Geologic Map of the Cocoraque Butte 7.5' Quadrangle, Pima County, Arizona

by
Steven J. Skotnicki and Philip A. Pearthree

October 2000

Arizona Geological Survey Digital Geologic Map 6

Arizona Geological Survey
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digital cartography by
Tim R. Orr

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MAP EXPLANATION

GEOLOGIC MAP SYMBOLS

- Geologic contacts (dashed where approximate; queried where guessed)
- Intraformational contact
- Normal fault, showing attitude and lineation of fault surface (dashed where approximate; dotted where concealed; ball and bar symbol on downdropped side)
- Plunging anticline (dashed where approximate; dotted where concealed)
- Plunging syncline (dashed where approximate; dotted where concealed)
- basalt dike
- quartz vein
- rhyolite dike
- zone of vertically banded tuff
- Inclined bedding
- Overturned bedding
- Prominent joints
- Flow-banding in rhyolite (map unit KJr)
- Eutaxitic foliation in welded tuffs
- Sample location (showing K-Ar whole rock date)

GEOLOGIC MAP UNITS

Quaternary Deposits

Piedmont Deposits

- Qy2 — Late Holocene alluvial deposits
- Qy1 — Middle to early Holocene alluvial deposits
- Qy — Holocene alluvial deposits, undivided (< 10 ka)
- Qly — Late Pleistocene to early Holocene alluvial deposits
- Ql — Late Pleistocene alluvial deposits, undivided (10 to 250 ka)
- Qt — Talus
- Qm — Middle Pleistocene alluvial deposits, unidived (250 to 750 ka)
- Qo — Early Pleistocene alluvial deposits (750 ka to 1.6 Ma)

Axial Drainage Deposits

- Qycr — Modern river channel deposits (< 100 years)
- Qy2r — Late Holocene floodplain deposits (< ca. 4 ka)
- Qy1r — Holocene terrace deposits (< 10 ka)
- Qyre — Holocene stream terrace deposits and eolian deposits (< 10 ka)
- Qyr — Holocene stream deposits, undivided (< 10 ka)
- Qmlr — Middle to late Pleistocene stream terrace deposits (~10 to 500 ka)

Tertiary Deposits

- Tsv — Sandstone and conglomerate
- Tb — Younger basalt
- Tc — Conglomerate
- Tbo — Older basalt
- Ttr — Tuff of Recortado Mountain
- Ttn — Non-welded base of the Tuff of Recortado Mountain
- Ttl — Lithic tuff
- Tx — Breccia
- Tcv — Conglomerate, sandstone, and siltstone
- Tcb — Conglomerate with basalt clasts

Laramide Rocks (?)

- TKx — Breccia, southern exposure
- TKr — Rhyolite
- TKrc — Crystal-rich rhyolite
- TKtm — Tan, crystal-poor ash-flow tuff

Cretaceous Rocks

- Kt — Welded tuff
- Ktb — Bedded tuff of map unit Kt

Tuff of Sharp Peak

- Kspu — Upper member of the Tuff of Sharp Peak
- Kspb — Bedded tuff
- Ksp — Main member of the Tuff of Sharp Peak

Cretaceous and Jurassic (?) Rocks

- KJg — Granodiorite of Cocoraque Butte
- KJgf — Border phase for the Granodiorite of Cocoraque Butte
- KJh — Hypabyssal rock?
- KJtw — Unit of Tunnel Well
- KJx — Breccia

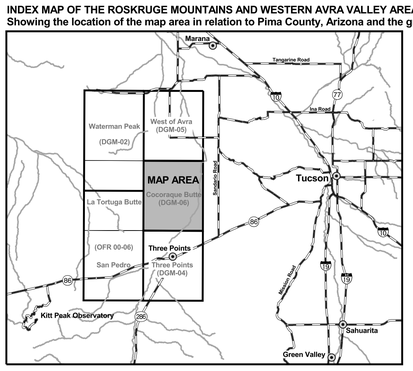
Sedimentary and Volcanic sequence east of Recortado Well Fault

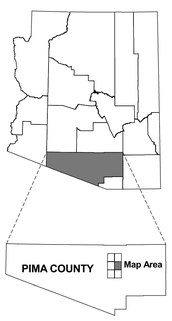
- Kqhx — Quartz-hematite breccia
- KJa — Andesite
- KJta — Ash-flow tuff interbedded with andesite
- KJai — Intrusive andesite
- KJss — Siltstone
- KJc — Conglomerate
- KJrx — Rhyolite breccia
- KJts — Tuff
- KJs — Arkosic sandstone
- KJr — Flow-banded rhyolite
- KJm — Mafic sill
- KJe — Eolian sandstone/quartzite
- KJax — Andesite breccia

