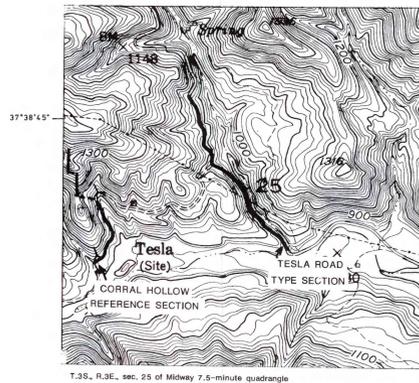
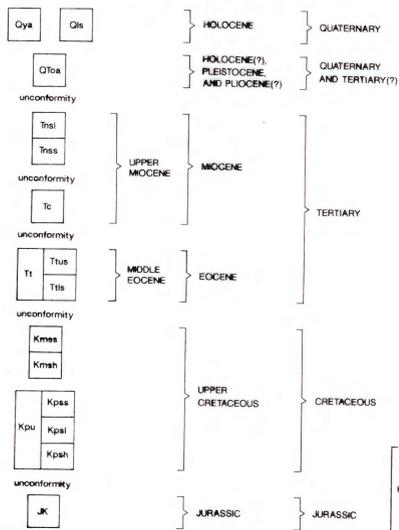


LOCATION OF MEASURED SECTIONS



CORRELATION OF MAP UNITS

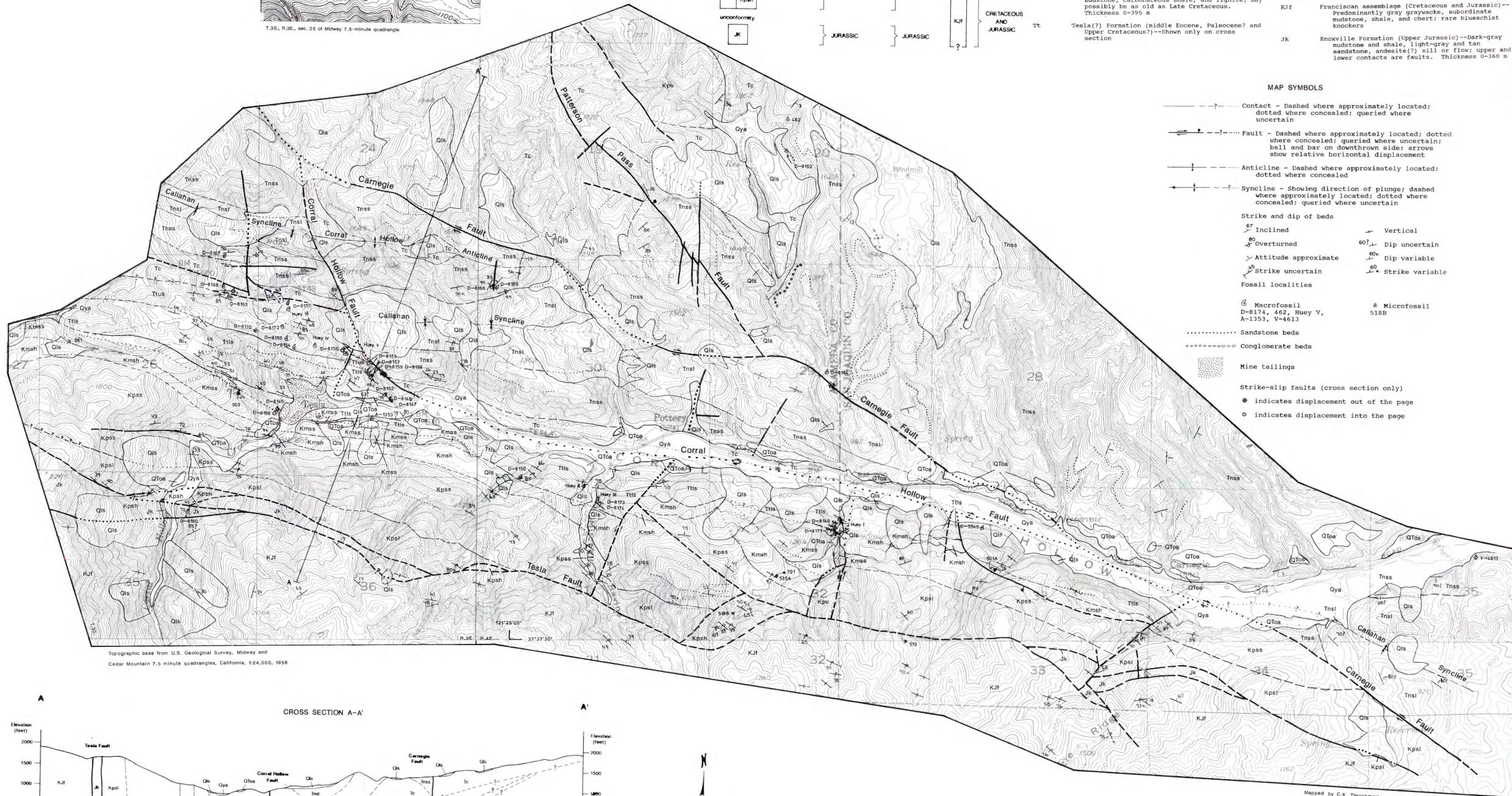


DESCRIPTION OF MAP UNITS

Oya	Younger alluvial deposits (Holocene)--Alluvium predominantly of cobble- to silt-size particles	Moreno Formation (Upper Cretaceous)--Consists of: Sandstone member--Upper part is fine- and medium-grained, brown and gray sandstone and sandy siltstone; thickness 0-100 m. Lower part is brown and gray siltstone and fine-grained brown and gray sandstone. Unit is lithologically similar to the Garzas Member of Bishop (1970) of the Moreno Formation as mapped in the Diablo Range about 35 km to the southeast. Thickness 0-235 m	
Qls	Landslide deposits (Holocene)--Small to large landslides; recognized by hummocky topography and scarps; locally, contact drawn between landslides of different ages	Kmas	Sandstone member--Tan to gray, medium-grained sandstone, less tan, fine-grained sandstone, tan to black siltstone, and dark-brown shale. Thickness 240-600 m
QToa	Older alluvial deposits (Holocene?, Pleistocene and Pliocene?)--Unconsolidated, sandy, pebbly to cobble gravels	Kmah	Shale member--Chocolate-brown to purplish-brown shale and minor brown mudstone and brown sandstone. Thickness 0-170 m
Tnsi	Neroly Formation (upper Miocene)--Consists of: Siltstone member--Gray and brown siltstone and mudstone, and brown sandstone. Thickness 0-200 m	Kpss	Panoche Formation (Upper Cretaceous)--Consists of: Sandstone member--Tan to gray, medium-grained sandstone, less tan, fine-grained sandstone, tan to black siltstone, and dark-brown shale. Thickness 240-600 m
Tns	Siltstone member--Predominantly blue, medium- to coarse-grained sandstone, also pebbly and cobble conglomerate, blue siltstone, white clay, brown and green siltstone. Thickness 225-350 m	Kpsi	Siltstone member--Tan, sandy siltstone and siltstone, and tan, fine-grained sandstone. Thickness 0-500 m
Tc	Cierbo Sandstone (upper Miocene)--White sandstone, chert-pebbles, pebbly sandstone and conglomerate, tan sandstone, green and brown, silty mudstone. Thickness 70-230 m	Kpsh	Shale member--Hard, dark-gray and black, nodular, shaly mudstone, minor soft, green and dark-brown mudstone and shale, tan and gray, fine-grained sandstone; upper and lower contacts are faults. Equivalent to Huey's (1948) Horseshoe Formation mapped in Corral Hollow; containing Early Cretaceous fossils, and the Adobe Flat Shale member of Bishop (1970), (Albian to Turonian in age), as mapped 30 km southeast of the Tesla area. Thickness 0-200 m
