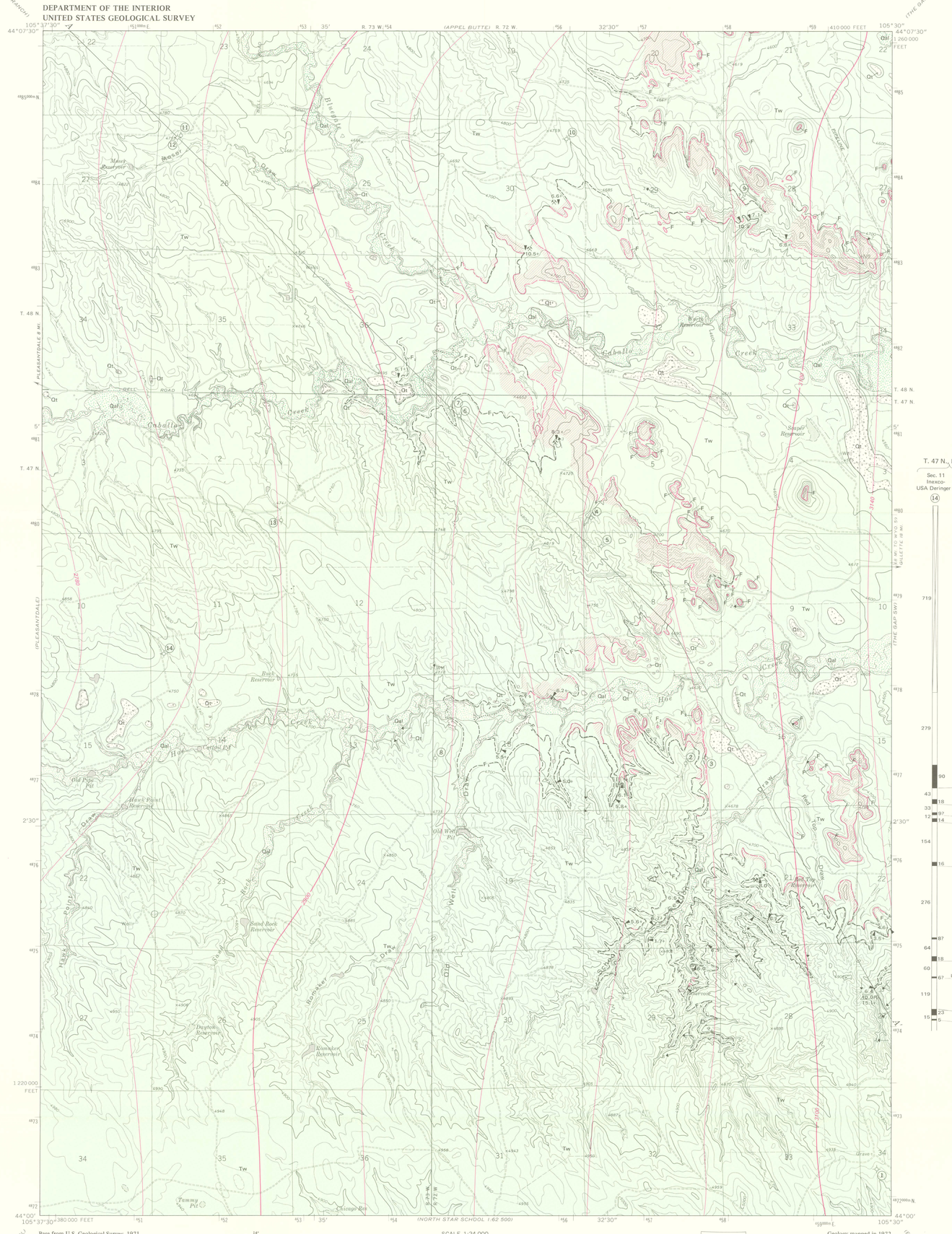


Base from U.S. Geological Survey, 1971
Projection and 10,000-foot grid ticks: Wyoming coordinate system, east zone (traverse Mercator)
1000-meter Universal Transverse Mercator grid ticks, zone 13. 1927 North American datum

