DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-1834-B
SHEET 2 OF 3

EXPLANATION

- SILICIFIED VENT COMPLEXES (TERTIARY)--In Tertiary rhyolites
- LOWER SEQUENCE OF VOLCANIC ROCKS (TERTIARY)
- GRANITIC AND METAMORPHIC ROCKS (JURASSIC)
- SEDIMENTARY ROCKS (PALEOZOIC TO MIDDLE PROTEROZOIC)
- GRANITIC AND METAMORPHIC ROCKS (PROTEROZOIC AND PROTEROZOIC?)

TRACTS

- Q1 — Gold-silver quartz veins (Q1-Q7)
- V1 — Epithermal vein deposits (V1-V8)
- H1 — Vein-type iron deposits (H1-H3)
- Pg1 — Pegmatites (Pg1-Pg4)
- J1 — Gneiss-hosted disseminated gold mineralization (J1-J8)
- A1 — Volcanic-hosted disseminated gold-silver deposits (A1-A3)
- Sn1 — Rhyolite-hosted tin deposits (Sn1-Sn3)
- R1 — Manganese replacement deposits (R1-R3)

CORRELATION OF MAP UNITS

- Qa, Qls — QUATERNARY
- QTb — QUATERNARY AND TERTIARY
- Tb, Trr, Tc, Tr, Tba, Tcs, Td, Trf, Tac, Tbv, Taf — TERTIARY
- Tg — TERTIARY AND CRETACEOUS
- TKgt, TKgh — CRETACEOUS AND (OR) JURASSIC
- KJsv — CRETACEOUS AND (OR) JURASSIC
- KJg — CRETACEOUS OR JURASSIC
- Jg, Jvs — JURASSIC
- pTg, pTp — PRE-TERTIARY
- PzYs — PALEOZOIC TO MIDDLE PROTEROZOIC
- YXg — MIDDLE AND EARLY PROTEROZOIC
- Xs — EARLY PROTEROZOIC

DESCRIPTION OF MAP UNITS

Qa — ALLUVIUM (QUATERNARY)

Qls — LANDSLIDE (QUATERNARY)

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

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

Trr — RHYOLITE, RHYODACITE, AND MINOR DACITE FLOWS AND PLUGS (TERTIARY)--Found in the Bates and Poco Redondo Mountains and Ajo Range

Tc — CHILDS LATITE (TERTIARY)--Flows and flow breccias. Age is Miocene

Tr — RHYOLITE SUITE (TERTIARY)--Mostly extensive flows in the Sauceda and Sand Tank Mountains. Rhyolite flows, flow breccias, and tuffs predominate in Sauceda Mountains. Porphyritic biotite- to biotite-hornblende-bearing rhyodacite and dacite are present in the Sand Tank Mountains. Generally, eruptions in Sauceda Mountains are younger than those of Sand Tank Mountains

Tba — BASALTIC SUITE (TERTIARY)--Primarily coarse, porphyritic basalt and basaltic andesite

Tcs — CONGLOMERATE AND MINOR SANDSTONE (TERTIARY)--Widely scattered exposures. Unit includes the Miocene Santels Conglomerate: the only significant sedimentary rock unit within the Ajo volcanic field

Td — DACITIC TO RHYOLITIC FLOWS, FLOW BRECCIAS, DIKES, AND SILLS (TERTIARY)--Includes minor latite and andesitic tuffaceous rocks

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

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

Tac — ANDESITE OF CASTLE DOME MOUNTAINS (TERTIARY)

Taf — ANDESITE, FANGLOMERATE, AND MINOR COARSE ARKOSIC SANDSTONE (TERTIARY)--Commonly found as intercalated steeply tilted sequence. Age is early Tertiary

Tg — BIOTITE-HORNBLENDE GRANITOIDS (TERTIARY)--Age is early Tertiary

TKgt — TWO-MICA GRANITE AND BIOTITE GRANITE (TERTIARY AND CRETACEOUS)--Age is Late Cretaceous and early Tertiary

TKgh — HORNBLENDE-BIOTITE SERIES GRANITOIDS (TERTIARY AND CRETACEOUS)--Age is Late Cretaceous and early Tertiary

KJsv — SEDIMENTARY AND VOLCANIC ROCKS (CRETACEOUS AND (OR) JURASSIC)--Age is Late Jurassic and (or) Cretaceous

KJg — GRANITIC ROCKS (CRETACEOUS OR JURASSIC)

Jg — GRANITIC AND SYENITIC ROCKS (JURASSIC)

Jvs — VOLCANIC AND MINOR SEDIMENTARY ROCKS (JURASSIC)

PzYs — SEDIMENTARY ROCKS (PALEOZOIC TO MIDDLE PROTEROZOIC)--Include the Middle Proterozoic Apache Group. Also include diabase

YXg — GRANITE (MIDDLE AND EARLY PROTEROZOIC)

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

pTg — GNEISS AND SCHIST (PRE-TERTIARY)--Age is Early and (or) Middle Proterozoic and (or) Mesozoic

pTp — PARAGNEISS (PRE-TERTIARY)--Age is Early and (or) Middle Proterozoic and (or) Paleozoic and (or) Mesozoic

CONTACT--Dashed where approximately located

FAULT--Dashed where approximately located; dotted where concealed

VEIN DEPOSITS, PEGMATITES, DISSEMINATED GOLD DEPOSITS, RHYOLITE-HOSTED TIN DEPOSITS, AND MANGANESE REPLACEMENT DEPOSITS

MINERAL RESOURCE ASSESSMENT OF THE AJO AND LUKEVILLE 1° BY 2° QUADRANGLES, ARIZONA

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