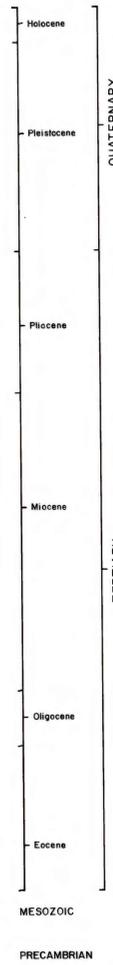


- EXPLANATION**
- SURFICIAL DEPOSITS**
- Qal Alluvium
 - Qol Older alluvium
 - Qes Saugus Formation, undifferentiated. Nonmarine sandstone, conglomerate, and siltstone grading downsection into brackish water and marine sandstone, conglomerate and siltstone.
 - Qsp Saugus Formation with clasts of San Francisco sandstone (Weber, 1979); Qes, Saugus Formation with clasts of Pelona Schist (Weber, 1979).
 - Qol Landslide material. Arrows in direction of sliding.
 - Q1 Stream terrace material, preserved on surfaces above present drainage, may grade into Qol.
- BEDROCK UNITS**
- Tp Pico Formation, undifferentiated. Marine siltstone, sandstone, and conglomerate.
 - Tps Tps, marine conglomerate and sandstone with minor siltstone; Tps, siltstone and fine grained sandstone.
 - Tms Towles Formation. T1s, predominantly siltstone or mudstone; T1c, predominantly sandstone or conglomerate; T1hc, Hasley conglomerate, basal reddish-brown conglomerate, lower part of Towles contains Mohian microfossils.
 - Tm Modelo Formation, undifferentiated. Contains Mohian microfossils in all but lowermost beds near Agua Blanco fault; these contain Lusian microfossils. Tms, gray to greenish-gray siliceous shale, siltstone, and fine-grained sandstone; Tmdc, Devil Canyon conglomerate member; Tmc, gray to gray-brown conglomerate, sandstone, and subordinate siltstone; Tmcb, basal sedimentary breccia of Weber (1979) with clasts of local basement.
 - Tc Castaic Formation, predominantly marine siltstone; Tvb, Violin Breccia, angular clasts of gneiss and granitic rock in sandstone matrix.
 - Tr Ricon Formation. Tr, mudstone, claystone; Tris, sandstone. Saucian microfossils.
 - Tva Vaqueros Formation; predominantly fossiliferous sandstone.
 - Tss Sespe Formation. Tss, brown pebbly sandstone with interbedded red mudstone and gray-green conglomerate; Tsc, brown conglomerate and breccia, clasts of orthoite and gneiss.
 - Te1, Te2, Te3 unnamed Eocene strata of Squires (1977). Te3, arkosic sandstone; Te2, white sandstone, middle Eocene molluscs; Te1, mudstone, middle Eocene molluscs and foraminifera.
 - gr Granodiorite
 - gn Gneiss
- Dashed where approximately located, dotted where covered by younger deposits.
Contact
- Dashed where approximately located, dotted where covered by younger deposits.
Fault, showing dip
- Folds, showing crestline and troughline and direction of plunge, dashed where approximately located or inferred, dotted where covered by younger deposits
- Paleomagnetic sampling site, filled circle indicates reversed magnetic polarity
○ Line of geologic cross section; open circle indicates oil or water well.



BASE FROM U.S. GEOLOGICAL SURVEY
TOPO SERIES 1:24,000 VAL VERDE, CA
1952



DOTTED LINES REPRESENT 5 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL



CENOZOIC STRUCTURE OF THE VAL VERDE 7 1/2 MINUTE QUADRANGLE AND SOUTH HALF OF THE WHITAKER PEAK 7 1/2 MINUTE QUADRANGLE, CALIFORNIA

by

Robert S. Yeats, James W. McDougall, and Leonard T. Stitt

1985

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.