

EXPLANATION

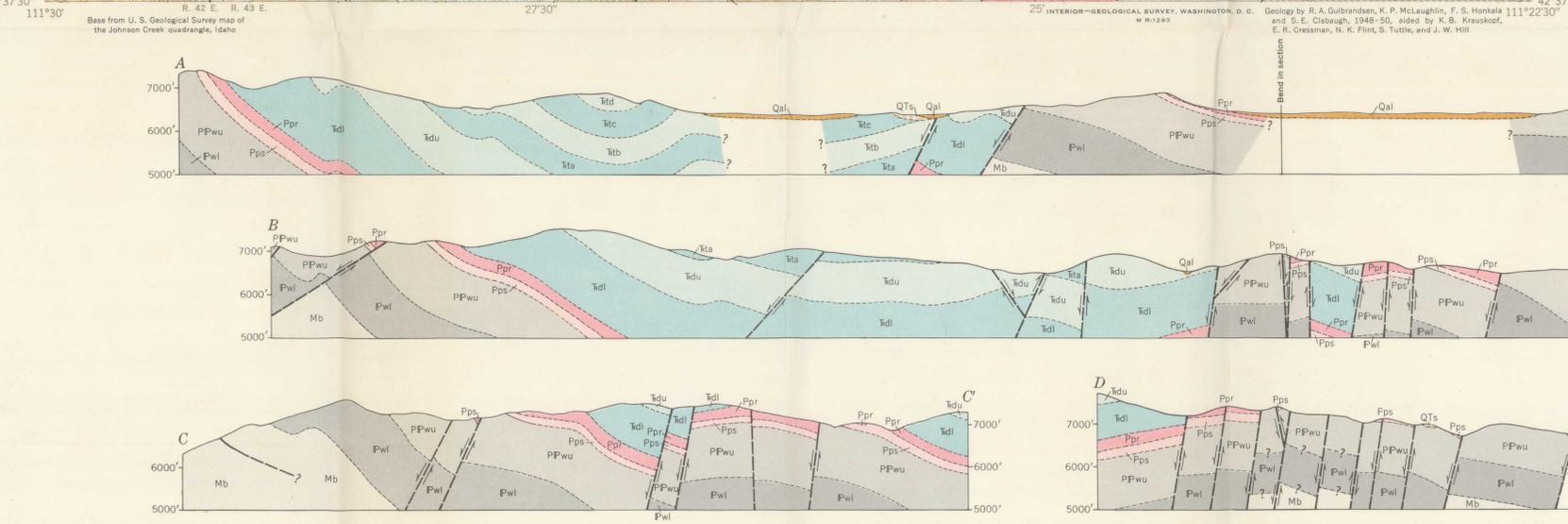
- Alluvium  
Mostly fine-grained sediments
- ANGULAR UNCONFORMITY  
Conglomerate, travertine, and gravel
- Member D  
Poorly exposed thick-bedded gray limestone and brown sandstone, possibly as much as 500 feet thick. Top of Thyaynes formation not represented.
- Member C  
Thick-bedded brownish-gray calcareous siltstone with irregular bedding surfaces, contains gray limestone nodules and lenses and some fossiliferous gray siltstone at base; 500 to 900 feet thick.
- Member B  
Thin-bedded calcareous siltstone, weathers to light-brown, large, smooth, thin plates that tend to thicken and whose surfaces are irregular in upper part; 600 to 800 feet thick.
- Member A  
Fossiliferous and thin-bedded dark-gray and brown calcareous siltstone and thin-bedded black brittle limestone, basal 10 to 20 feet composed of gray limestone and thin-bedded calcareous siltstone that contains the regionally distinctive Mesozoic fauna; 500 to 800 feet thick.
- Upper member  
Thick-bedded (as much as 8 feet) gray limestone with some interbedded thin- and thick-bedded olive-gray siltstone; 800 to 1200 feet thick.
- Lower member  
Dusky-yellow and light-olive-gray shale, fissile in part, containing some very fossiliferous limestone beds generally less than 1 foot in thickness that weather purplish and brownish-gray; grades upward to thick-bedded calcareous siltstone that weathers brownish-gray and black; 1000 to 1400 feet thick in most places.
- Rex chert member  
Massive medium-gray to black ledge-forming chert; lower half is very distinctive over the region; upper half consists of poorly exposed thin-bedded dark-gray to black chert; 300 to 500 feet thick.
- Phosphatic shale member  
No natural exposures; in trenches it is grayish-brown to black shale including a lower phosphate zone, a middle nodular zone, and an upper phosphate zone; some limestone beds are present; phosphate rock is generally oolitic; 100 to 200 feet thick in most places.
- Upper member  
Thick-bedded brown and gray sandstone with some interbedded limestone; very distinctive thick-bedded gray limestone in upper 20 feet contains silicified fossils (smooth brachiopods) and lenses and beds of black and bluish-gray chert; used as marker for overlying phosphate beds; 1100 to 1200 feet thick.
- Lower member  
Thick-bedded gray limestone with abundant fossil fragments and calcareous sandstone, weathers brownish-gray; about 800 or 900 feet thick.
- Brazer limestone  
Distinctive ledge-forming massive gray limestone and some gray and brown sandstone in lower part; limestone contains large silicified horn corals; about 1000 feet thick; base not exposed.

TERTIARY QUATERNARY(?)  
TRIASSIC  
PERMIAN  
PENNSYLVANIAN  
CARBONIFEROUS

- Contact
- Long dashed where approximately located, short dashed where gradational, indefinite, or inferred; queries indicate doubtful position
- Limit of outcrop
- Strike and dip symbols outside of outcrop areas indicate location of outcrops of unmapable size
- Fault
- Dashed where approximately located or inferred, dotted where covered; U, upthrown side; D, downthrown side; queries indicate doubtful position
- Fault showing relative movement
- Anticline
- Syncline
- Showing approximate location of trace of axial plane, dashed where approximately located, dotted where concealed; queries indicate doubtful position
- Showing approximate location of trace of axial plane, dotted where concealed; queries indicate doubtful position
- Overturned anticline
- Showing approximate location of trace of axial plane; queries indicate doubtful position
- Overturned syncline
- Showing approximate location of trace of axial plane; queries indicate doubtful position
- Plunge of minor anticline
- Strike and dip of beds
- Strike and dip of overturned beds
- Strike of vertical beds
- Horizontal beds
- Portal of adit
- Trench or prospect pit
- Diamond-drill hole

1274, 1275, and 1276 are lot numbers of sampling-program drill holes

APPROXIMATE MEAN DECLINATION 1949



GEOLOGIC MAP AND SECTIONS OF THE JOHNSON CREEK QUADRANGLE, CARIBOU COUNTY, IDAHO

Scale 1:24,000  
Contour interval 20 feet  
Datum is mean sea level