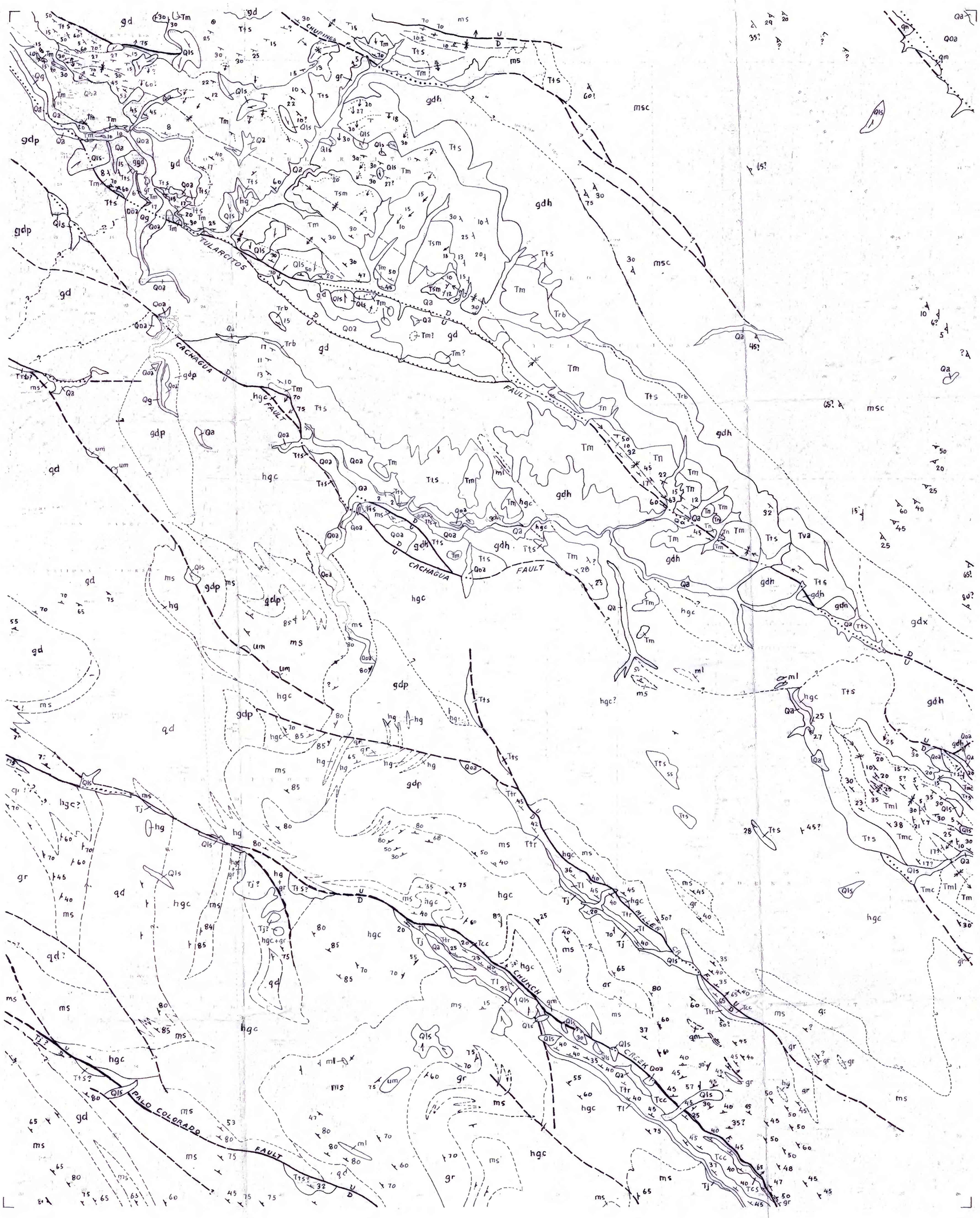
U.S. GEOLOGICAL SURVEY
OPEN FILE MAP



Contact
dashed where gradational or approximately located

Fault
dashed where uncertain
dotted where concealed
U-upthrown side
D-downthrown side
arrows indicate possible horizontal movement
↓ arrow indicates observed dip of fault plane

anticline syncline
Axis of fold showing direction of plunge

inclined vertical overturned
Strike and dip of strata

inclined vertical
Strike and dip of foliation

Direction of downward movement of landslide

INDEX TO SOURCE OF GEOLOGY
1. Fiedler, 1944 * †
2. Dickinson, 1959 *
3. Wiebe, 1970 * †
4. T.W. Dibblee Jr., fieldwork, 1972

