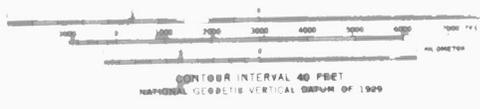


**EXPLANATION**

<b>QUATERNARY</b>	<b>Qal</b> Alluvium Unconsolidated deposits of alluvium along stream valleys at or near present stream levels.
	<b>Qac</b> Mixed alluvium and colluvium Unconsolidated tributary stream alluvium and colluvium.
	<b>Qls</b> Landslide deposits Blocks of bedrock or loose slope debris.
	<b>Qtl</b> Terrace levels Gravel-capped terraces along Red Fork of Powder River. Q1 is lowest surface and Q6 is highest.
	<b>Qb</b> Bench deposits Gravel-capped benches west of Cottonwood Creek in the southwest and northeast corners of the quadrangle.
<b>TRIASSIC</b>	<b>Fc</b> Chugwater Formation Includes Crow Mountain Sandstone Member, Alcona Limestone Member, and Red Peak Member. Top to bottom: Crow Mountain is reddish orange sandstone; Alcona is purplish gray limestone; and Red Peak is red shale, siltstone, and fine-grained sandstone. Thickness is 700-900 feet.
<b>PERMIAN</b>	<b>Fpge</b> Goose Egg Formation Dark red to reddish orange shale and siltstone with interbedded gypsum, limestone, and dolomite. Thickness is 250-350 feet.
	<b>Fpe</b> Tensleep Sandstone Gray to buff, to salmon pink, fine-grained, massive to crossbedded sandstone; gray to pinkish gray thin limestone and dolomite units common toward base. Thickness is 300-400 feet.
<b>PENNSYLVANIAN</b>	<b>Fma</b> Amaden Formation Includes from top to bottom: Rancho Limestone Member - gray to purplish limestone and dolomite, interbedded with red or green shale, chert lenses, siltstone, and sandstone; Horseshoe Shale Member - reddish brown to maroon shale and siltstone with thin beds of sandstone and carbonates; and Darwin Sandstone Member - orange, gray, or buff, fine-grained to medium-grained, crossbedded sandstone, extremely variable in thickness ranging from 0-100 feet. Total Amaden Formation thickness is 200-300 feet.
<b>MISSISSIPPIAN</b>	<b>Mm</b> Madison Limestone Alternating units of light tan to gray limestone and dolomite. Upper portion bluish gray limestone with karst surface at the top. Lower portion mainly dolomite and dolomitic limestone. Entire formation is fossiliferous. Thickness is 250-300 feet.
<b>ORDOVICIAN</b>	<b>Ob</b> Bighorn Dolomite Gray to yellowish gray to pink dolomite and dolomitic limestone; dense with massive bedding; characteristically pitted on weathered surface, mottled on unweathered surface in a reticulate pattern. Lower 15-30 feet is quartz sandstone, mostly white to light gray with dark maroon mottling, very fine- to coarse-grained, and friable to well-cemented. Dolomite sequence forms characteristic prominent cliff. Total thickness varies from 100-200 feet.
	<b>Egg</b> Gullatin Limestone and Gros Ventre Formation - undivided Uppermost unit contains resistant grayish red limestone and thin beds of flat-pebble conglomerate underlain by olive green to yellowish brown, glauconitic shale and siltstone. The middle unit includes light gray limestone, silty and glauconitic interbedded with soft grayish green shale and beds of flat-pebble conglomerate. The basal unit consists of yellowish brown to reddish brown, friable, medium- to coarse-grained glauconitic sandstone. The two formations are not distinguishable in this area. Laminolites are common in this unit, especially near the lower end of Arch Creek. Total thickness ranges from 500-600 feet.
<b>CAMBRIAN</b>	<b>Ef</b> Flathead Sandstone Tan, brown, and reddish gray quartz sandstone; medium- to coarse-grained and crossbedded to planar bedded. Thin interbeds of green, maroon, and tan siltstone, mainly in the upper portion. Arkosic conglomerate in lower part. Thickness is 500-600 feet.
<b>PRECAMBRIAN</b>	<b>Fc</b> Precambrian Granitic rock of possible metamorphic origin and equivalent to a quartz monzonite in igneous terminology. Only one small exposure in core of anticline near Arch Creek.

--- Formation contact  
--- Fault  
--- Fault  
--- Anticline  
--- Syncline  
--- Monocline  
--- Strike and dip of beds

Base by U.S. Geological Survey (1984)



PRELIMINARY GEOLOGIC MAP OF THE FRAKER MOUNTAIN QUADRANGLE, JOHNSON COUNTY, WYOMING

By Alan J. Ver Ploeg, Rodney H. De Bruin and Phillip L. Greer