

Compilation Geologic Map of the Central Gila Bend Mountains Maricopa County, Arizona

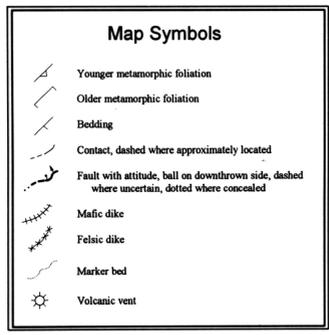
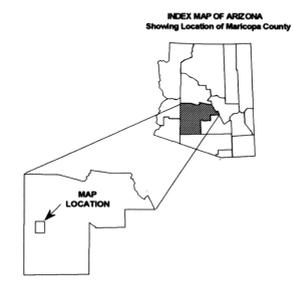
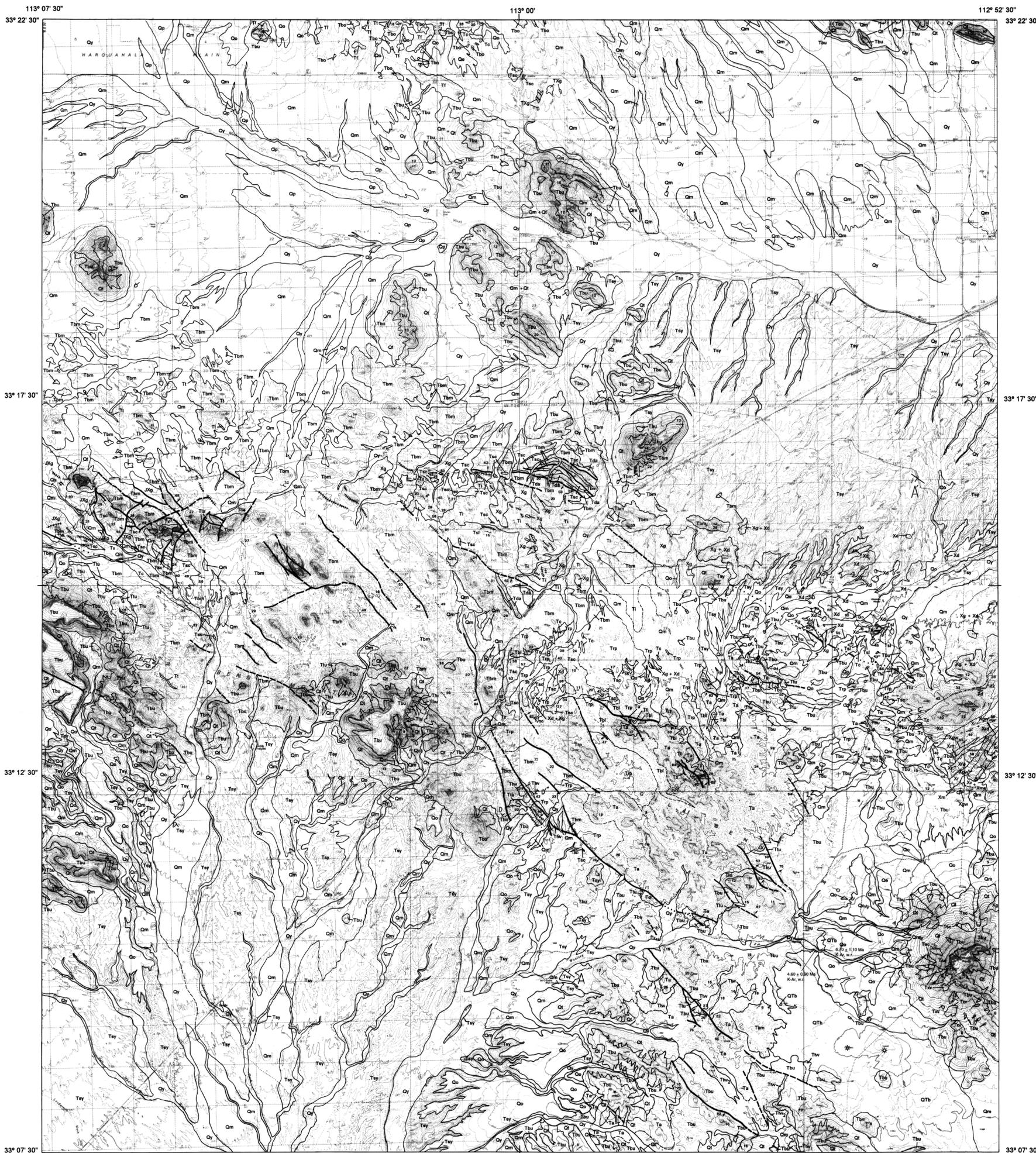
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ARIZONA GEOLOGICAL SURVEY
Open-File Report 94-18, sheet 1 of 1, with text

