

Long-dashed where approximately located; short-dashed where gradational, indefinite, or inferred; dotted where covered.

Dashed where approximately located or inferred; dotted where covered. U, upthrown side; D, downthrown side.

Location of trace of axial plane, dashed where approximately located, dotted where covered.

Approximate location of trace of axial plane, dotted where covered.

Location of trace of axial plane, dashed where approximately located.

Approximate location of trace of axial plane.

Plunge of minor anticline

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Horizontal beds

Surface openings

Trench

1206 and 1209 are lot numbers of sampling program trenches

Portal of adit

Queries in map symbols indicate doubtful existence and/or location of feature queried.

Qal

Alluvium  
Mostly fine-grained sediments

Qt

Travertine

Angular unconformity

Qts

Sedimentary deposits  
Conglomerate, limestone, and gravel

Angular unconformity

Rtd

D member  
Poorly exposed thick-bedded gray limestone and brown sandstone, possibly up to 500 feet thick. Top of Thaynes formation not represented.

Rtc

C member  
Thick-bedded brownish-gray calcareous siltstone with irregular bedding surfaces, contains gray limestone nodules and lenses and some fissile gray siltstone at base; 500 to 900 feet thick.

Rtd

B member  
Thin-bedded light-brown-weathering calcareous siltstone, weathers to large smooth thin plates that tend to be thicker and whose surfaces are irregular in upper part; 600 to 800 feet thick.

Rtd

A member  
Fissile 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 contain the regionally distinctive Meekoceras fauna, mapped locally as Tiam; 500 to 800 feet thick.

Rtd

Upper member  
Thick-bedded (up to 8 feet) gray limestone with some interbedded thin- and thick-bedded olive-green siltstone; 800 to 1,200 feet thick.

Rtd

Lower member  
Olive-green shale, fissile in part, containing some very fossiliferous limestone beds generally less than one foot in thickness that weather purplish- and brownish-gray, grades upward to thick-bedded olive-green calcareous siltstone that weathers dark-brown and black; 1,000 to 1,400 feet thick in most places.

Ppr

Rex chert member  
Massive dark-gray to black ledge-forming chert in lower half is very distinctive over the region; upper half consists of poorly exposed thin-bedded dark-gray to black cherty siltstone; 200 to 300 feet thick.

Pps

Phosphatic shale member  
No natural exposures; in trenches it is grayish-brown to black shale including a lower phosphate zone, a middle mudstone zone, and an upper phosphate zone; some limestone beds are present; phosphate rock is generally oolitic; 100 to 200 feet thick in most places.

Cwb

Upper member  
Thick-bedded brown and gray sandstone with some interbedded limestone; very distinctive thick-bedded gray limestone in the upper 10 to 20 feet contains silicified fossils, mostly brachiopods (Squamarilia), and lenses and beds of black and bluish-white chert, used as marker for overlying phosphate beds; 1,000 to 1,300 feet thick.

Cwb

Lower member  
Thick-bedded gray sandy limestone with abundant fossil fragments; contains interbeds of brownish-weathering calcareous sandstone, large nodules and lenses of chert characterize uppermost beds; 100 to 1,300 feet thick.

Cwb

Lower limestone  
Upper 100 feet distinctive massive gray ledge-forming limestone; contains large zoned coals, underlain by thin-bedded limestone with some interbeds of sandstone; base not exposed, maximum of 100 feet exposed at any one place.

Quaternary  
Tertiary

Thaynes formation  
Lower Triassic

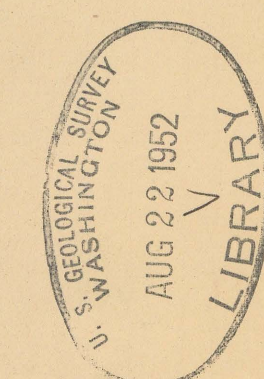
Drinwoody formation

Permian  
Phosphoria formation

Pennsylvanian  
Wells formation

Mississippian

Carboniferous



M(200)  
R290  
no. 52-56  
C-1



GEOLOGIC MAP  
OF THE

JOHNSON CREEK QUADRANGLE  
Caribou County, Idaho

By

R.A. Gulbrandsen, K.P. McLaughlin, F.S. Honkala,  
S.E. Clabaugh and K.B. Krauskopf

SCALE 1:24,000

CONTOUR INTERVAL 20 FEET  
DATUM: MEAN SEA LEVEL

Geology mapped in 1949 and 1950 by

R.A. Gulbrandsen  
K.P. McLaughlin  
F.S. Honkala  
S.E. Clabaugh  
K.B. Krauskopf  
E.R. Gressman  
J.W. Hill

Idaho (Johnson Creek quad). Geol. 1:24,000. 1949.

cap

Topography from aerial photographs by multiplex methods  
Aerial photographs taken 1947. Field check 1949

This map is preliminary and has not been reviewed  
for conformity with U.S. Geological Survey standards  
and nomenclature.