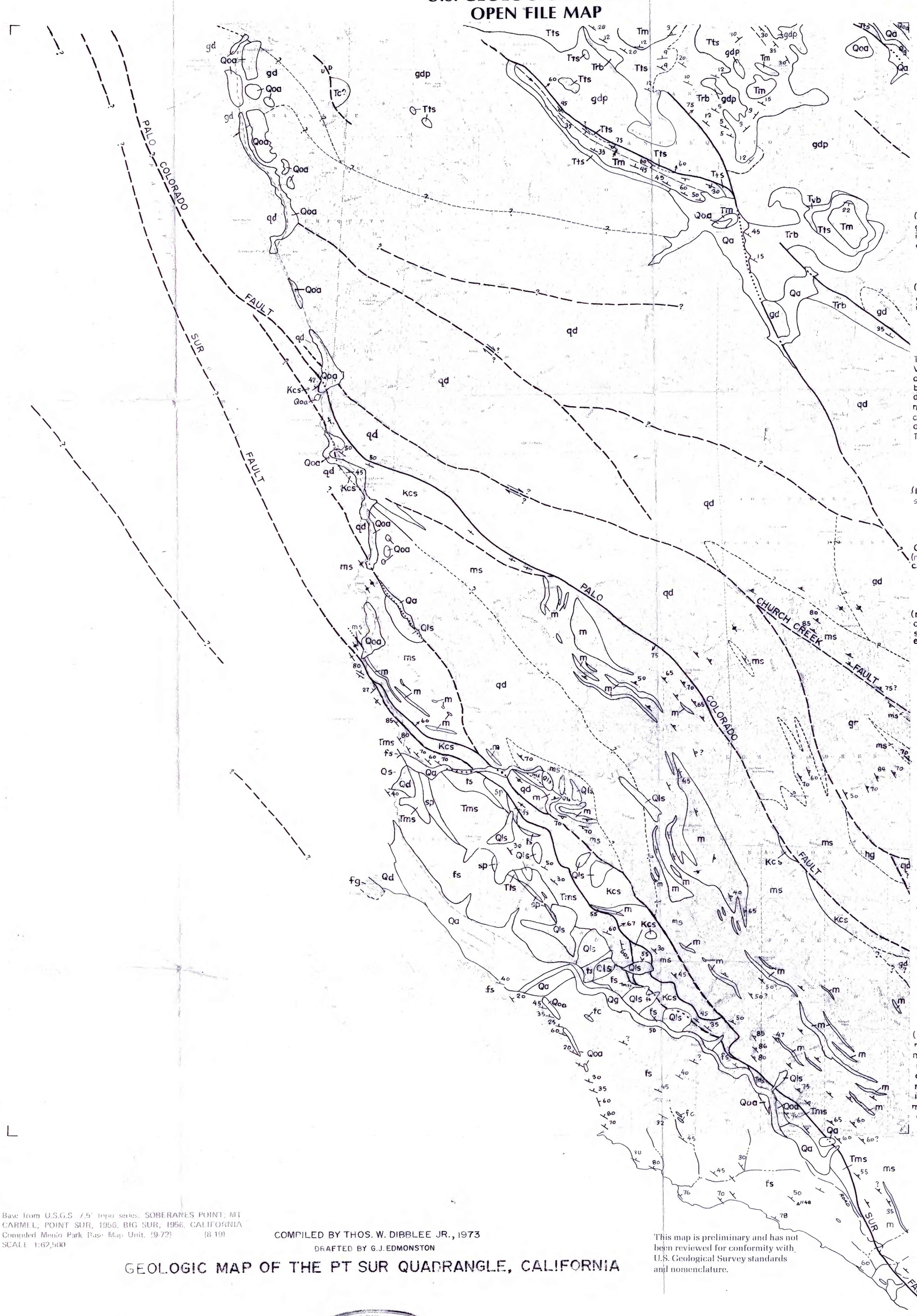
U.S. GEOLOGICAL SURVEY
OPEN FILE MAP



SOBERANES POINT	MOUNT CARMEL
POINT SUR	BIG SUR

INDEX TO 7' MINUTE QUADRANGLE BASE MAPS
SCALE 1:24,000

Contact
dashed where gradational or approximately located

U D

Fault
dashed where inferred; queried where doubtful; dotted where concealed and inferred
U-upthrown side
D-downthrown side, relatively parallel arrows indicate inferred lateral movement

syncline

Axis of fold showing direction of plunge

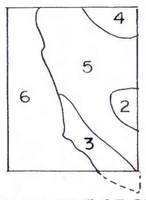
strike and dip of inclined bedding in degrees

strike of vertical bedding

strike and dip of overturned bedding

strike and dip of inclined foliation

strike of vertical foliation



INDEX TO SOURCE OF GEOLOGY
1. Whole quadrangle modified after Trask, 1928, from following sources
2. Wiebe, 1970
3. Gilbert, 1971 †
4. Brown, 1962 †
5. D.C. Ross, fieldwork, 1972-73 †
6. H.G. Greene, fieldwork, 1972
† Some parts field checked by T.W. Dibblee Jr., 1973