APPROXIMATE MEAN DECLINATION, 1977

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

Geology mapped in 1972

QUADRANGLE LOCATION

CORRELATION OF MAP UNITS

Qal	Holocene	QUATERNARY
Qt	Pleistocene(?)	QUATERNARY
Unconformity		
Tw	Eocene	TERTIARY
Tfu	Paleocene	TERTIARY

DESCRIPTION OF MAP UNITS

Qal — ALLUVIUM (HOLOCENE) – Valley fill consisting mainly of reworked local sediments

Qt — TERRACE DEPOSITS (PLEISTOCENE?) – Gravels up to 20 feet (6.1 m) thick consisting mainly of interstitial sand, well-indurated sandstone, quartzite, chert, and granite pebbles and cobbles up to 1 foot (0.3 m) in diameter. Commonly found as thin patches capping indistinct terraces, but locally capping well-formed terraces. Deposits are present along major drainages

Tw — WASATCH FORMATION (EOCENE) – Interbedded sandstone, shale, and coal beds. The sandstone and shale are generally poorly consolidated. Some of the sandstone is coarse grained and contains pebbles and cobbles up to 3 inches (7.6 cm) in diameter. The Felix coal bed is the only coal bed persistently cropping out in this quadrangle. About 600 feet (182 m) exposed

Tfu — FORT UNION FORMATION (PALEOCENE) – Shown in cross section only

6.4 10.0R 15-1 — COAL BED – Long dashed where approximately located; short dashed where inferred; dotted where concealed. Letter denotes specific coal bed name. Equivalent thickness of coal, in feet measured at triangle, calculated by method of Smith and others (1913, p. 72–73) and Bass, Smith, and Horn (1970, p. 6). R, rock interval between coal splits

F — BAKED AND FUSED ROCK – Trace of burned coal bed, dashed where approximately located, short dashed where inferred. Letter identifies coal bed. Pattern indicates inferred extent of burn

3100 — STRUCTURE CONTOURS – Drawn on top of X coal bed. Contour interval 40 feet (12.2 m). Datum is mean sea level

HORIZONTAL BEDS

DIP COMPONENT

STRIKE AND DIP OF BEDS

OPEN PIT COAL MINE

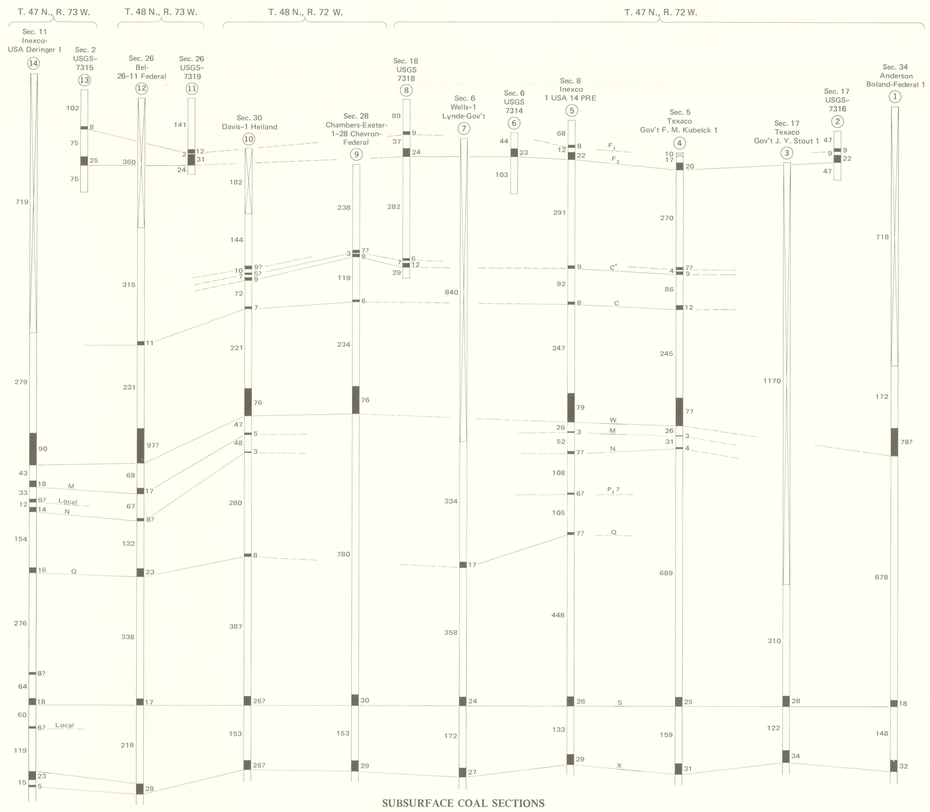
DRILL HOLES – Used in subsurface interpretation. Index number refers to coal sections

