



MEASURED COAL SECTIONS

- EXPLANATION**
- Sandstone
 - Siltstone
 - Shale
 - Carbonate
 - Coal
 - Shale with coaly streaks
 - Abandoned mine
 - Location shown on geologic map
 - Coal thickness in feet
 - Shale with coaly streaks
 - Abandoned mine
 - Location shown on geologic map



Geology mapped in 1975-76

Scale 1:24,000

Contour interval 20 feet

Base from U.S. Geological Survey, 1965

Control by USGS and USCGS

Topography by photogrammetric methods from aerial photographs taken 1964. First checked 1968.

Photocopy projection, 1927 North American datum, 10,000-foot grid based on Wyoming coordinate system, with zone 1000 meters Universal Transverse Mercator grid cells, zone 12, shown in blue.

File and data sheets available on request.

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By **Marvin L. Schroeder**

CORRELATION OF MAP UNITS

Qal	Qc	Qls	Holocene	QUATERNARY
Qg	Tw	Tke	Holocene and Pleistocene	
Keh	Kav	Kal	Eocene	TERTIARY
Kfu	Kfl	Ka	Paleocene	
Kbr			Upper Cretaceous	CRETACEOUS
			Lower Cretaceous	

DESCRIPTION OF MAP UNITS

SURFICIAL DEPOSITS (HOLOCENE)

- Qal Alluvium
- Qc Colluvium
- Qls Landslide deposits and mudflows
- Qg GRAVEL (HOLOCENE AND PLEISTOCENE)—Cobble-gravel to silt-size particles in lag concentrates overlying parts of the Hilliard Shale and Adaville Formation; derived predominantly from the Hans Fork Conglomerate Member of the Evanston Formation
- Tw WASATCH FORMATION (EOCENE AND PALEOCENE)—Red, maroon, yellow, and gray mudstone, and yellow, brown, and gray, fine- to coarse-grained sandstone. Sequence contains some stream-channel conglomerate beds containing boulders, cobbles, and pebbles of quartzite, chert, and limestone. As much as 2,000 ft thick
- Tke EVANSTON FORMATION (PALEOCENE AND UPPER CRETACEOUS)—Upper part, gray siltstone, carbonaceous claystone, shaly mudstone, quartzitic siltstone, gray carbonaceous sandstone, and some dark-brown concretionary ironstone. 200+ ft thick
- Keh Hans Fork Conglomerate Member (Upper Cretaceous)—Boulder-conglomerate beds containing small boulders, cobbles, and pebbles of well-rounded quartzite, chert, and limestone and interbedded white to brown calcareous sandstone; forms conspicuous boulder trains on topographic highs in west-central part of quadrangle. As much as 1,000 ft thick
- Kav ADAVILLE FORMATION (UPPER CRETACEOUS)—Predominantly gray-brown weathering carbonaceous shale and mudstone containing beds of yellowish-brown sandstone and siltstone; contains workable coal beds as much as 70 ft thick in lower part (Dames and Moore, 1979). 2,000+ ft thick
- Kal Lazear Sandstone Member—Light-gray to white fine- to coarse-grained sandstone; basal part of formation. About 200-400 ft thick
- Kh HILLIARD SHALE (UPPER CRETACEOUS)—Dark-gray to dark-brown marine shale, siltstone, and sandy shale; contains a few conspicuous light-gray to light-tan fine-grained resistant sandstone beds in upper part. About 6,000 ft thick
- Kfu FRONTIER FORMATION (UPPER CRETACEOUS)
- Kfl Upper unit—Middle part consists of a prominent hogback of white to light-gray weathering, oyster-bearing sandstone (Oyster Ridge Sandstone Member) overlain by shale and thin beds of gray sandstone that contains the Kemmerer coal zone; underlain by a thick shale interval that contains the Willow Creek coal zone in the Kemmerer area. About 1,200 ft thick
- Ka Lower unit—Dark-gray shale, tan siltstone and brown sandstone; sandstone beds less resistant than those in upper unit; contains the Spring Valley coal zone in lower part. About 1,000 ft thick
- Kbr ASPEN SHALE (LOWER CRETACEOUS)—Light- to dark-gray siltstone and shale, quartzitic sandstone, and porcelanite; forms prominent silver-gray hogbacks. About 900-1,000 ft thick
- Bear River Formation (Lower Cretaceous)—Black to dark-gray fissile shale and olive- to tan-weathering fine-grained sandstone; contains a few thin fossiliferous limestone beds. About 500-600 ft thick

CONTACT—Approximately located

COAL BED—Long dashed where approximately located; short dashed where inferred. Thickness of coal, in feet, measured at triangle; V indicates coal thickness measured by Veatch (1907). Number in circle refers to measured coal section

BAKED ROCKS—Showing areal extent of burned coal zone

FAULT—Dashed where approximately located; dotted where concealed. Arrows show relative horizontal movement. U, upthrown side; D, downthrown side

THRUST FAULT—Dashed where approximately located; dotted where concealed. Sawtooth on upper plate

ANTICLINE—Showing crestline; dotted where concealed

OVERTURNED ANTICLINE—Showing crestline; dotted where concealed

SYNCLINE—Showing troughline and plunge; dotted where concealed

OVERTURNED SYNCLINE—Showing troughline; dotted where concealed

STRIKE AND DIP OF BEDS

- Inclined
- Overturned
- Vertical

COMPONENT OF DIP OF BEDS

COAL MINE—Inactive or abandoned

LINE OF MEASURED SECTION—Circled number refers to measured section

REFERENCES

Dames & Moore, 1979, Coal resource occurrence and coal development potential maps of the Meadow Draw quadrangle, Uinta County, Wyoming: U.S. Geological Survey Open-File Report 79-1018, 39 p., 30 oversize sheets, scale 1:24,000.

Veatch, A. C., 1907, Geography and geology of a portion of southwestern Wyoming, with special reference to coal and oil: U.S. Geological Survey Professional Paper 56, 178 p.

1 foot = 0.3048 meter

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