U.S. GEOLOGICAL SURVEY
OPEN FILE MAP

72-89

NORTHEAST OF AND NEAR SAN ANDREAS FAULT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CALIENTE MTN. QUADRANGLE
CALIFORNIA
15 MINUTE SERIES (TOPOGRAPHIC)

QUATERNARY — Pleistocene ? Pliocene
- QTp — Paso Robles Formation (Valley sediments of shale-pebble gravel)
- Tmo — Morales Formation (terrestrial gravel-sand)

TERTIARY — Miocene
- Tsg — Santa Margarita Formation (granitic conglomerate and breccia)
- Tmg — Monterey Shale (marine silic. shale, Middle Miocene)

Contact
Dashed where gradational or approximately located

Fault
Dashed where doubtful
Dotted where concealed
U, Upthrown side
D, Downthrown side
Arrows indicate horizontal movement

Anticline — Syncline
Axis of fold, showing direction of plunge

Horizontal
30 Inclined
Vertical
70 Overturned
Strike and dip of strata

Abandoned well drilled for oil or gas
Oil well

Qg / Qa | Qc — Surficial sediments
Qg, river sand and gravel
Qa, alluvium
Qc, alkali clay

Qls — Landslide rubble

Qoa — Older alluvium

Qfg — Fan gravel

UNCONFORMITY

Tmo / Tmo-l — Morales Formation (valley deposits)
Tmo, gravel and sand
Tmo-l, clay, sand and gravel

UNCONFORMITY

Tsm / Tsd | Tc — Santa Margarita and Caliente Formations (Upper Miocene)
Tsm, Santa Margarita Fm., marine white sandstone, includes
Tsd, diatomite
Tc, Caliente Fm., terrest. red beds

Tmw / Tms | Tbs | Tb — Monterey Shale and Branch Canyon Sandstone (Middle Miocene marine)
Tmw, Monterey Shale, Whiterock Bluff Shale Member (silic. shale)
Tms, Monterey Shale Saltos Shale Member (subsilic. & clay sh.)
Tbs, Branch Canyon Sandstone
Tb, Basalt or diabase

Tv | Tvp / Tvl (ch) — Vaqueros Formation (Lower Miocene - Upper Oligocene, marine)
Tv, sandstone
Tvp, Painted Rock Sandst. Mbr.
Tvl, Soda Lake Shale Member, includes ch - chert

Ts | Tsc — Simmler Formation (terrestrial)
Ts, sandstone and siltstone
Tsc, conglomerate

UNCONFORMITY

Tss — Unnamed strata (marine) (sandstone & clay shale)

Ksg — Unnamed basal conglom. (marine)

UNCONFORMITY

gr — Granitic rocks

mq | gn — Metamorphic rocks
mq, quartzite
gn, gneissic rocks

Scale 1:62500

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and USCE

Compiled in 1960 from 1:24 000 scale maps of Painted Rock, Cheneslaw Ranch, Taylor Canyon, and Caliente Mtn. 7.5 minute quadrangles, surveyed 1959

Topography from aerial photographs by photogrammetric methods and by planetable surveys. Aerial photographs taken 1953

Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system, zone 5
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue

Dashed road lines indicate approximate locations

Geology drafted by K. Moore

CONTOUR INTERVAL 250 FEET
DOTTED LINES REPRESENT 125-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Geology mapped and compiled by T.W. Dibblee Jr. 1952, 1966-67

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D.C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Light-duty
Unimproved dirt
State Route

CALIENTE MTN., CALIF.
N3500—W11945/15
1960

QUADRANGLE LOCATION

GEOLOGIC MAP OF THE CALIENTE MTN. QUADRANGLE, CALIFORNIA

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

QUATERNARY — Holocene ? Pleistocene ? Pliocene
TERTIARY — Miocene — Oligocene — Eocene & Paleocene ? — Upper ?
MESOZOIC OR OLDER – MESOZOIC-CRETACEOUS
U. CRET. & L. TERT. SEDIMENTARY SEQUENCE
MIDDLE TERTIARY SEDIMENTARY SEQUENCE