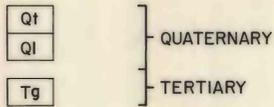
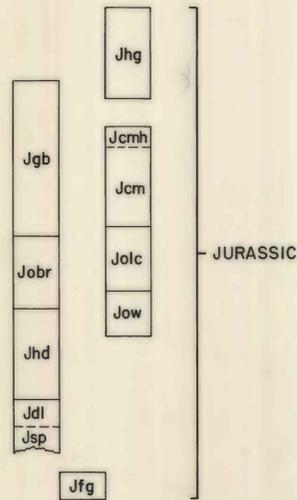
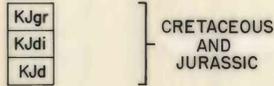


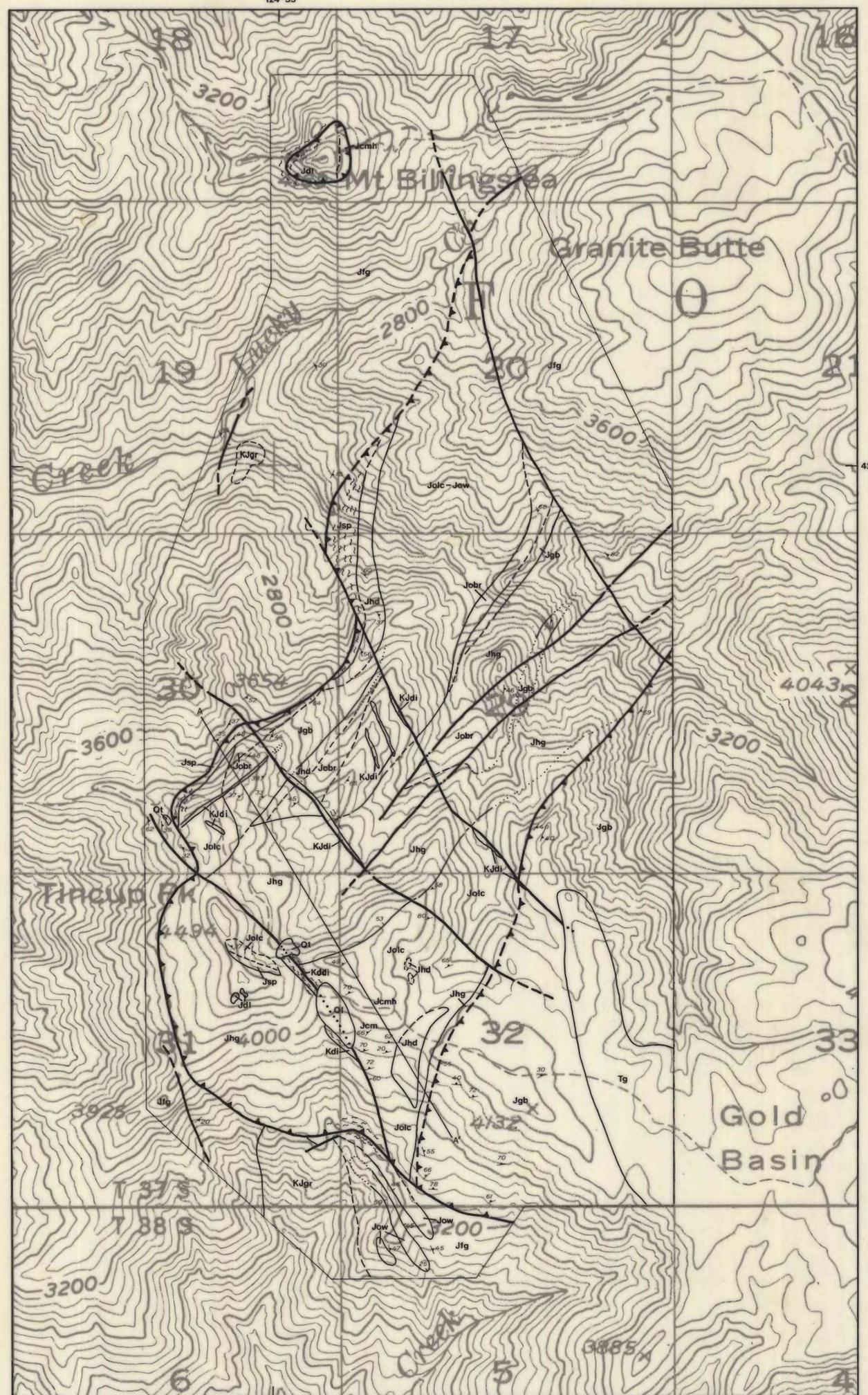
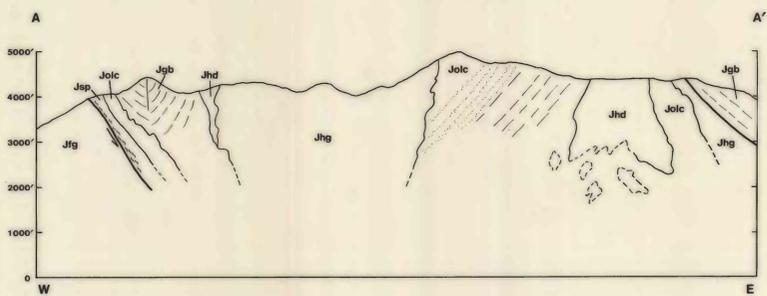
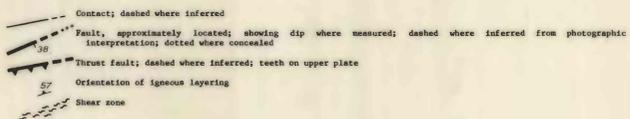
CORRELATION OF MAP UNITS