Ttus	Tesla Formation (middle Eocene, Paleocene? and Upper Cretaceous?)--Consists of: Upper sandstone member--Predominantly fine- and medium-grained brown sandstone. Thickness 0-280 m	Kpu	Undivided part
Ttis	Lower sandstone member--Heterogeneous sequence of interbedded gray, brown, and white sandstone, brown and gray siltstone, brown mudstone, carbonaceous shale, and lignite; may possibly be as old as Late Cretaceous. Thickness 0-395 m	Kjf	Franciscan assemblage (Cretaceous and Jurassic)--Predominantly gray graywacke, subordinate mudstone, shale, and chert; rare blueschist knickers
Tt	Tesla(?) Formation (middle Eocene, Paleocene? and Upper Cretaceous?)--Shown only on cross section	Jk	Knovville Formation (Upper Jurassic)--Dark-gray mudstone and shale, light-gray and tan sandstone, andesite(?) sill or flow; upper and lower contacts are faults. Thickness 0-360 m

MAP SYMBOLS

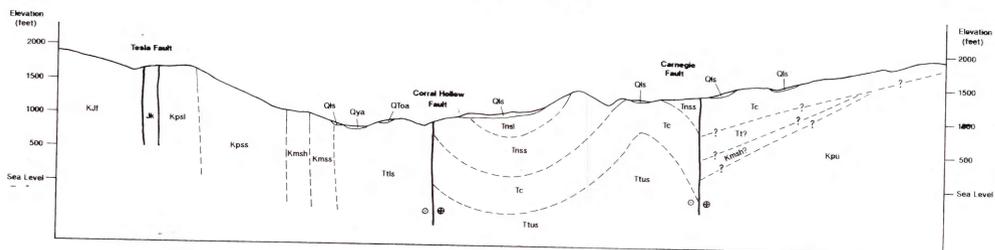
- Contact - Dashed where approximately located; dotted where concealed; queried where uncertain
- Fault - Dashed where approximately located; dotted where concealed; queried where uncertain; ball and bar on downthrown side; arrows show relative horizontal displacement
- Anticline - Dashed where approximately located; dotted where concealed
- Syncline - Showing direction of plunge; dashed where approximately located; dotted where concealed; queried where uncertain
- Strike and dip of beds
  - Inclined
  - Overturned
  - Attitude approximate
  - Strike uncertain
  - Vertical
  - Dip uncertain
  - Dip variable
  - Strike variable
- Fossil localities
  - Macrofossil
  - Microfossil
- Sandstone beds
- Conglomerate beds
- Mine tailings
- Strike-slip faults (cross section only)
  - indicates displacement out of the page
  - indicates displacement into the page



Topographic base from U.S. Geological Survey, Midway and Cedar Mountain 7.5 minute quadrangles, California, 1:24,000, 1958

Mapped by C.K. Throckmorton, 1981

CROSS SECTION A-A'



SCALE = 1:12,000

CONTOUR INTERVAL - 20 and 40 FEET

GEOLOGIC MAP OF THE TESLA AREA, ALAMEDA AND SAN JOAQUIN COUNTIES, CENTRAL CALIFORNIA

by C.K. Throckmorton