

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH U.S. FOREST SERVICE, LOS PADRES NATIONAL FOREST

UNITS SOUTH OF THE  
SANTA YNEZ FAULT

UNITS NORTH OF THE  
SANTA YNEZ FAULT

- Tsp**  
Sespe Formation  
nonmarine red claystone  
and sandstone
- Ta**  
Alegria Formation  
shallow marine light grey  
sandstone
- Tg**  
Gaviota Formation  
marine gray sandstone;  
Refugian age
- Tsa Tsas**  
Sacate Formation  
marine sandstone and  
shale; Narizian age  
Tsa - predominantly shale  
Tsas - predominantly  
sandstone
- Tcd Tcds**  
Cozy Dell Shale  
marine micaceous shale  
mostly Narizian age  
Tcd - shale  
Tcds - sandstone strata
- Tma Tmas**  
Matilija Sandstone  
marine arkosic sandstone  
thin shale interbeds  
Tma - sandstone  
Tmas - sandstone & shale
- Tan Tj Tjs**  
marine strata  
micaceous shale; few thin  
sandstones; mid- or lower  
Eocene  
Tan - Anita Shale  
Tj, Tjs - Juncal Formation  
Tj - shale  
Tjs - sandstone
- Kjs Kj**  
Jalama Formation  
marine  
Kjs - sandstone  
Kj - shale and siltstone

STRUCTURE SYMBOLS

- Contact  
shown dashed where gradational  
or approximately located,  
and between members
- Fault  
shown dashed where inferred;  
dotted where concealed; U - up-  
thrown side, D - downthrown  
side, relatively; arrow indicates  
dip of fault plane
- Anticline
- Syncline
- Axis of fold  
shown dotted where concealed;  
arrow on axis indicates  
direction of plunge
- inclined
- vertical
- overturned
- Strike & dip of bedding  
numbers indicate amount of  
dip in degrees
- direction of landslide movement
- Sandstone
- Conglomerate
- hard carbonate  
strata
- Abandoned test hole for  
oil or gas

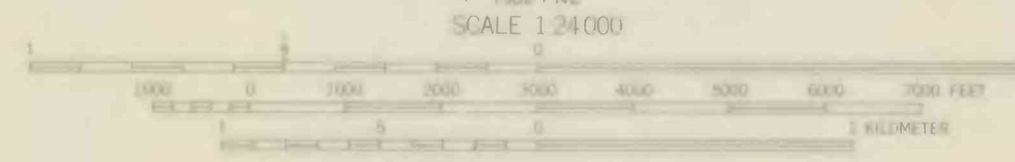
PERTINENT  
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- Qa Qg**  
Surficial Sediments  
Qg - stream gravel & sand  
Qa - valley alluvium
- Qls**  
Landslide debris
- Qoa Qoa<sub>1</sub> Qoa<sub>2</sub> Qoa<sub>3</sub>**  
Older surficial sediments  
Qoa - undivided  
Qoa<sub>1</sub> - youngest remnants  
Qoa<sub>2</sub> - intermed. remnants  
Qoa<sub>3</sub> - oldest remnants
- Qog**  
Older gravel  
cobble - boulder gravel of  
sandstone detritus
- UNCONFORMITY**
- QTP**  
Paso Robles Formation  
valley sediments; pebble-  
gravel, sand, and clay
- Tca**  
Careaga Sandstone  
shallow marine soft sand-  
stone with hard, calcareous  
shell bed at base
- UNCONFORMITY**
- Tsq**  
Sisquoc Formation  
marine white punky dia-  
tomite or diatomaceous  
lower Plioc. or upper Mioc.
- Tm**  
**Tml**  
Monterey Shale  
marine shale  
Tm - upper part: hard platy  
siliceous shale, locally  
cherty; Mohian age  
Tml - lower part: siliceous  
shale, fissile shale, and thin  
calcareous strata, foram-  
iniferal; Luisian-Relizian  
age
- Tr**  
"Tombler" Sandstone  
marine; locally fossiliferous;  
contains bentonitized  
tuff near base locally, up-  
permost Saucian age
- UNCONFORMITY**
- Tr**  
Rincon Shale  
marine; gray claystone or  
clay shale; Saucian -  
upper Zemorrian age
- Tvq**  
Vaqueros Sandstone  
marine; Zemorrian age
- Tsg**  
Sespe Formation  
nonmarine green to red  
claystone, sandstone, and  
conglomerate of Francis-  
can debris
- UNCONFORMITY**
- Tes Tesh Tec**  
Marine strata  
Tes - sandstone and siltst.  
Tesh - silty shale  
Tec - cobble conglomerate
- UNCONFORMITY**
- Ke**  
Espada Formation  
marine thin bedded shale,  
thin sandstones; may be  
in part upper Jurassic
- sp**  
Serpentinite  
and associated mafic  
igneous rocks

Base from U.S. Geological Survey, Santa Ynez, 1974



Geology mapped in 1939-40, 1955, 1958  
Drafted by E. J. Wiedmann, 1979

GEOLOGIC MAP OF THE SANTA YNEZ QUADRANGLE, CALIFORNIA

By Thomas W. Dibblee, Jr.  
1981

This map is preliminary and has  
not been reviewed for conformity  
with U.S. Geological Survey editorial  
standards and stratigraphic nomenclature.