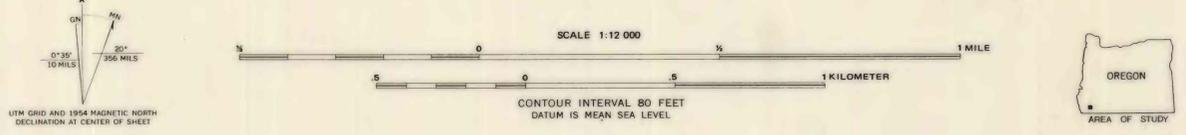
INTRUSIVE ROCKS



- DESCRIPTION OF MAP UNITS
- Qt QUATERNARY TALUS—Unconsolidated, poorly sorted, angular rock fragments
 - Ql QUATERNARY LANDSLIDE—Unstratified, heterogeneous mixtures of soil, debris, and angular rock fragments
 - Tg TERTIARY GRAVELS—Coarsely stratified, saturated cobbles, boulders, and sand found on upland surfaces near 4,000 ft; clasts are composed of gabbro, metavolcanics, peridotite, quartzite, amphibolite, greywacke, and chert
 - Kgr GRANODIORITE—Medium-grained equigranular, locally foliated, rock composed of plagioclase, quartz, potassium feldspar, muscovite, biotite, accessory garnet and epidote, and secondary chlorite and clay minerals
 - Kdi QUARTZ DIORITE—Equigranular to inequigranular quartz, plagioclase, biotite, muscovite uniformly weathered and epidotized
 - Kd DIKE ROCK—Ophiolite to subophiolite rocks with dike-like characteristics composed predominantly of plagioclase and amphibole; intrudes all units except quartz diorite and granodiorite
 - Jfg FOLIATED HORNBLENDE GABBRO—Fine- to medium-grained holocrystalline hornblende, plagioclase, and gabbro. Textures vary considerably from a poorly defined planar foliation to a gneissic texture. Irregular compositional zoning may define foliation and possibly a grain-size change. Epidote and chlorite alteration is common probably resulting from metamorphism and hydrothermal activity
- WEBBLIITE ROCKS
- Jhg HORNBLENDE GABBRO—Dark-green black, medium- to coarse-grained hornblende-plagioclase gabbro characterized by large varying grain size and various comb and radial textures which may exhibit flow foliation
 - Jcmh HORNBLENDE MAGNETITE CLINOPYROXENITE AND MAGNETITE CLINOPYROXENITE—Medium to coarse-grained clinopyroxenite with scattered primary black hornblende and greater than accessory amounts of magnetite, rare plagioclase (Jca); usually layered rock with local occurrences of graded beds and magnetic horizons with minor clinopyroxene (Jca)
 - Jolc OLIVINE CLINOPYROXENITE—Coarse to very coarse grained serpentinized olivine with clinopyroxene. Clinopyroxene crystals partially altered to hornblende. Layering is rare
 - Jow WEBBLIITE—Medium to very coarse grained serpentinized rock consisting of olivine and clinopyroxene
- HERZOLITIC ROCKS
- Jgb TWO PYROXENE GABBRO—Medium-grained, grey-colored, equigranular to poikilitic rock composed of plagioclase, clinopyroxene, orthopyroxene, and accessory magnetite and hornblende. Distinctive cumulus nodal layering occurs throughout the unit. Pyroxene-rich layers are 1-3 cm at top of section increasing to 5 m downsection
 - Jobr OLIVINE BRONZITE CUMULATE—Medium-grained cumulate with distinctive poikilitic clinopyroxene. Consists of cumulus olivine and bronzite; intercumulus clinopyroxene, and plagioclase. The olivine bronzite cumulate is part of a broken gradational group with the two pyroxene gabbro
 - Jhd OLIVINE-CLINOPYROXENE HETERADICULITE—Medium- to coarse-grained rock consisting of rounded olivine crystals enclosed in poikilitic clinopyroxene and minor orthopyroxene
 - Jdl MONITE-HERZOLITE—Fine- to medium-grained intensely serpentinized olivine-rich rocks. Metamorphic or cataclastic texture defined by recrystallized olivine and porphyroclastic pyroxene. Minor pyroxene-rich layers present. Barites contain abundant pyroxene fold hinges near western thrust
 - Jsp SERPENTINITE—Intensely sheared siltclitic. No primary textures recognized



Base by U.S. Geological Survey, 1952
Geology by Floyd Gray, 1976-77



MAP SHOWING GEOLOGY OF THE TINCUP PEAK AREA, KALMIOPSIS WILDERNESS AREA,
JOSEPHINE COUNTY, SOUTHWESTERN OREGON

By
Floyd Gray
1980

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