

EXPLANATION

- Qal**
RECENT ALLUVIUM AND BEACH DEPOSITS.
- Qpt**
PLEISTOCENE ALLUVIAL PLAIN, STREAM, AND MARINE TERRACES.
- Tta**
BONEY MOUNTAIN AGGLOMERATE, CRUDELY BEDDED ANDESITIC BRECCIA WITH TUFFACEOUS MATRIX; SOME FLOWS OF ANDESITE AND BASALT INTERBEDDED.
- Ttb**
SERRANO BASALT, CHIEFLY BASALT FLOWS WITH PILLOW LAVAS QUITE COMMON SOME IRREGULAR BEDS OF AGGLOMERATE AND TUFF INTERCALATED.
- Ttt**
SEDIMENTARY-VOLCANIC TRANSITION ZONE, CHIEFLY ANDESITIC AGGLOMERATE WITH INTERBEDDED SANDSTONE AND SHALE, SOME ANDESITIC AND BASALTIC PILLOW LAVAS.
- Tt**
THIN-BEDDED GRAY SANDSTONE AND OLIVE DRAB SHALE OF MARINE ORIGIN WITH OCCASIONAL HORIZONS OF MORE MASSIVE SANDSTONE. UNFOSSILIFEROUS.
- Ttss**
GRAY MASSIVE SANDSTONE FACIES WITH SOME THIN-BEDDED SHALE, INCREASINGLY SHALY EASTWARD. UNFOSSILIFEROUS.

- Tvsh**
BLACK ORGANIC SHALE WITH REGULARLY INTERBEDDED BLACK MICO-CRYSTALLINE LIMESTONE LAYERS OF CONCRETIONARY ORIGIN, FREQUENTLY CUT BY SANDSTONE DIKES FROM THE UNDERLYING HORIZON.
 - Tvss**
LIGHT-GRAY MASSIVE SANDSTONE FACIES WITH VARIABLE AMOUNTS OF FOSSILS AND FOSSIL FRAGMENTS FOSSILIFEROUS PEBBLE BED AT THE TOP GRADES EASTWARD INTO A CONGLOMERATE.
 - Tv**
THIN-BEDDED, LIGHT GRAY SANDSTONE AND DARK SHALE WITH BLACK ORGANIC SHALE HORIZON AT THE TOP.
 - Td**
DIABASE SILLS AND BASALTIC DIKES.
- AXIS OF ANTICLINE.

 ARROW ALONG LINE SHOWS DIRECTION OF PLUNGE.
- D** FAULT
 SOLID LINE WHERE ACCURATELY LOCATED; BROKEN LINE WHERE APPROXIMATELY LOCATED; U, P - D, DOWN
- 30° STRIKE AND DIP STRATA
 - HORIZONTAL STRATA
 - STRIKE OF VERTICAL STRATA

**GEOLOGIC MAP OF THE SANTA MONICA MOUNTAINS
WEST OF THE MALIBU RANCH
VENTURA COUNTY, CALIFORNIA**

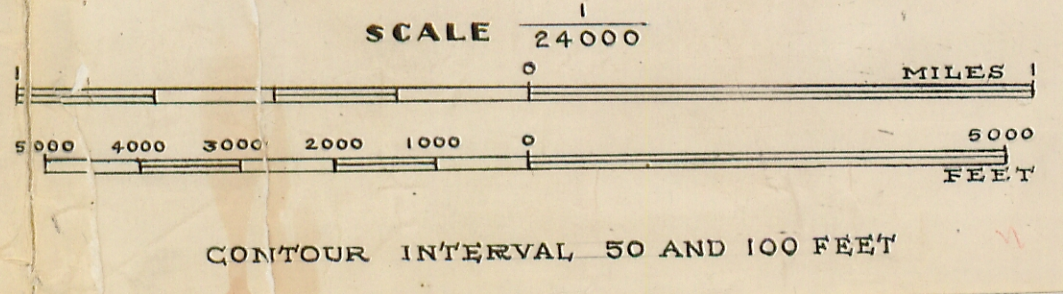


PLATE I

TOPOGRAPHY FROM U.S. GEOLOGICAL SURVEY 1901
GEOLOGY BY VINCENT C. KELLEY 1932