ROCK UNITS

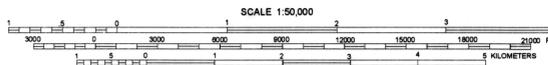
- Quaternary Units**
- Qy **Younger alluvium.** Unconsolidated sand and gravel in younger drainages.
 - Qp **Silty alluvium.** Possibly eolian. Probably Holocene or Late Pleistocene.
 - Qt **Talus.**
 - Qm **Middle alluvium.** Unconsolidated to moderately consolidated terrace-forming alluvium.
 - Qo **Older alluvium.** Caliche-indurated deposits that form high-standing terraces.
- Quaternary and Tertiary Units**
- QTb Basalt.** Unfaulted basaltic shield volcanoes.
- Tertiary Units**
- Tsy **Younger sedimentary deposits.** Consolidated, tan-colored basin-fill deposits.
 - Tbu **Younger basalt.** Blue-grey mesa-forming basalt.
 - Txv **Woolsey Peak breccia.** Poorly sorted volcaniclastic breccia. Stratified.
 - Ttw **Welded tuff.** Lavender to pink biotite-bearing felsic to intermediate welded tuff.
 - Ttw2 **Lower welded tuff.** Tan-colored lithic tuff.
 - Ttu **Upper tuff.** Yellow bedded tuffs containing rare biotite. Mostly rich in sand-sized lithics.
 - Tbm **Middle basalt.** Dark brown, purple and grey basalt flows locally interbedded with tuff.
 - Tt **Tuff.** Airfall tuff, tuffaceous sediments, and surge deposits interbedded with Tbm.
 - Tta **Andesitic tuff.** Grey to yellow plagioclase-pyroxene tuff near Fourth of July Butte.
 - Tda **Dacite, rhyodacite, and andesite, undivided.** Dark red-grey to pink and green flows and tuff interbedded with Tbm.
 - Ttl **Lower tuff.** Lithic tuffs interbedded with andesite at Signal Mountain.
 - Ta **Andesite.** Pink to dark purple dense, platy andesite flows.
 - Trp **Rhyolite porphyry and rhyolite.** Blue-grey, pink and green flows locally interbedded with sandstone and conglomerate.
 - Tbl **Lower basalt.** Dark brown to purple basalt flows interbedded locally with andesite.
 - Td **Dacite.** Tan, crystal-rich flow-banded lava near Saddle Mountain.
 - Ti **Biotite-hornblende dacite.** Pink to blue-grey lavas and vitrophyre near Saddle Mountain.
 - Tbo **Older basalt.** Blue-grey basalt interbedded with dacite near Saddle Mountain.
 - Tsc **Sandstone and conglomerate.** Interbedded, pre-volcanic red arkosic sandstone and conglomerate.
 - Tc **Conglomerate.** Poorly-sorted, well-rounded, pre-volcanic conglomerate.
 - Tx **Sedimentary breccia.** Poorly sorted angular granite and volcanic breccias.
 - Tsl **Limestone.** Light blue-grey, massive to bedded limestone rich in red chert.
 - Ti **Hypabyssal felsic intrusion.** Feldspar, quartz and biotite in a tan, aphanitic matrix.
- Tertiary or Proterozoic Units**
- TXg **Biotite granite.** Equigranular, fine- to medium-grained granitoid.
- Mesozoic or Proterozoic units**
- JXg **Granite.** Medium-grained hornblende-biotite granitoid near Fourth of July Butte.
- Proterozoic Units**
- Xg **Granitic rocks.** Fine- to medium-grained, equigranular granitic rocks containing muscovite and/or biotite.
 - Xd **Diorite.** Dark green fine- to medium-grained diorite containing chlorite, feldspar, and quartz.
 - Xv **Mafic to intermediate metavolcanic rocks.**
 - Xms **Metasedimentary rocks.** Quartzite and conglomeratic quartzite.
 - Xr **Metarhyolite.** Tan-colored serfictic schist with equant quartzose phenocrysts.
 - Xrd **Metadacite.** Dacite and rhyodacite flows containing plagioclase and altered hornblende.
 - Xm **Mafic sills.** Dark green porphyritic hornblende phenocrysts within a dark green matrix.
 - Xgw **Metagreywacke.** Chlorite-muscovite-quartz slates, phyllites and schists.



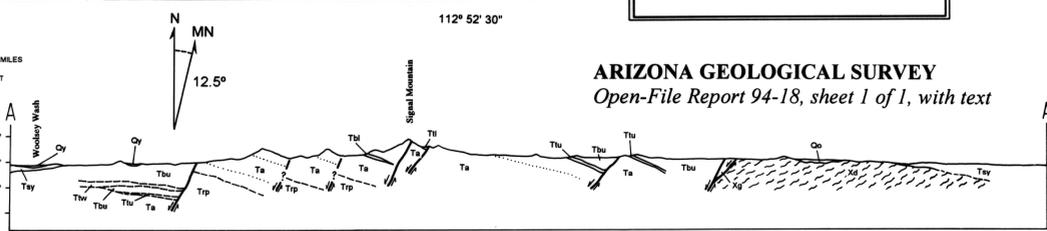
Sources of Data



- 1 Scott, E.A., 1991. Geologic map of the central Gila Bend Mountains, west-central Arizona. Arizona Geological Survey Open-File Report 91-7, scale 1:24,000.
- 2 Arizona Public Service Company, 1976. Site characterization of the Palo Verde Nuclear Generating Station: Preliminary Safety Analysis Report, PVNGS Units 1, 2, and 3, v. 2 and 3.
- 3 Northrup, C.J., and Reynolds, S.J., Proterozoic geology of the Webb Peak area, northeastern Gila Bend Mountains, southwestern Arizona, in Karlstrom, K.E., (ed.), 1991, Proterozoic geology and ore deposits of Arizona. Arizona Geological Society Digest 19, p. 251-259.
- 4 Skotnicki, S.J., this report.



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