LOOKING WEST

SECTION C-E

LOOKING S.W.

LOOKING N.E.

SECTION A-B

LOOKING N.E.

SECTION A-B

EXPLANATION

INTRUSIVE ROCKS

- Ta — Andesite dikes, showing dip
- TKap — Andesite porphyry
- TKd — Quartz diorite
- TKdp — Dacite porphyry
- TKqm — Quartz monzonite porphyry
- TKgd — Biotite granodiorite
- TKlp — Quartz latite porphyry
- TRJ(?)g — Granite. Locally containing large inclusions of schist and hornfels

SEDIMENTARY & VOLCANIC ROCKS

- Qal — Alluvium
- Th / Tha — Helmut fanglomerate; Tha - interbedded andesite flows
- TKs — Silverbell volcanics
- Kv — Cretaceous volcanics
- Kar — Cretaceous arkose (includes Papago-Keno units of Kennison and others)
- Pz — Undifferentiated Paleozoic limestones

QUATERNARY; TERTIARY; CRETACEOUS (?); TRIASSIC OR JURASSIC ?; CAMBRIAN TO PERMIAN

- Monolithologic breccia
- Contact, showing dip (dashed where approximate, dotted where concealed)
- Thrust fault, showing dip. Saw teeth on upper plate (dashed where approximate, dotted where concealed.)
- Fault, showing dip (dashed where approximate, dotted where concealed) U, upthrown side, D, downthrown side.
- Strike and dip of beds.

Subsurface information derived from diamond drill information and indicated by formation name designations.

SAN XAVIER OREBODY

PALO VERDE OREBODY

MISSION OREBODY

PIMA OREBODIES

ANACONDA OREBODY

W. ESPERANZA OREBODY

ESPERANZA OREBODY

T. 16 S.
T. 17 S.

T. 17 S.
T. 18 S.

R. 12 E.
R. 13 E.

GEOLOGIC MAP
OF THE TWIN BUTTES MINING DISTRICT
PIMA COUNTY, ARIZONA

2000 0 2000 4000 6000 8000
SCALE IN MILES

PLATE I

A-63-II-22