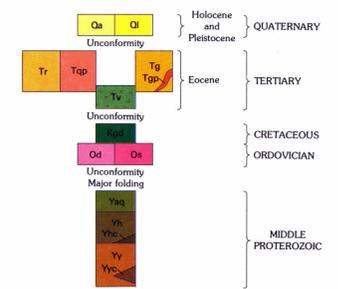


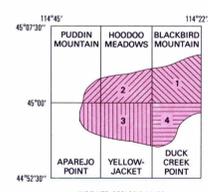
CORRELATION OF MAP UNITS



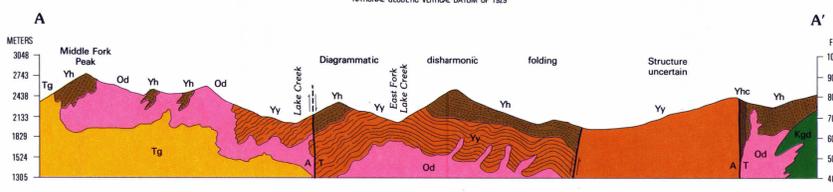
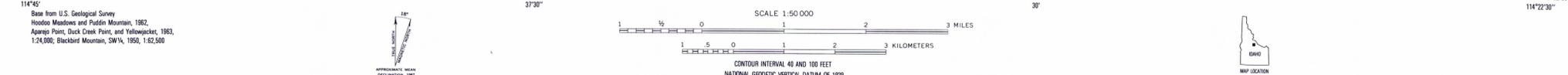
DESCRIPTION OF MAP UNITS

- Surficial deposits (Holocene and Pleistocene)**
- Qa Alluvium—Thickness 0-30 m
 - Qi Landslide debris—Thickness 0-50 m
- Challis Volcanics and related intrusive rocks (Eocene)**
- Tr Rhyolite intrusions—At Red Rock Peak consists of light-gray to pink, columnar-jointed rhyolite containing 9 percent phenocrysts consisting mostly of euhedral alkali feldspar (3-6 mm), minor quartz (1-2 mm), and sparse altered mafic minerals; mapped to include vesicular brown latite that crops out near the triangulation station and the helpad. Rhyolite bordering the Panther Creek graben is similar to rhyolite at Red Rock Peak but contains a higher proportion of quartz. Alkali feldspar from Red Rock Peak gave a K-Ar age of 44.6 ± 1.5 m.y. (R. F. Marvin, written commun., 1981).
 - Tgp Quartz porphyry intrusions—See plate 2
 - Tgpp Gray porphyry intrusions—See plate 2
 - Tv Granite—See plate 2
- Volcanic rocks undivided—See plate 2.** In eastern part consists principally of tuff of Ellis Creek in upper exposures that is intercalated with potassium-rich basalt; locally, has phenocryst-rich dacite lavas at base containing abundant plagioclase, biotite, and hornblende. Near Duck Point, south of an east-trending fault, principally densely welded tuff of Camas Creek-Black Mountain. South of Middle Fork Peak principally latite lavas.
- Granitic rocks of Idaho batholith (Cretaceous)—See plate 2**
- Intrusive rocks (Ordovician)**
- Od Diorite, quartz diorite, gabbro, and syenite—See plate 2
 - Os Quartz syenite, syenite, and granite—See plate 2
- Sedimentary rocks (Middle Proterozoic)**
- Yq Argillaceous quartzite, siltite, and argillite—Light-gray to dark-gray, mostly medium-gray, thin- and thick-bedded, fine-grained (0.1-0.2 mm) and very fine grained feldspathic and micaceous quartzite with lesser siltite and argillite. Cleaner, thicker quartzite beds near base closely resemble the Hoodoo Quartzite. Thickness 500+ m (incomplete)
 - Yh Hoodoo Quartzite—Mostly white and light-gray, obscurely bedded quartzite containing 80-90 percent well-rounded quartz grains mostly about 0.2-0.3 mm in diameter but commonly with scattered grains or "berries" as large as 1.5 mm; 5-10 percent feldspar consisting of orthoclase, microcline, and albite; 5-10 percent biotite, chlorite, sericite, and iron oxide. Conspicuously thin bedded at base in the East Fork of Lake Creek where interbedded with Yellowjacket-like argillaceous quartzite beds. Thickness 1,100+ m
 - Yc Calcareous beds of Hoodoo Quartzite—White, gray, and brown, coarsely crystalline marble interbedded with calcareous quartzite; vigorous fizzing of marble with dilute HCl suggests that magnesium content of marble is low; locally metamorphosed to calc-silicates including scapolite. Thickness 0-100+ m
 - Yy Yellowjacket Formation—Variegated gray, argillaceous, mostly thin-bedded quartzite with lesser dark-gray siltite and argillite; cross-laminated lenses about 1-2 cm thick are common in the quartzite layers; beds are mostly nongraded to poorly graded, commonly reversely graded. Argillaceous quartzite beds contain about 70 percent quartz with an average diameter of 0.1 mm; matrix composed principally of silt-sized biotite, chlorite, and magnetite; some beds strongly attract a pencil magnet. Thickness, according to Ross (1934, p. 16), about 9,000 ft (2,740 m)
 - Yyd Calcareous beds of Yellowjacket Formation—White, gray, dark-green, and black, irregularly bedded calcareous quartzite. Principal component is quartz (0.3-1.0 mm); other minerals are calcite, scapolite, biotite, epidote, chlorite, coarse- and fine-grained actinolite, plagioclase, and apatite

- Contact—Queried where approximately located
- Fault—Showing direction of relative movement; bar and ball on downthrown side; dashed where approximately located or inferred; dotted where concealed. In cross section, direction of relative movement: T, toward observer; A, away from observer.
- Major folds—Showing trace of axial plane and direction of plunge of axis. Queried where approximately located
- Anticline
- Syncline
- Minor folds—Showing trace of axial plane and direction of plunge of axis
- Minor anticline
- Minor syncline
- Minor overturned anticline
- Strike and dip of beds
- Inclined
- Vertical
- Horizontal
- Overturned



- INDEX TO GEOLOGIC MAPPING**
1. E. B. Ekren (unpub. mapping, 1981); K. V. Evans and E. Sisor (unpub. mapping, 1983); Bennett (1977).
 2. E. B. Ekren (unpub. mapping, 1981); K. V. Evans and E. Sisor (unpub. mapping, 1983); Carter and others (1973).
 3. E. B. Ekren (unpub. mapping, 1982) with intrusive contacts from Ross (1934); M. Lemson (unpub. mapping, 1980; Carter (1981); Peale (1982).
 4. E. B. Ekren (unpub. mapping, 1980); Peale (1982)



GEOLOGIC MAP OF THE AREA IN AND ADJACENT TO THE YELLOWJACKET AND HOODOO CREEK AREAS, LEMHI COUNTY, IDAHO