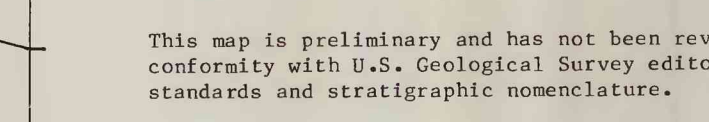


Figure 1. Index map of south-central Idaho showing location of Mackay & NW quadrangle (diagonal lines) in relation to the Mackay & NE (Skipp, 1988), the Grouse 15' quadrangle (solid outline), major thrust faults (modified from Skipp, 1987), geographic features referred to in the text (mountain ranges shaded), and the Lava Creek mining district (dashed outline) (Anderson, 1929).



May]	Lower number (Low
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turbidites con-
gray laminated
medium- to dark
graded sandstone
gray, granule- to
graded sequence
light gray and
thin bedded. In
bedded, weather-
moderate brown,
and minor cross-
Sandstone con-
argillite and
15 m in diameter
granule-and-pel-
the same as the
scarce clasts of
much as 3.8 cm
gray mudstone
faunas were found
assigned an age
the basis of six
lithologic sizes
Creek Formation
to the north (Fig.
lower part of the
west of the quarry
An unconformable

Devonian rocks
the quadrangle.
thickness of 5'
Cherry Creek al
quadrangle bou
D05 **Sedimentary rocks**
Ordovician)—Qu
dolomite. Quar
represented on
in flows and t
Group. Unit w
rocks. Thickn
6,000 ft. Unit
section

Ag **Grained gneiss (A)**
black and yellow
coarse grained
cataclastic re-
quartz, plagioclase
and minor garnet
minerals are
opaque oxides,
Glass and glass
present as thin
crystals and re-
this rock. In
quadrangle, but
present in flow
this quadrangle
Unit shown only

plate, the White Knob plateau, corner of the quadrangle (figure 1) located 5 miles west of the town of Pinedale during mid-Cretaceous time, and Pioneer Mountains of south Copper Basin thrust, the boundary of the Copper Basin, cross out 2 miles north of the town of Pinedale beneath volcanics of the Eocene quadrangle where it juxtaposes elastic rocks of the upper part of the age of the Pinedale sandstone of the Snake Canyon Mississippi limestone and the Surret Canyon Formation upper part of the Copper Basin sandstone and a sheet of the Mississippi Antler highland Pennsylvanian limestones of and the underlying Mississippi limestones on the outer cratonic shelf (1979). No Pennsylvanian rock Copper Basin Formation. Corner of the quadrangle to the east of the quadrangle to the east of the Wood River Formation (Pinedale) farther west indicate that

highland, a source area for conglomerates present to the highland (Skip, Sanda, not only are two different lithologies, but the conglomerate source area for the Upper Bed has overridden its own detritus suggest that shortening along the Tertiary fault is responsible for the plate of 12 to 14 miles (Skip).

Steeply dipping rocks of Formation are shown to be the gently dipping beds of the unit. The contact is the 1190' bend found in the hanging wall. Rocks as old as Archean? are brought to the near-surface, and in the center of the unit near the east edge of the quarter section). A granite gneiss is long, labeled as nap, was the Gneiss. The cross section A-A' is the cross section.

Three periods of Tertiary were

Challis; 2) syn-Challis; and 3) post-Challis. The first period trend east-south-east and involved the rocks on both sides of Antelope Creek. The second fault represents a north-south extension that followed the Challis magmatism. The extension direction of N. 20° E. was followed by the third stage Challis rhyolite dikes. This orientation are prevalent throughout the mountains (Nelson and Rose, 1972). The third stage Challis fabric locally deflects the older dikes. Northwest-trending Antelope Creek (unit Tta) shows evidence that it was formed in the early stages of Challis volcanism. Mesozoic contraction folds a late-stage rhyolite dikes, a unit that is well exposed in the upper reaches of the Antelope Creek similar to the Reogone and yet older units. These units are rocks that are still active in some of these younger faults are current earlier fault faces. The faults from the Green and Nevada

Miller Peak and Reserve No. 10. The east on a major buried fault along Cherry Creek (Skipp, 1964).

RESOURCES

There are no mines and the quadrangle which is adjacent southeast to the Lava Creek (figure 1), a rich silver belt country (Anderson, 1929, 1934, 1940).

A reconnaissance geochemical study in the northeast corner identified some moderate Au-Ag, As-Sb-Tl, and Cu-Mo-Zn (1988). The presence of trace amounts of these metals in the jasperoids indicates that they are present in the area and may be associated with the volcanic rocks. The quadrangle contains large amounts of Cr and Mn were no stream-sediment sampling was done. Bear Creek along the northern boundary of the quadrangle. The metals is considered to be low (1981).

The thermal history of the plate, as indicated by the color index (CII) value of $1\frac{1}{2}$ to 1, values of 2 to 3 in the Mack adjacent on the east, indicates little or no potential for dry gas (methane).

COUNTIES, IDAHO

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By
ty Skipp
1989