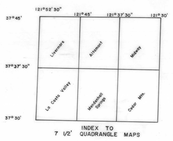
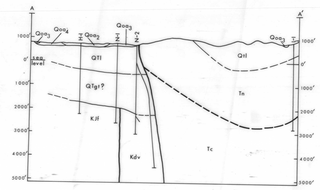
OPEN FILE MAP
77-689

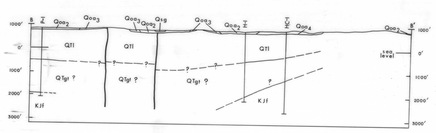
Geology by D. G. Herd, 1974-76; assisted by B. W. Rogers and K. M. Williams, 1976. Adapted in part from Huey (1948) and Hall (1958).

Base from U.S. Geological Survey 1:24,000
Altamont, 1953 (68 PR); Cedar Mtn., 1956 (71 PR); La Costa Valley, 1953-60 (68 PR);
Livermore, 1953-61 (68 PR); Mendenhall Springs, 1956 (71 PR); Midway, 1912-53
(68 PR)



7 1/2' INDEX TO QUADRANGLE MAPS





Well log data from Wight, 1974

CONTOUR INTERVALS 20 AND 40 FEET
DATUM IS MEAN SEA LEVEL

CORRELATION OF MAP UNITS

Qsg		Holocene	Pleistocene	QUATERNARY
Qfo				
Qoo_1				
Qoo_2				
Qoo_3				
Qoo_4				
QTl	QTgt	Pliocene and Miocene	Miocene	TERTIARY QUATERNARY
Tn				TERTIARY
Tc				
Tb				
Tor				
Tt		Paleocene and Eocene		
Kjg	KJf	JURASSIC AND CRETACEOUS		

Description of Map Units

Qsg RECENT STREAM GRAVEL

Qfo RECENT FLOOD-PLAIN ALLUVIUM

OLDER ALLUVIUM, divided into:

Qoo_1 Unit 1

Qoo_2 Unit 2

Qoo_3 Unit 3

Qoo_4 Unit 4

QTl LIVERMORE GRAVELS OF CLARK (1930) (Pliocene and Pleistocene)--Brown to light-gray, poorly cemented, massive gravel with minor pebbly sands and greenish-blue silty clay or claystone. Contains scattered vertebrate fossils

QTgt GREEN VALLEY AND TASSAJARA FORMATIONS, UNDIVIDED, OF CLARK (1943) (Pliocene and Pleistocene)--Red and maroon conglomerate, brown sandstone, blue, gray, brown, and red siltstone and claystone with minor gray limestone, lignite, and tuff

Tn NEROLY SANDSTONE (Miocene)--Blue sandstone, brown shale, and minor brown siltstone, andesitic tuff, and conglomerate

Tc CIERBO SANDSTONE (Miocene)--Gray, brown, and white sandstone with minor conglomerate, brown tuff, and carbonaceous brown shale. Ostrea and Modiolus shells common near base

Tb BRIONES SANDSTONE (Miocene)--Gray, calcareous sandstone with pebbly shelly conglomerate near middle and minor yellow limestone. Abundant Ostrea shells in conglomerates

Tor OURSAN(?) SANDSTONE (Miocene)--Brown sandstone with minor shelly and pebbly conglomerates

Tt TESLA FORMATION (Paleocene and Eocene)--White and buff sandstone and carbonaceous shale with minor lignite and white to light-blue clay

Kjg GREAT VALLEY SEQUENCE (Jurassic and Cretaceous)--Brown, massive, at places concretionary sandstone, brown thinly bedded siltstone and shale with scattered conglomerate lenses, grayish-brown carbonaceous shale, and dark-gray to black concretionary shale with minor fossiliferous sandstone

KJf FRANCISCAN ASSEMBLAGE (Jurassic and Cretaceous)--Gray-green sandstone and shale and red and green chert with minor greenstone, conglomerate, diabase, serpentinite, limestone, and blueschist

Contact

Fault--Dotted where concealed. Bar and ball on downthrown side

Strike and dip of beds

Inclined

Overturned

Vertical

Horizontal

Approximate

Folded axes

Anticline--dotted where concealed

Syncline--dotted where concealed

Landslide

Drill hole

Gravel pit or quarry

U. S. Geological Survey
OPEN FILE REPORT
This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature

GEOLOGIC MAP OF THE LAS POSITAS, GREENVILLE, AND VERONA FAULTS, EASTERN ALAMEDA COUNTY, CALIFORNIA

BY
DARRELL G. HERD

1977