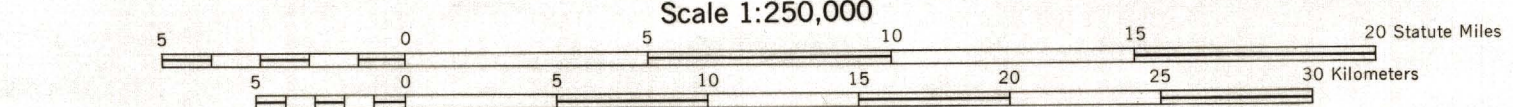
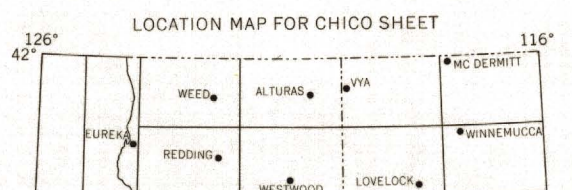
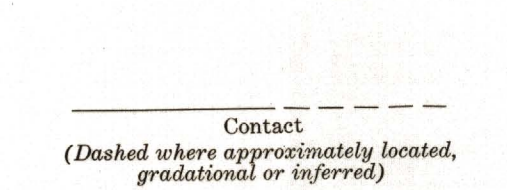
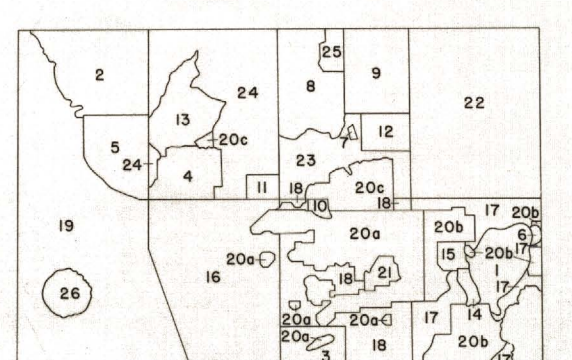


QUATERNARY	QUATERNARY	QUATERNARY
Qd	Dune sand	
Qal	Alluvium	
Qsc	Stream channel deposits	Recent volcanic: Qv ¹ - rhyolite; Qv ² - andesite; Qv ³ - basalt; Qv ⁴ - pyroclastic rocks
Qf	Fan deposits	
Qb	Basin deposits	
Qs	Salt deposits	
Ql	Quaternary lake deposits	
Qg	Glacial deposits	
Qnt	Quaternary nonmarine terrace deposits	
Qm	Pleistocene marine and marine terrace deposits	Pleistocene volcanic: Qm ¹ - rhyolite; Qm ² - andesite; Qm ³ - basalt; Qm ⁴ - pyroclastic rocks
Qn	Pleistocene nonmarine	
Qp	Pliocene nonmarine	Quaternary and/or Pliocene cinder cones
U	Undivided Pliocene nonmarine	
U ¹	Upper Pliocene nonmarine	
U ²	Upper Pliocene marine	Pliocene volcanic: U ¹ - rhyolite; U ² - andesite; U ³ - basalt; U ⁴ - pyroclastic rocks
M ¹	Middle and/or lower Pliocene nonmarine	
M ²	Middle and/or lower Pliocene marine	
M	Undivided Miocene nonmarine	
M ¹	Upper Miocene nonmarine	
M ²	Middle Miocene nonmarine	Miocene volcanic: M ¹ - rhyolite; M ² - andesite; M ³ - basalt; M ⁴ - pyroclastic rocks
M ³	Middle Miocene marine	
M ⁴	Lower Miocene marine	
O ¹	Oligocene nonmarine	Oligocene volcanic: O ¹ - rhyolite; O ² - andesite; O ³ - basalt; O ⁴ - pyroclastic rocks
O ²	Oligocene marine	
E ¹	Eocene nonmarine	
E ²	Eocene marine	Eocene volcanic: E ¹ - rhyolite; E ² - andesite; E ³ - basalt; E ⁴ - pyroclastic rocks
P ¹	Paleocene nonmarine	
P ²	Paleocene marine	
C ¹	Cenozoic nonmarine	Cenozoic volcanic: C ¹ - rhyolite; C ² - andesite; C ³ - basalt; C ⁴ - pyroclastic rocks
T ¹	Tertiary nonmarine	
T ²	Tertiary lake deposits	Tertiary intrusive (hypabyssal) rocks: T ¹ - rhyolite; T ² - andesite; T ³ - basalt
T ³	Tertiary marine	Tertiary volcanic: T ¹ - rhyolite; T ² - andesite; T ³ - basalt; T ⁴ - pyroclastic rocks
C ¹	Undivided Cretaceous marine	
C ²	Upper Cretaceous marine	Franciscan Formation
C ³	Lower Cretaceous marine	Franciscan volcanic and metavolcanic rocks
K	Knoxville Formation	Mesozoic granitic rocks: g ¹ - granite and adamellite; g ² - granodiorite; g ³ - tonalite and diorite
J ¹	Upper Jurassic marine	Mesozoic basic intrusive rocks
J ²	Middle and/or Lower Jurassic marine	Mesozoic ultrabasic intrusive rocks
T ¹	Triassic marine	Jura-Trias metavolcanic rocks
Pr ¹	Pre-Cretaceous metamorphic rocks (ls = limestone or dolomite)	Pre-Cretaceous metavolcanic rocks
Pr ²	Pre-Cretaceous metasedimentary rocks	Pre-Cenozoic granitic and metamorphic rocks
P ¹	Paleozoic marine (ls = limestone or dolomite)	Paleozoic metavolcanic rocks
P ²	Permian marine	Permian metavolcanic rocks
C ¹	Undivided Carboniferous marine	Carboniferous metavolcanic rocks
P ¹	Pennsylvanian marine	
M ¹	Mississippian marine	
D ¹	Devonian marine	Devonian metavolcanic rocks
S ¹	Silurian marine	Devonian and pre-Devonian? metavolcanic rocks
Pr ¹	Pre-Silurian metasedimentary rocks	Pre-Silurian metavolcanic rocks
O ¹	Ordovician marine	Pre-Silurian metavolcanic rocks
C ¹	Cambrian marine	
C ¹	Cambrian - Precambrian marine	Precambrian igneous and metamorphic rock complex
U ¹	Undivided Precambrian metamorphic rocks (g ¹ = granite, g ² = schist)	Undivided Precambrian granitic rocks
L ¹	Later Precambrian sedimentary and metamorphic rocks	
E ¹	Earlier Precambrian metamorphic rocks	

