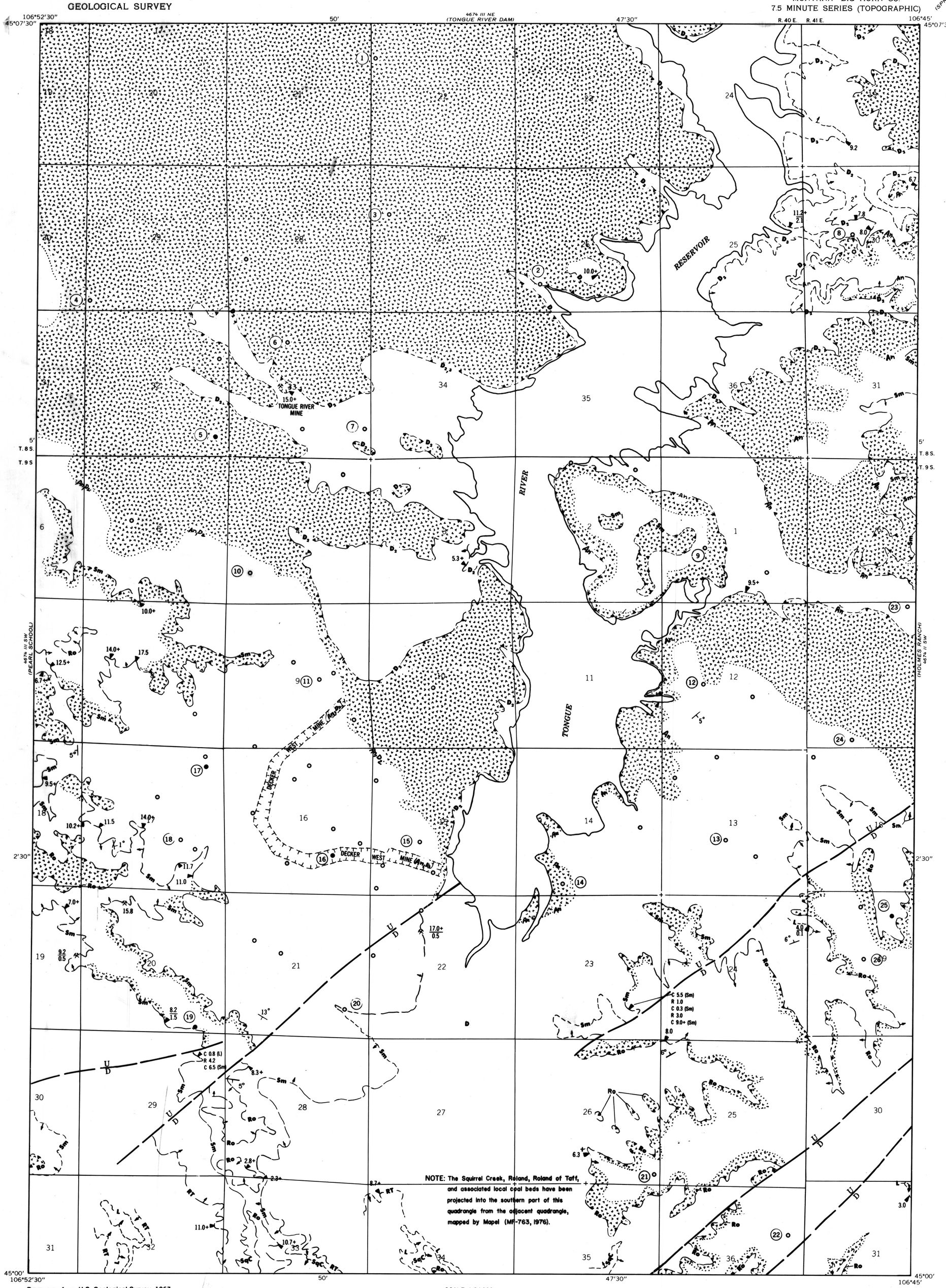
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DECKER QUADRANGLE
MONTANA–BIG HORN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 79-647
PLATE 1A OF 43
SHEET 1 OF 2



NOTE: The Squirrel Creek, Roland, Roland of Taff, and associated local coal beds have been projected into the southern part of this quadrangle from the adjacent quadrangle, mapped by Mapel (MF-763, 1976).

Base map from U.S. Geological Survey, 1967

Compiled in 1977

SCALE 1:24 000

1 MILE — 7000 FEET — 1 KILOMETER

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

SEE PLATE 1B FOR DRILL HOLE DATA.

EXPLANATION

(25) ● GL 3707
NR 361
R 18
C 20 (D_2)
R 60
C 6 (L)
R 60

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

(10) ○ GL 3574
R 97
C 56 An, D_2
R 7
TD 160

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 may include clinker near ground surface.
R?— Rock, occurrence of coal undeterminable
C— Coal interval
RR— Red rock (scoria or clinker)
TD— Total depth

DRILL-HOLE DATA SYMBOLS

Ro — Roland of Baker (1929)
Sm — Smith
Sqc — Squirrel Creek
L — Local
R1 — Roland (Taff, 1909)
An — Anderson of Matson and Blumer, 1973,
D_2 — $Dietz_2$ (Dietz No. 1 of Matson and Blumer, 1973)
D_3 — $Dietz_3$ (Dietz No. 2 of Matson and Blumer, 1973)
Cy — Canyon
Ck — Cook
W — Wall
BA — Brewster-Arnold
Ki — King
Ke — Kendrick

COAL BED SYMBOLS AND NAMES

7.0+ 8.2/1.5 C 0.8(L) R 4.7 C 6.5(Sm) 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. Arrow points toward coal-bearing area. Trace of coal outcrop has been modified from Baker (1929, pls. 28 and 29) and Matson and Blumer (1973, pls. 1, 2, 3, and 4) to fit modern topographic map.

6°

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.

TONGUE RIVER MINE ⚒ 15.0+

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

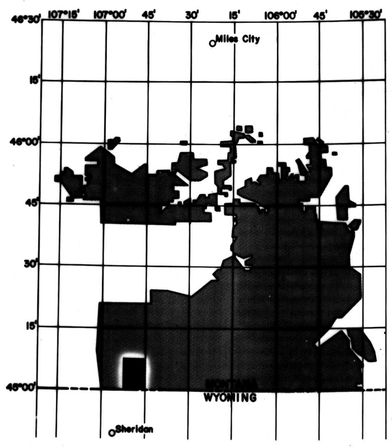
Decker West Mine
An, D_2

COAL STRIP MINE—Showing name of mine and coal bed removed. Hachures point towards mined-out area. Boundary dashed where approximately located.

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.
Mapel, W.J., 1976, Geologic map and coal sections of the Bar N Draw Quadrangle, Wyoming and Montana: U. S. Geol. Survey Misc. Field Studies Map MF-763.
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.
U. S. Bureau of Mines, 1969, Strippable coal reserves of Montana: U. S. Bur. Mines Preliminary Report 172, 68 p.



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

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

BY

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979

PLATE 1A

COAL DATA MAP