Dry hole

USGS–MBMG coal test holes

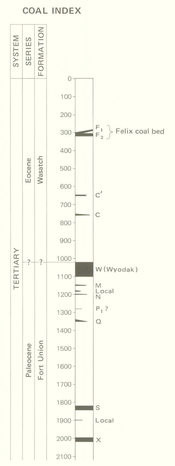
REFERENCES

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



SUBSURFACE COAL SECTIONS

COAL INDEX



Subscripts indicate splits or subzones of the same coal; superscripts indicate separate coals. All intervals and measurements in feet

EXPLANATION FOR SUBSURFACE COAL SECTIONS

Sec. 30
Davis-1 Heiland—Operator and well name
10 Index number shown on map
90 Cased, no record
120 No coal
47 Possible coal
15 W-Coal thickness and bed identification

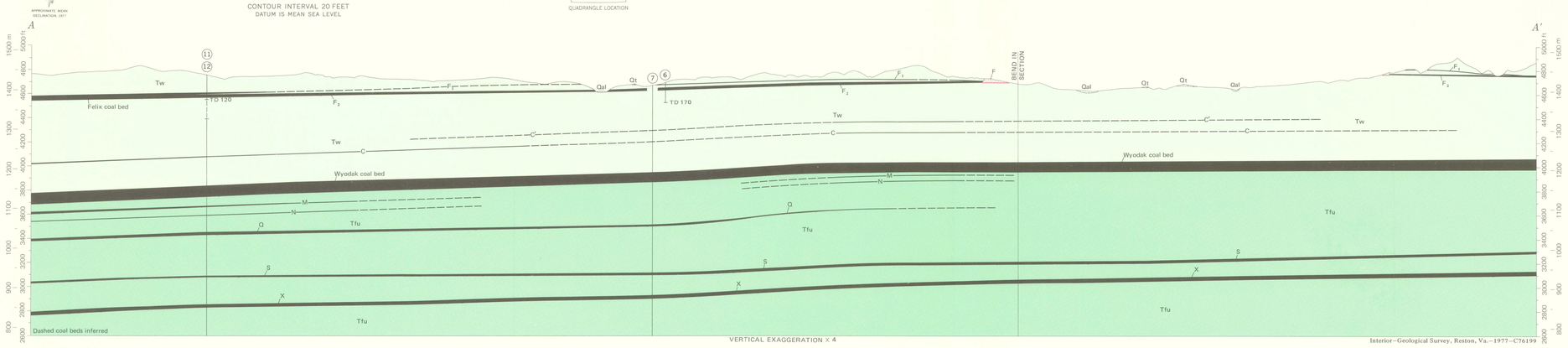
All measurements in feet

Subsurface data compiled as of August 1973

METRIC CONVERSIONS

1 inch=2.54 centimeters
1 foot=0.3048 meter
1 mile=1.6 kilometers

INDEX TO QUADRANGLES
Note: Sheets 2 and 3 of each map carry the same text, tables and generalized columnar section



VERTICAL EXAGGERATION X 4

Interior—Geological Survey, Reston, Va.—1977—C76199

GEOLOGIC MAP AND COAL RESOURCES OF THE SCAPER RESERVOIR QUADRANGLE, CAMPBELL COUNTY, WYOMING

By
S. L. Grazis

1977

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