TOPOGRAPHIC BASE MAP
Prepared by the Army Map Service (KCSA), Corps of Engineers, U. S. Army, Washington, D. C., compiled in 1957 from United States Quadrangles, 1:24,000, 1:25,000, 1:48,000, 1:50,000, 1:62,500, U. S. Geological Survey and AMS, 1:62,500. Planimetric detail revised by photo planimetric methods. Horizontal and vertical control by USGS USCGS, USFS, USBR, U. S. Army and C. E. and Fairchild Aerial Surveys. Map held checked 1958.



CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
GEOLOGIC MAP OF CALIFORNIA
OLAF P. JENKINS EDITION
CHICO SHEET
COMPILATION BY JOHN L. BURNETT AND CHARLES W. JENNINGS 1962
SECOND PRINTING, 1965



- INDEX TO GEOLOGIC MAPPING
(COMPLETE INDEX ON EXPLANATORY DATA SHEET)
- Birkeland, P. W., unpublished.
 - Burnett, J. L., unpublished.
 - Swil, L., unpublished.
 - Telf., J. A., Harris, G. D., and Cross, C. M., 1940.
 - Cost, R. L., unpublished.
 - Chandler, D. G., unpublished.
 - Compton, R. R., 1955.
 - Cleary, R. S., unpublished.
 - Davis, A. C. and Foster, D. M., unpublished.
 - Dunnell, C. and Proctor, P. D., 1948.
 - Dunnell, C., unpublished.
 - Turner, H. W., 1937.
 - Dunnell, C., unpublished.
 - Ferguson, H. S. and Gannett, R. W., 1932.
 - Goodwin, J. G., unpublished.
 - Ford, R. G., unpublished.
 - Hansen, A., 1951.
 - Hudson, F. S., 1951.
 - Lindgren, W. and Turner, H. W., 1895.
 - Lindgren, W., 1900.
 - Lincoln, W. W., 1900.
 - Chandler, F. H. and Davis, C. W., 1961.
 - Southern Pacific Company, Land Department, unpublished.
 - Southern Pacific Company, Land Department, unpublished.
 - Stanton Geological Survey, unpublished.
 - Sisson, M. C., unpublished.
 - Turner, H. W., 1897.
 - Turner, H. W., 1898.
 - Wilshire, E., unpublished.
 - Williams, H., 1929.
 - Johnson, H. R., 1943.
 - Garrison, L. E., 1961.

HEAVY BORDER ON BOXES INDICATES UNITS THAT APPEAR ON THIS SHEET