DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
84-399
PLATE 1

DESCRIPTION OF GEOLOGIC MAP UNITS

Qu UNCONSOLIDATED DEPOSITS (QUATERNARY) -- Holocene alluvium, rock glaciers, and talus, and Pleostocene glacial moraines and outwash material.

Ts SEDIMENTARY DEPOSITS (UPPER TERTIARY) -- Terrace gravels south and southwest of the Taylor River.

Tr RHYOLITE (MIDDLE TO LOWER MIOCENE?) -- Dikes and small plugs of porphyritic (quartz-feldspar) rhyolite.

Ta ANDESITE (PRE-OLIGOCENE?) -- Sills, laccoliths, and stocks of porphyritic (plagioclase-hornblende) andesite-latite and porphyritic dacite. (Recently determined to be Cretaceous in age; Ed DeWitt, personal communication).

TKd DIORITE (TERTIARY-CRETACEOUS?) -- Small plug of equigranular diorite.

Kd DAKOTA SANDSTONE (CRETACEOUS) -- Sandstone, siltstone, and minor conglomerate.

Jm MORRISON FORMATION (JURASSIC) -- Siltstone, tuffaceous siltstone.

Jj JUNCTION CREEK SANDSTONE (JURASSIC) -- Sandstone and minor conglomerate.

Pg GOTHIC FORMATION (PERMIAN) -- Conglomerate, shale, and evaporites.

Pb BELDEN FORMATION (PERMIAN) -- Shale, siltstone, and conglomerate.

Ml LEADVILLE LIMESTONE (MISSISSIPPIAN) -- Limestone containing very minor amounts of siltstone.

Dc CHAFFEE FORMATION (DEVONIAN) -- Siltstone, limestone, and minor silty limestone.

Ou UNDIFFERENTIATED ORDOVICIAN UNITS (ORDOVICIAN) -- Includes Harding Sandstone and Manitou Dolomite.

Oh HARDING SANDSTONE (ORDOVICIAN) -- Sandstone.

Om MANITOU DOLOMITE (ORDOVICIAN) -- Dolomite, limestone, and siltstone that contains chert.

Cs SAWATCH QUARTZITE (CAMBRIAN) -- Sandstone, limestone, and minor conglomerate.

YXdb UNNAMED DIORITE AND DIABASE (PROTEROZOIC Y?) -- Dikes of biotite-rich diorite and diabase. Most dikes appear to be Proterozoic Y in age, but some may be Proterozoic X.

YXg UNDIFFERENTIATED GRANITIC ROCKS (PROTEROZOIC X AND Y) -- Stocks, sills, and plutons of granite.

Yt GRANITE OF THE TAYLOR RIVER (PROTEROZOIC Y) -- Small and large plutons of muscovite granite.

Xg UNDIFFERENTIATED GRANITIC ROCKS (PROTEROZOIC X) -- Stocks, sills, and plutons of granite.

Xsy UNNAMED SYENITE (PROTEROZOIC X) -- Zoned pluton of quartz monzonite-syenite that may possibly be partly Proterozoic Y in age.

Xh GRANITE OF HENRY MOUNTAIN (PROTEROZOIC X) -- Large pluton of coarse-grained, porphyritic (microcline) biotite-muscovite granite.

Xr GRANITE OF ROOSEVELT GULCH (PROTEROZOIC X) -- Large pluton of biotite granite.

Xf GRANODIORITE OF FAIRVIEW PEAK (PROTEROZOIC X) -- Large pluton of well-foliated biotite granodiorite.

Xd UNNAMED DIORITE (PROTEROZOIC X) -- Stocks and subvolcanic sills of diorite, quartz diorite, and metagabbro.

Xs UNNAMED METASEDIMENTARY UNITS (PROTEROZOIC X) -- Muscovite-biotite-andalusite-cordierite schist, metaquartzite, metagraywacke, and minor metaconglomerate.

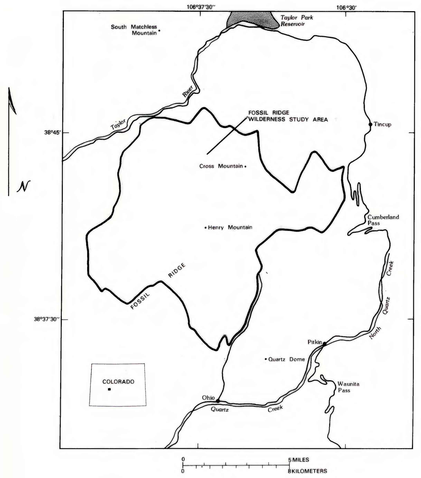
Xfv UNNAMED FELSIC METAVOLCANIC UNITS (PROTEROZOIC X) -- Metarhyolite tuffs and intrusive bodies.

Xiv UNNAMED INTERMEDIATE COMPOSITION METAVOLCANIC UNITS (PROTEROZOIC X) -- Metadacite intrusive bodies and minor tuffs.

Xmv UNNAMED MAFIC METAVOLCANIC UNITS (PROTEROZOIC X) -- Amphibolite, metabasalt, metaandesite, layered calc-silicate gneiss, and lomerate.

EXPLANATION

- ● Rock sample location
- ⊗ Rock and soil sample location
- ▲ Stream sediment sample location
- ■ Stream sediment and panned concentrate sample location
- Ag >100 X threshold value
- Ag 10 to 100 X threshold value
- Ag 1 to 10 X threshold value
- pAg Anomaly in panned concentrate



Base from U.S. Geological Survey 1:24,000.
Parlin and Pitkin 1964, Crystal Creek, Fairview Peak, Matchless Mountain and Taylor Park Reservoir 1967, Cumberland Pass and White Pine unpublished.

Geology compiled by Ed DeWitt.

Miles 0 1 2
Kilometers 0 1 2
Scale 1:30,000

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

Geochemical Anomaly Map for the Fossil Ridge Wilderness Study Area, Gunnison National Forest, Gunnison County, Colorado