74-350

Sheet 1 of 3

R.71W. R.70W.

T. 49 N.
T. 48 N.

SCALE 1:24 000

1 MILE

1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

Base from U.S. Geological Survey
unedited advance print

Geology mapped in 1972-73

CORRELATION OF MAP UNITS

Qal	HOLOCENE	QUATERNARY
Unconformity		
Tw	EOCENE	TERTIARY
Tfu	PALEOCENE	TERTIARY

DESCRIPTION OF MAP UNITS

Qal — ALLUVIUM (HOLOCENE)--Interbedded sand, silt, clay; clasts primarily derived from erosion of local formations

Tw — WASATCH FORMATION (EOCENE)--Generally drab brown and gray, soft interbedded sandstone, siltstone, shale, carbonaceous shale, and thin coal beds; lower 450 feet (137 m) exposed in the quadrangle. Between the Felix and Wyodak coal beds, consists of upper unit of poorly indurated, cross-bedded, coarse-to medium-grained, conglomeratic sandstone approximately 100 feet (30 m) thick; middle unit is predominantly shale and carbonaceous shale and contains C' and C'' coal beds; middle unit is approximately 100-120 ft (30-37 m) thick. A lower unit consists of massive, poorly indurated, cross-bedded, medium- to fine-grained sandstone which grades downward to interbedded fine-grained sandstone, shale, and thin coal beds approximately 100-150 feet (30-46 m) thick

Tfu — FORT UNION FORMATION, UNDIFFERENTIATED (PALEOCENE)--Generally light brown and gray, soft interbedded channel sandstone, silty shale, carbonaceous shale, and thick coal beds; large ferruginous concretions common; overall light-gray color contrasts markedly with drab brown and gray of overlying Wasatch Formation. Wyodak 1 coal bed, and locally the Wyodak 2 coal bed, correspond to Roland coal of Dobbin and Barnett (1927). Upper 280 feet (85 m) of Fort Union Formation is exposed in quadrangle

EXPLANATION OF LINE SYMBOLS

CONTACT--Long dashed where approximately located; short dashed where indefinite or inferred

4600 STRUCTURE CONTOURS--Drawn on base of W1 coal or base of W1 clinker in northern two-thirds of quadrangle; drawn on base of W2 coal or W2 clinker in southern one-third of quadrangle. Short dashed where above land surface. Contour interval 40 feet (12 m). Datum is mean sea level

STRIKE AND DIP OF BEDS

DIP COMPONENT

W1 2.5 R4.5 2.3 COAL BED--Long dashed where approximately located, short dashed where inferred, dotted where concealed. Letter denotes specific coal bed. Equivalent thickness, in feet, 1/ measured at triangle; calculated by method of Smith and others (1913, p. 72-73), and Bass and others (1970, p. 6). Where rock interval (R4.5) separates two closely spaced coals, the mapped line represents the base of the lower coal

BAKED AND FUSED ROCK--Base and areal extent of burned coal. Long dashed where approximately located, short dashed where inferred. Attached v's indicate base of baked and fused rock; dotted line indicates inferred extent of burning; dotted boundary area indicates a burned subsurface coal. Letter indicates which coal has burned

MEASURED SECTIONS--Index number refers to surface sections, sheet 2

Stratigraphic section

(10) Coal section

OPEN PIT COAL MINE, ABANDONED

DRILL HOLES--Used in subsurface interpretation. Index number refers to subsurface coal sections, sheet 3

(25) Oil well

(30) Abandoned oil well

(33) Abandoned oil and gas test

(19) SWD Salt water disposal well

(41) W Water well

(27) USGS-MBMG--Coal test hole by U.S. Geological Survey and Montana Bureau of Mines and Geology

1/ To convert feet to metres, multiply by 0.3048.

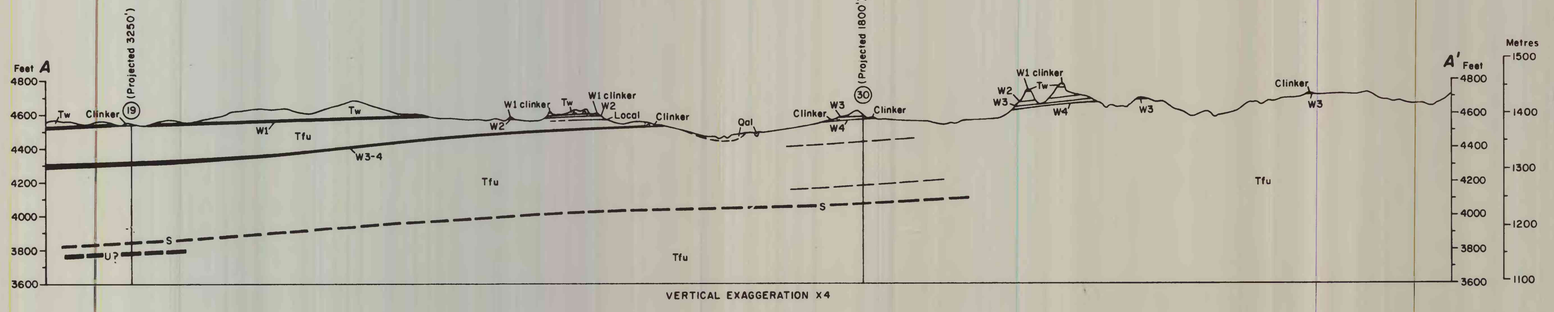
REFERENCES CITED

Bass, N. W., Smith, H. L., and Horn, G. H., 1970, Standards for the classification of public coal lands: U.S. Geol. Survey Circ. 633, 10 p.

Dobbin, C. E., and Barnett, V. H., 1927, The Gillette coal field, northeastern Wyoming: U.S. Geol. Survey Bull. 796-A, p. 1-50.

Smith G. O., and others, 1913, The classification of the public lands: U.S. Geol. Survey Bull. 537, 197 p.

This map is preliminary and has not been edited or reviewed for conformity with U.S. Geological Survey standards or nomenclature



VERTICAL EXAGGERATION X4

PRELIMINARY GEOLOGIC MAP AND COAL RESOURCES OF THE COYOTE DRAW QUADRANGLE, CAMPBELL COUNTY, WYOMING

By

G. L. Galyardt

1974