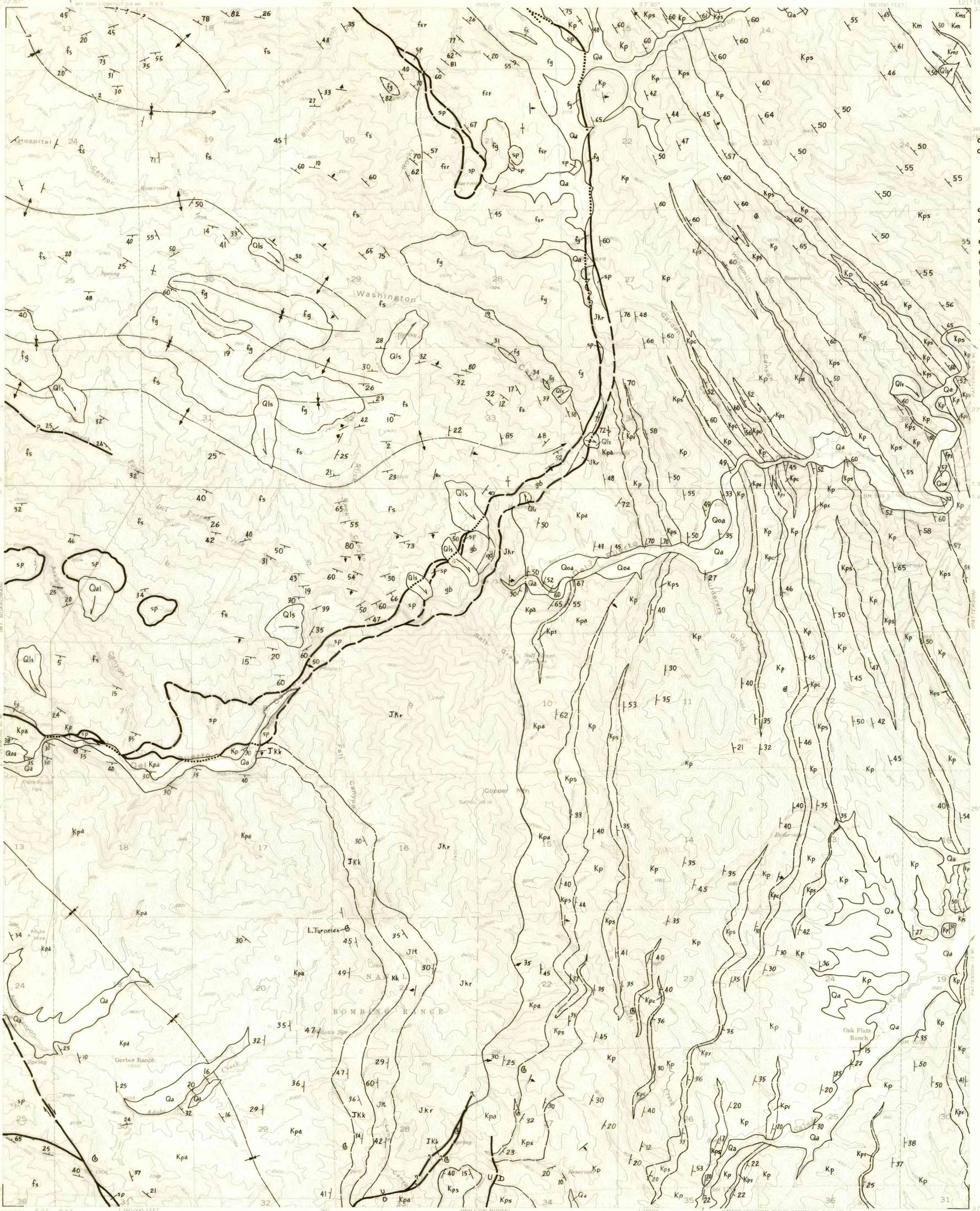


DEPARTMENT OF THE INTERIOR

UNITED STATES GEOLOGICAL SURVEY

- QUATERNARY**
- Holocene**
 - Qa; alluvium
 - Qls; landslide debris
 - Pleistocene**
 - Unconformity
 - Qoa; Older alluvium
- UPPER CRETACEOUS**
- Unconformity
 - Km; clay shale
 - Kms; sandstone
 - Panoche Formation (marine)
 - Kps; arkosic sandstone, tan, locally contains large concretions; minor interbedded shale
 - Kp; micaceous shale, gray, with minor thin sandstone beds
 - Kpc; cobble conglomerate and sandstone
 - Kpa; Adobe Flat Shale Member of Maddock (1964), dark micaceous shale
- JURASSIC AND/OR CRETACEOUS**
- Jkk; Knoxville Formation
 - Dark, micaceous shale
 - Jlt; Lotta Creek Tuff of Maddock (1964)
 - Jkr; Del Puerto Keratophyre of Maddock (1964)
 - gb; gabbro and diabase, fine-grained
 - qd; diorite and quartz diorite
 - sp; serpentinite and peridotite or harzburgite
- Franciscan assemblage**
- fsr; sheared greenstone, sandstone, chert, and glaucophane schist
 - fg; greenstone
 - fs; sandstone (graywacke), minor amounts of micaceous shale, chert, greenstone, and blue-schist
 - fc; chert



- Contact dashed where gradational or approximately located
- Fault dashed where inferred; dotted where concealed; queried where existence doubtful; double arrows indicate strike-slip movement; U - upthrown side D - downthrown side relatively
- Anticline
- Syncline
- Axis of fold arrow on axis indicates direction of plunge
 - 30 inclined
 - inclined (approximate)
 - vertical
 - 70 overturned
- Strike and dip of strata
- @ fossil locality

References

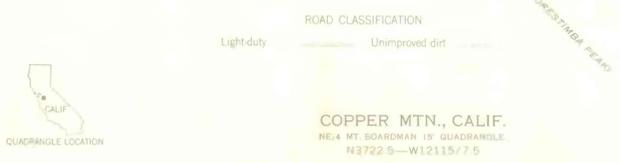
Bishop, C.D., 1970, Upper Cretaceous stratigraphy of the west side of the northern San Joaquin Valley, Stanislaus and San Joaquin Counties, California: California Division Mines and Geology Special Report 104, 29 p.

Maddock, M.E., 1964, Geology of the Mount Boardman quadrangle, Santa Clara and Stanislaus Counties, California: California Division Mines and Geology, Map Sheet 3, scale 1:62,500

Raymond, L.A., 1973, Franciscan geology of the Mount Oso area, central California, Ph.D. thesis, Univ. California, Davis, (unpublished)

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

Geology mapped and compiled by T.W. Dibblee, Jr., (1975); in part modified from M.E. Maddock (1964), L.A. Raymond (1973), C.C. Bishop (1970), and H.S. Sonneman and J.R. Switzer, Jr., unpublished data



PRELIMINARY GEOLOGIC MAP OF THE COPPER MOUNTAIN QUADRANGLE, STANISLAUS COUNTY, CALIFORNIA

by
Thomas W. Dibblee, Jr.
1982