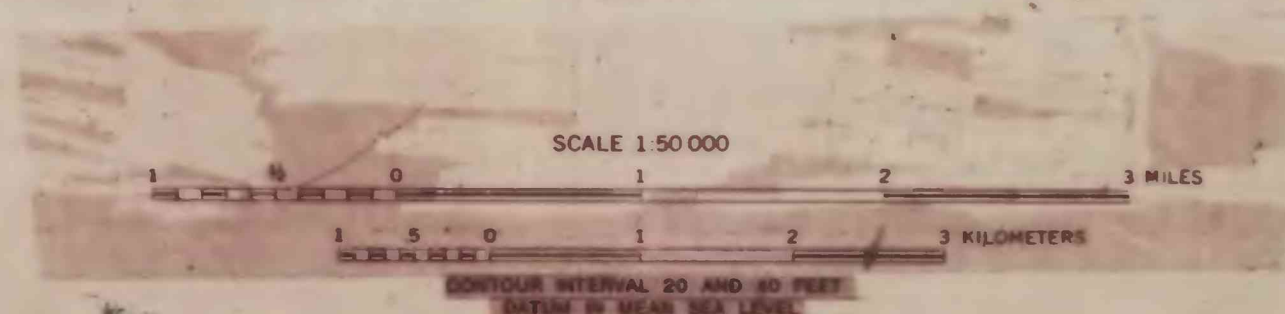


39° 27' 30"

39° 27' 30"

39° 17' 30"



GEOLOGIC STRIP MAP OF PARTS OF BAR X WASH, BRYSON CANYON, JIM CANYON, AND SAN ARROYO RIDGE QUADRANGLES,

UTAH AND COLORADO, SHOWING COAL ZONES AND ADJACENT ROCKS

By  
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1980

# CORRELATION OF MAP UNITS

Qal	Holocene	QUATERNARY
Qpa		
Qg		
Tg	Eocene	TERTIARY
Tw		
Ka	Upper Cretaceous	CRETACEOUS
Kb		
Kc		
Km		
Kmb		
Kd	Lower Cretaceous	
Kem		

## DESCRIPTION OF MAP UNITS

- UNCONSOLIDATED DEPOSITS (HOLOCENE):**
- Qal** Alluvium—Minor gravel, and sand and silt on canyon floor and in some washes.
- Qpa** Old alluvium—Sand and silt; occurs locally at front of escarpment near Bitter Creek and Bryson Canyon.
- Qg** Pediment deposits of gravel and sand veneering planar surfaces commonly standing above adjacent terrain.
- UNCONSOLIDATED AND SEMICONSOLIDATED DEPOSITS (PLEISTOCENE):**
- Tg** GREEN RIVER FORMATION (EOCENE)—Impure limestone, siltstone, and sandstone; occurs in few places along northern edge of mapped area.
- Tw** WASATCH FORMATION (EOCENE AND PALEOCENE)—Variegated shale and siltstone, and brown sandstone; pebble conglomerate at base in some localities. Occurs in few places along northern edge of mapped area. Mapped thickness ranges from 260 ft (85 m) to 440 ft (134 m).
- Kt** TUSCHER FORMATION (UPPER CRETACEOUS)—Brown to very light-gray, medium-grained sandstone, and green to olive siltstone and silty shale. Mapped thickness ranges from about 160 ft (49 m) to about 460 ft (146 m).
- Kf** FARRER FORMATION (UPPER CRETACEOUS)—Brown, fine to medium-grained sandstone, and greenish gray to gray silty shale, carbonaceous in parts. Contact with overlying unit indefinite. Mapped thickness ranges from about 400 ft (122 m) to about 800 ft (244 m).
- Kn** NESLEN FORMATION (UPPER CRETACEOUS)—Brown to very light-gray, very fine grained sandstone, and moderately dark-gray to black shale and silty shale; commonly carbonaceous. Includes the following coal zones in ascending order: Palsade (pa), Ballard (b), Chesterfield (ch), and Carbonera (ca). The Palsade and Chesterfield are the most persistent zones. Individual beds range in thickness from less than a foot to more than 7 feet. Coal is high volatile A and B bituminous; rank generally increases with depth. Sulfur content ranges from 0.4% to 2.5% and ash content ranges from 3.0% to 36.6% in beds or parts of beds selected for analysis. Contact of Neslen with overlying unit gradational. Mapped thickness ranges from about 380 ft (116 m) to about 580 ft (182 m).
- Ka** SEGO SANDSTONE (UPPER CRETACEOUS)—Brown to very light-gray, very fine to fine-grained, cross-laminated, cliff-forming sandstone, and some gray, sandy or silty shale. Mapped thickness ranges from about 120 ft (37 m) to about 300 ft (92 m).
- Kmb** BUCK TONGUE OF MANCOS SHALE (UPPER CRETACEOUS)—Dark gray shale and silty shale. Mapped thickness ranges from about 240 ft (73 m) to about 360 ft (110 m).
- Kc** CASTLEGATE SANDSTONE (UPPER CRETACEOUS)—Brown, very fine grained, laminated cliff-forming sandstone, some gray shale, and locally some impure limestone. Mapped thickness ranges from about 6 ft (1.8 m) to about 80 ft (24 m).
- Km** MANCOS SHALE (UPPER AND LOWER CRETACEOUS)—Dark-gray nonresistant shale; contact with overlying unit gradational. Only upper part mapped.
- CONTACT**—Long dashed where approximately located, short dashed where indefinite, inferred, or gradational; dotted where concealed.
- FAULT**—Short dashed where inferred, dotted where concealed. U; upthrown side, D; downthrown side. All faults are normal with vertical or steeply inclined planes.
- CLINKERED COAL BED**