Paleozoic or Mesozoic Rocks

- MzPzc — Interbedded chert-rich carbonate and argillite

INDEX MAP OF THE ROSKRUGE MOUNTAINS AND WESTERN AVRA VALLEY AREA
Showing the location of the map area in relation to Pima County, Arizona and the greater Tucson region





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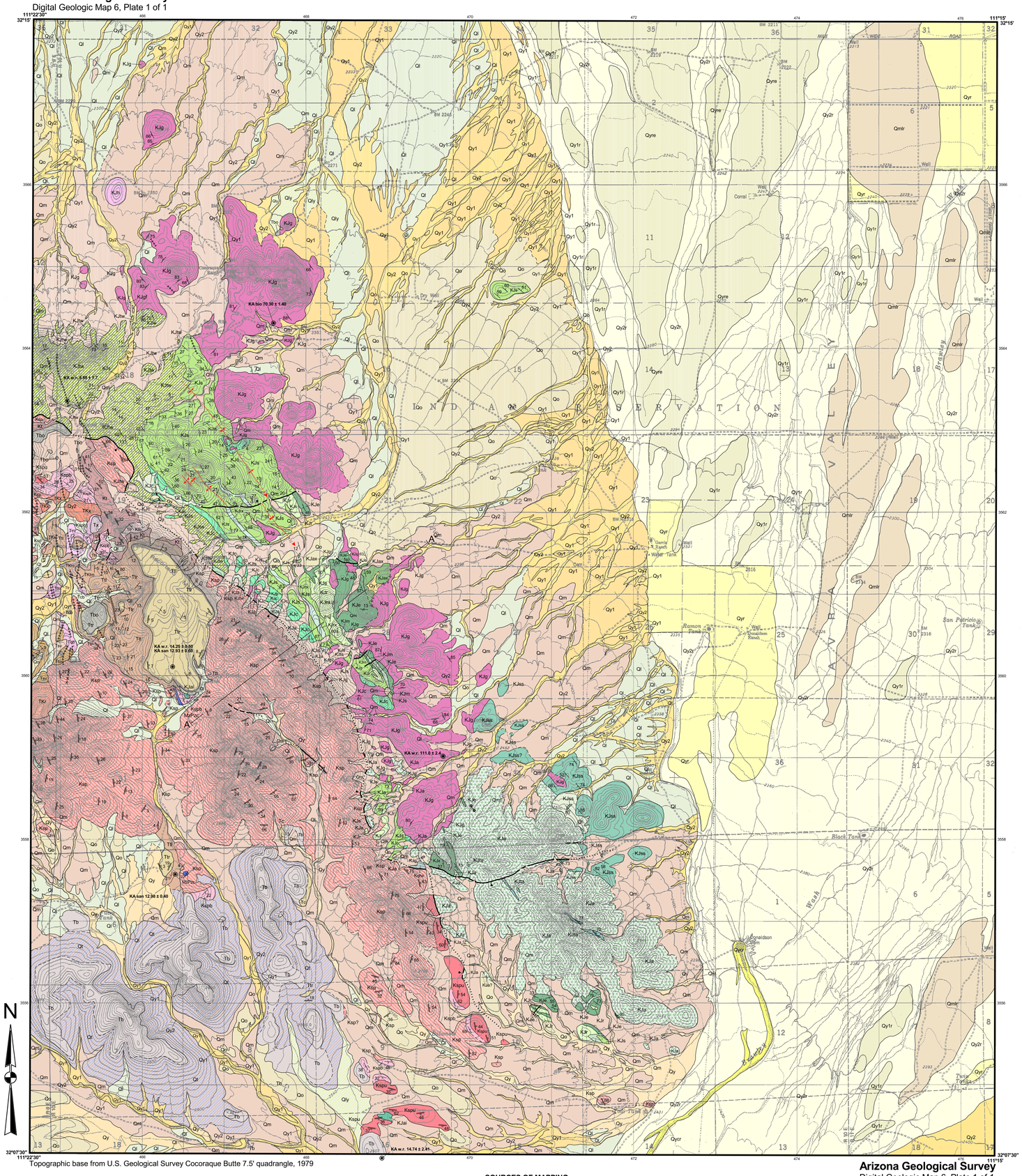

Topographic base from U.S. Geological Survey Cocoraque Butte 7.5' quadrangle, 1979

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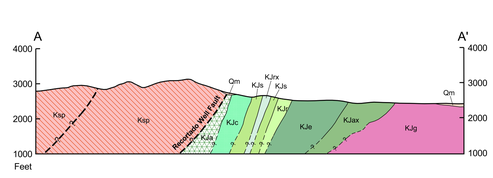
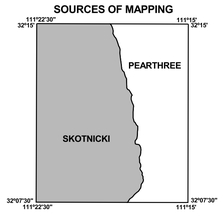


SOURCES OF MAPPING



1 0 1 Miles

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

1 0 1 Kilometers