DEPARTMENT OF THE INTERIOR
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PLATE 1 OF 3

TRACTS DELINEATED FOR HORNBLENDE-BIOTITE GRANITOID RELATED DEPOSITS, STOCKWORK MOLYBDENUM DEPOSITS, AND TUNGSTEN-BEARING VEIN DEPOSITS

By Jocelyn A. Peterson, Dennis P. Cox, and Floyd Gray

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Simplified geologic map compiled by
Floyd Gray, R.J. Miller, and M.J. Grubensky

EXPLANATION

- LOCOMOTIVE-TYPE FANGLOMERATE
- LATE CRETACEOUS AND EARLY TERTIARY HORNBLENDE-BIOTITE GRANITOIDS
- LATE CRETACEOUS AND EARLY TERTIARY TWO-MICA GRANITOIDS
- PALEOZOIC AND LATE PROTEROZOIC SEDIMENTARY ROCKS
- OLDER GRANITIC AND METAMORPHIC ROCKS (EXCEPT FINAL SCHIST)
- C1 — TRACTS DELINEATED FOR PORPHYRY COPPER DEPOSITS (C1-C11)
- S1 — TRACTS DELINEATED FOR SKARN AND PORPHYRY COPPER RELATED SKARN DEPOSITS (S1-S11)
- M1 — TRACTS DELINEATED FOR STOCKWORK MOLYBDENUM DEPOSITS (M1-M10)
- W1 — TRACTS DELINEATED FOR TUNGSTEN-BEARING VEIN DEPOSITS (W1-W8)

CORRELATION OF MAP UNITS

- Qa, Qls — QUATERNARY
- QTb — QUATERNARY AND TERTIARY
- Tb, Trm, Tcl, Trc, Tbc, Tcs, Tbv, Tof, Tg — TERTIARY
- Td, Trf, Toc — TERTIARY
- TKgt, TKgh — TERTIARY AND CRETACEOUS
- KJsv, KJg — CRETACEOUS AND JURASSIC
- Jg, Jvs — JURASSIC
- MzYXg, MzXp — MESOZOIC TO EARLY PROTEROZOIC
- PzZs — PALEOZOIC AND LATE PALEOZOIC
- YXg — MIDDLE PROTEROZOIC AND EARLY PROTEROZOIC
- Xs — EARLY PROTEROZOIC

DESCRIPTION OF MAP UNITS

Qa ALLUVIUM (QUATERNARY)

Qls LANDSLIDE DEPOSITS (QUATERNARY)

QTb BASALT OF SENTINEL PLAIN AND PINACATE VOLCANIC FIELD (QUATERNARY AND TERTIARY)

Tb BASALT AND BASALTIC ANDESITE (TERTIARY)--Includes the Batamote Andesite; scattered capping basaltic flows, tuffs, and breccias

Trm RHYOLITE, RHYODACITE, AND MINOR DACITE FLOWS AND PLUGS (TERTIARY)--In the Bates and Pozo Redondo Mountains and the Ajo Range

Tcl CHILOS LATITE FLOWS AND FLOW BRECCIA (TERTIARY)

Trc RHYOLITE COMPLEX (TERTIARY)--Mostly extensive flows in the Sauceda and Sand Tank Mountains. Rhyolite flows, flow breccia, and tuffs predominate in the Sauceda Mountains. Porphyritic biotite- to biotite-hornblende-bearing rhyodacite and dacite occur in the Sand Tank Mountains. Generally, eruptions in the Sauceda Mountains are younger than those of the Sand Tank Mountains

Tbc BASALTIC COMPLEX: PRIMARILY COARSE, PORPHYRITIC BASALT TO BASALTIC ANDESITE (TERTIARY)

Tcs CONGLOMERATE AND MINOR SANDSTONE INCLUDING DANIEL'S CONGLOMERATE (TERTIARY)--Widely scattered occurrence; generally the Daniel's Conglomerate is only significant sedimentary rock lying within the Ajo Volcanic Field

Td DACITIC TO RHYOLITIC FLOWS, FLOW BRECCIA, DIKES, AND SILLS; MINOR LATITE AND ANDESITIC TUFFACEOUS ROCK (TERTIARY)

Trf RHYOLITE FLOWS, RHYODACITE, ASH FLOW TUFFS, MINOR ANDESITE (TERTIARY)

Tbv BASAL VOLCANIC SEQUENCES (TERTIARY)--Low-lying, typically poorly exposed porphyritic plagioclase andesite and minor tuff. Includes Sneed Andesite of Gilluly (1946)

Tac ANDESITE OF CASTLE DOME MOUNTAINS (TERTIARY)

Taf ANDESITE AND FANGLOMERATE, MINOR COARSE ARKOSIC SANDSTONE (EARLY TERTIARY)--Commonly occurs as intercalated steeply tilted sequence

Tg BIOTITE-HORNBLENDE GRANITE (EARLY TERTIARY)

TKgt TWO-MICA GRANITE, BIOTITE GRANITE (EARLY TERTIARY AND LATE CRETACEOUS)

TKgh HORNBLENDE BIOTITE SERIES GRANITOIDS (EARLY TERTIARY AND LATE CRETACEOUS)

KJsv SEDIMENTARY AND VOLCANIC ROCKS (CRETACEOUS AND (OR) UPPER JURASSIC)

KJg GRANITIC ROCKS (CRETACEOUS OR JURASSIC)

Jg GRANITIC AND SYENITIC ROCKS (JURASSIC)

Jvs VOLCANIC AND MINOR SEDIMENTARY ROCKS (JURASSIC)

Rxs SEDIMENTARY ROCKS INCLUDING APACHE GROUP ROCKS, DIABASE (PALEOZOIC AND LATE PROTEROZOIC)

YXg GRANITE (MIDDLE AND EARLY PROTEROZOIC)

Xs UNDIFFERENTIATED SCHIST (EARLY PROTEROZOIC)--Includes Pinal Schist

MzYXg GNEISS AND SCHIST (MESOZOIC AND (OR) MIDDLE PROTEROZOIC AND (OR) EARLY PROTEROZOIC)

MzXp PARAGNEISS (MESOZOIC AND (OR) PALEOZOIC AND (OR) MIDDLE PROTEROZOIC AND (OR) EARLY PROTEROZOIC)

CONTACT

FAULT--Dashed where approximately located; dotted where concealed

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