* local field checks by T.W. Dibblee Jr., 1972
† local field checks by D.C. Ross, 1973 (pre-Tertiary rocks)

References:
Thorup, R.R., 1943, Type locality of the Vaqueros Form: in Calif. Div. Mines Bull. 118, p. 463-466; Fiedler, W.M., 1944, Geology of the Jamesburg quad. Monterey Co., Calif: Cal. Jour. Mines & Geol. State Min. Rpt. XI, v. 40, n. 2, p. 177-257: Dickinson, W.R. 1959, Tertiary stratig. of Church Creek area, Monterey Co. Calif. Cal. Div. Mines & Geol. Spec. Rpt. 86, p. 25-44: Wiebe, R.A., 1970, Relations of granitic and gabbroic rocks, northern Santa Lucia Range, Calif. Geol. Soc. Amer. Bull. v. 31, p. 105-116

INDEX TO 7½ MINUTE QUADRANGLE BASE MAPS
SCALE 1:24000
CARMEL VALLEY | RANA CREEK | VENTANA CONES | CHEWS RIDGE

Base from U.S.G.S. Topographic Series: CHEWS RIDGE, RANA CREEK, CARMEL VALLEY and VENTANA CONES, CALIF. 1950 Contour Interval 40 feet. Compiled Menlo Park, Base Map Unit. (6-12)

Scale 1:62500
0 1 2 3 4 MILES
5000 0 3000 6000 9000 12000 15000 18000 21000 FEET
1 0 1 2 3 4 5 KILOMETERS

COMPILED BY THOS. W. DIBBLEE JR. 1972
Drafted by G. J. Edmonston

GEOLOGIC MAP OF THE JAMESBURG QUADRANGLE, CALIFORNIA

QUATERNARY

Holocene

Qg / Qa
Surficial deposits
Qg, stream-channel sand and gravel
Qa, alluvium (gravel, sand and clay

Pleistocene

Qls
Landslide debris

Qoa
Older alluvium

UNCONFORMITY

Pliocene?

Tn
Unnamed non marine sandstone and siltstone

TERTIARY

Miocene

Tsm
Santa Margarita marine white sandstone

Tm / Tml / Tmc
Monterey Shale (marine)
Tm, upper part: siliceous shale, upper Miocene
Tml, lower part: soft, fissile and thin bedded siliceous shale, middle Miocene
Tmc, clay shale and soft fissile shale, middle Miocene

Tts / Tva
Marine sandstone (Vaqueros-Temblor Sandstone of Fiedler, 1944; middle & lower? Miocene)
Tvs, sandstone
Tva, basic andesitic flows

Trb
Unnamed redbeds (non marine sandstone siltstone and conglom.)

UNCONFORMITY

Oligocene

Tcc / Tcs
Church Creek Formation of Dickinson, 1959 (marine, Oligocene ?)
Tcs, sandstone
Tcc, siltstone

Eocene

Ttr
The Rocks Sandstone of Thorup, 1943 (marine sandstone upper Eocene)

Tl
Lucia Shale of Thorup, 1943 (middle Eocene)

Tj
Junipero Sandstone of Thorup, 1943 (lower Eocene)

UNCONFORMITY

MESOZOIC

gr / gd | gdh | gdx | gdp | qd | hgc
Granitic rocks
gr, quartz monzonite, leucocratic
gd, granodiorite
gdh, granodiorite, with hornblende
gdx, granodiorite, with hornblende & phenocrysts of pink feldspar
gdp, granodiorite, with phenocrysts of feldspar
qd, quartz diorite
hgc, heterogeneous granitic complex (mixtures of granitic rocks and metasedimentary rocks)

hg
Hornblende gabbro-diorite

um
Ultramafic rocks

MESOZOIC OR OLDER

ml | ms | msc
Metasedimentary rocks
ml, marble
ms, schist-gneiss
msc, schist

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