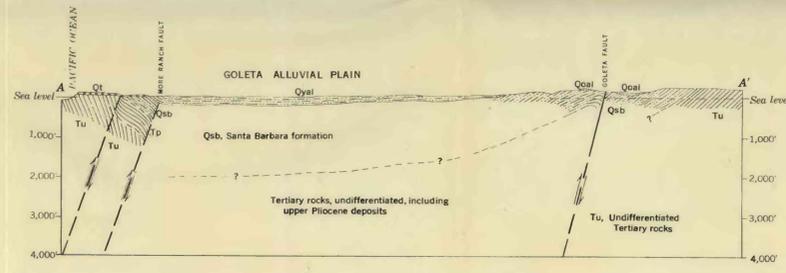


EXPLANATION

- Quaternary**
    - Oyal**  
Younger alluvium  
Unconsolidated clay, silt, sand, and some gravel. Underlies alluvial plains. Yields water in small amounts to shallow wells.
    - Qt**  
Terrace deposits and older alluvium  
Unconsolidated clay, silt, sand, and gravel, partly as thin alluvial and marine terraces covers (Qt); partly as extensive alluvial deposits near mountains (Qal). Not very permeable, but yields water in small to moderate amounts in the Goleta basin.
    - Dst**  
Santa Barbara formation  
Unconsolidated clay, silt, and sand; marine, fossiliferous. Low permeability, but yields water to most irrigation wells in the Goleta basin. Tapped by few wells in the Carpinteria basin.
    - Unnamed upper Pliocene formation**  
Compact mudstone and siltstone; local lenses of loess sand and gravel; marine, mainly not fossiliferous. Not penetrated by water wells. Probably very low permeability.
    - Monterey shale**  
Consolidated marine mudstone, silt, ooze and diatomaceous shales. Not penetrated by water wells in the basin.
    - Binon shale**  
Consolidated marine mudstone. Not penetrated by water wells. Doubtless very low permeability.
    - Vaqueros sandstone**  
Partly consolidated medium to coarse sand and some shales; marine. Not penetrated by water wells in the basin, though locally permeable.
    - Sespe formation**  
Consolidated red and green sandstone and red shale and conglomerate; continental. Not penetrated by water wells.
    - Tejon formation**  
Consolidated marine sandstone and shale. Locally yields water from fractures and permeable lenses. Not penetrated by water wells in the basin.
  - Tertiary**
    - Fault**  
Dashed where inferred; dotted where concealed. U, upstream side; D, downstream side.
    - Strike and dip of beds**  
-45°
    - Strike and dip of overturned beds**  
-90°
    - Strike of vertical beds**  
-90°
    - Water well**  
○<sup>H2</sup>
    - Abandoned water well**  
○<sup>R1</sup>
    - Spring**  
●<sup>J1</sup>
- Numbering system described in text



Base from map compiled by Geo. MacCulloch from County records, also from U. S. Geological Survey topographic sheets. Broken land lines projected for reference only. 939923 O - 51 (In pocket)

GEOLOGIC MAP AND SECTIONS OF THE GOLETA BASIN AND VICINITY, SANTA BARBARA COUNTY, CALIFORNIA

Geology by C. A. Wahrhaftig, L. Porter, Jr., and J. E. Upson. Surveyed in 1941-46.