8.0+

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

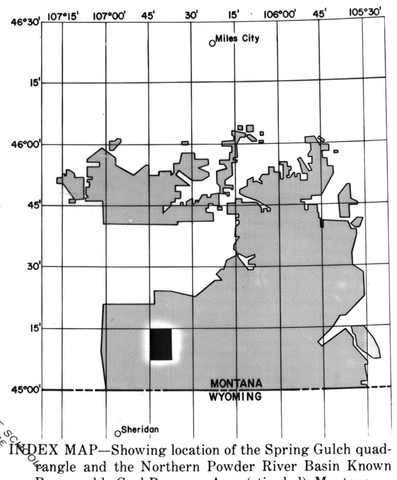
To convert feet to meters, multiply feet by 0.3048.

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.

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 informaion than is shown in their Bull. 91.]

Montana Bureau of Mines and Geology and U.S. Geological Survey, 1976, Preliminary report of coal drill-hole data and chemical analyses of coal beds in Campbell, Converse, and Sheridan Counties, Wyoming; and Big Horn, Richland and Dawson Counties, Montana: U.S. Geol. Survey Open-File Report 76-450, 382 p.



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

PLATE 1

COAL DATA MAP

COAL RESOURCE OCCURRENCE MAP OF THE SPRING GULCH QUADRANGLE, ROSEBUD AND BIG HORN COUNTIES, MONTANA

BY

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979