References;
Trask, P.D., 1928, Geology of the Pt Sur quadrangle; Univ. Calif. Pub. Geol. Sci., v. 16, n. 6, p. 120-185
Feidler, W.M., 1944, Geology of the Jamesburg quadrangle, Monterey Co., Calif.; Calif. Journal Mines & Geol., v. 40, n. 2, p. 177-250
Oakeshoff, G.B., 1951, Guide to geol. of Pfeiffer Big Sur State Park, Monterey Co. Calif.: Calif. Div. Mines Spec. Rpt. 11
Wiebe, R.A., 1970, Relations of granitic and gabbroic rocks, northern Santa Lucia Range Calif., Geol. Soc. Amer. Bull. v. 81, p. 105-116
Gilbert, W.G., unpub., Sur fault zone, Monterey Co. Calif. PhD thesis, Stanford Univ., 1971
Brown, E.H., unpub., Geol. of the Robinson Canyon area, Monterey Co., Calif., M.A. thesis, Stanford Univ., 1962

Base from U.S.G.S. 7.5' topo series: SOBERANES POINT, MT CARMEL, POINT SUR, 1956, BIG SUR, 1956, CALIFORNIA
Compiled Menlo Park Base Map Unit, (9-72) (8-19)
SCALE 1:62,500

COMPILED BY THOS. W. DIBBLEE JR., 1973
DRAFTED BY G.J. EDMONSTON

GEOLOGIC MAP OF THE PT SUR QUADRANGLE, CALIFORNIA

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

QUATERNARY

Holocene

Qs | Qg | Qd | Qa

Surficial sediments
Qg, stream channel gravel and sand
Qs, dune sand
Qa, alluvium
Qs, beach sand

Pleistocene ?

Qls

Landslide debris

Qoa

Older alluvium

UNCONFORMITY

TERTIARY

Miocene

Tms

Sandstone (marine buff hard fine-grained sandstone, some interbedded shale; upper and/or middle Miocene)

Tm

Monterey Shale (marine siliceous shale, upper Miocene, possibly in part middle Miocene)

Tts | Tvb

Marine sandstone
Temblor Fm. of Trask, 1928; Vaqueros-Temblor Sandst. of Feidler, 1944; marine, buff to light gray friable arkosic sandst. contains minor conglom.; middle Miocene, possibly in part upper and lower Miocene
Tvb, basalt, local flows

Trb

Red beds of Robinson Canyon
(terrestrial conglomerate, sandstone, red beds; Mio?)

UNCONFORMITY

Paleocene

Tc

Carmelo ? Fm. (of Bowen, 1965) (marine coarse sandst. and cgl)

UNCONFORMITY

Upper CRETACEOUS

Kcs

Sedimentary rocks (marine hard buff sandst. cobble conglom. and micac. shale; may be in part early Tertiary in age

UNCONFORMITY

MESOZOIC

sp

Serpentine

fs | fc | fg

Franciscan rocks (eugeosynclinal sedimentary and volcanic rocks)
fs, graywacke sandstone, some micaceous shale
fc, chert
fg, greenstone

gr | gd | gdp | qd

Granitic rocks
composed of about 30% quartz, 60% feldspar, and 10% or less accessories, mostly biotite)
gr, quartz monzonite to granodiorite; contains garnet
gd, granodiorite to quartz monzonite
gdp, granodior. to quartz monzonite, porphyritic
qd, biotite-hornblende quartz diorite to granodiorite

hg

Hornblende diorite and gabbro

MESOZOIC OR OLDER ?

ms | m

Metamorphic rocks
(Sur Series of Trask, 1928, metasedimentary rocks)
ms, mica schist to gneiss, includes some quartzite and calc-silicate hornfels, many admixtures of granitic rocks
m, marble, blue gray to white, calcitic to dolomitic