PLATE 1

DIGITAL ELEVATION, TOPOGRAPHIC, AND **TECTONIC GEOMORPHOLOGY MAP** OF THE WESTERN SANTA BARBARA FOLD BELT, SANTA BARBARA, CALIFORNIA

LARRY D. GURROLA

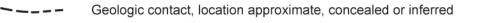
Dissertation Map 1 of 2 (rev. 2025)

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Oblique-slip fault, location exposed or known, approximate, inferred or concealed (blind); reverse left-lateral, motion arrow indicates dip direction; arrow indicates average bearing and rake of slickenlines onf hanging wall block

Anticline, location approximate where dashed, inferred where dotted; plunge direction indicated

Syncline, location approximate where dashed, inferred where dotted;

Marine terrace landform, marine terrace shoreline or strandline indicated by solid blue line, location approximate where dashed

Marine terrace shoreline or strandline, location approximate

Defeated stream

EXPLANATION

Alluvial fan terrace deposit

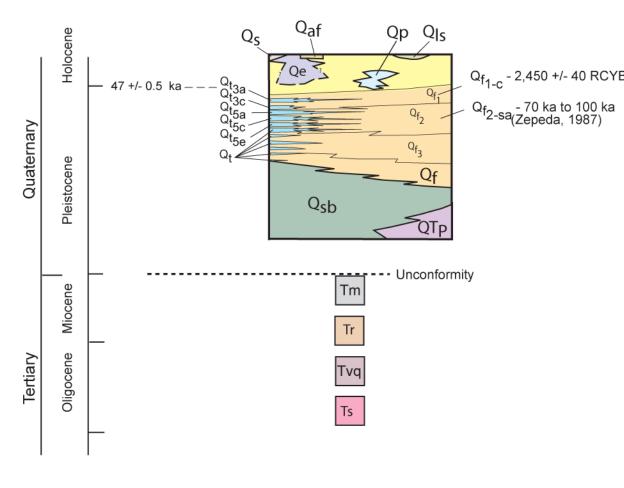
Strike and dip of inclined beds

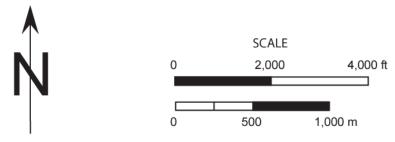
Strike and dip of overturned beds

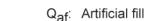
Optical stimulated luminescence sample site number 6

Uranium-series sample site number 2

Radiocarbon sample site number 3

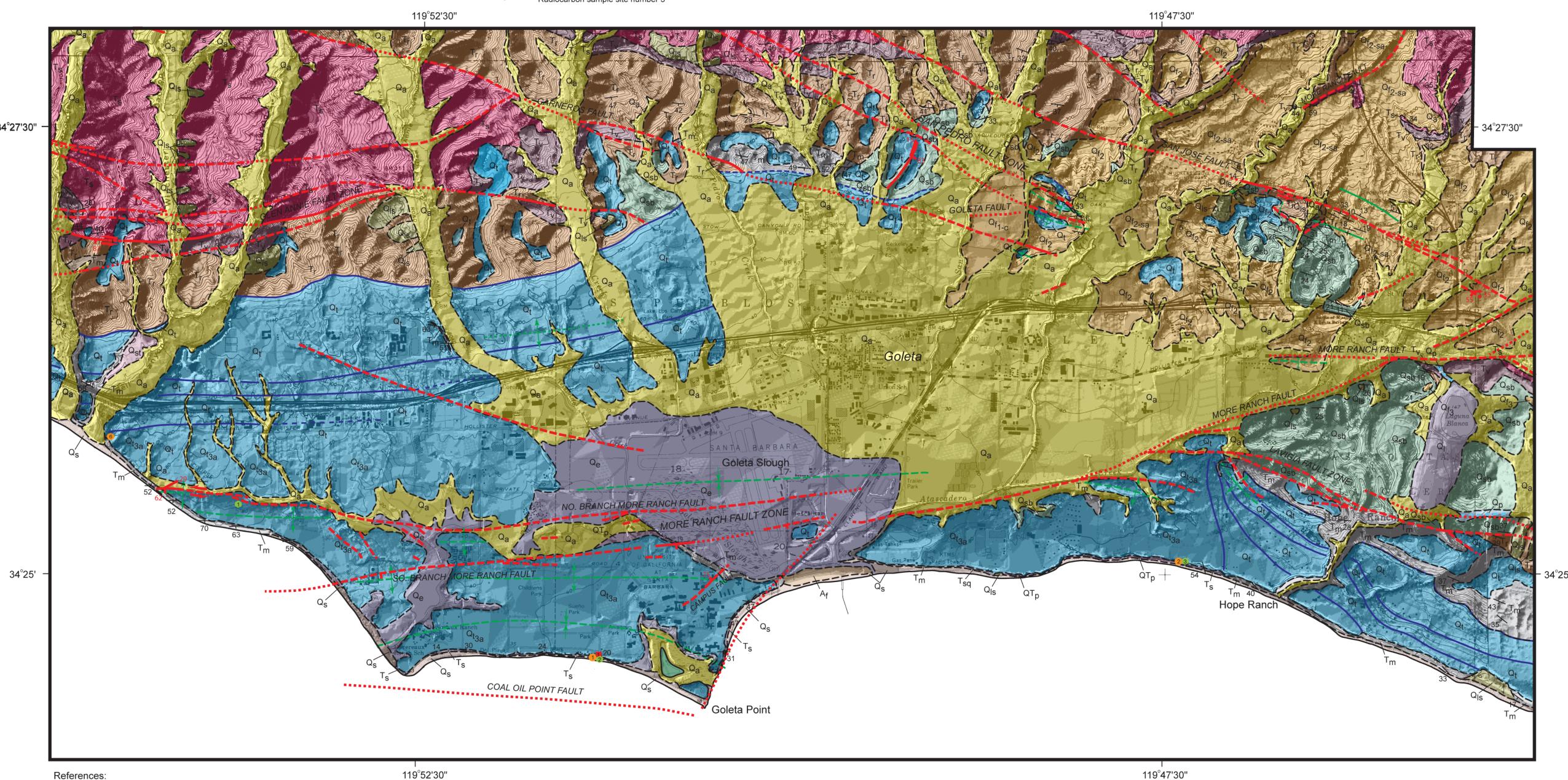






- Beach Sand Unconsolidated marine and aeolian beach sand.
- Q_{St}: Stream Terrace Deposits Commonly gravels, sands, and silts with minor clay interbeds
- Alluvium Undifferentiated alluvial, stream channel, and floodplain deposits composed of silty sands to sandy gravels.
- Q_e: Estuarine Deposits Commonly estuarine silts and clays with sand interbeds and lenses.
- Q_{Is}: Landslide Deposits Landslide deposits includes reworked bedrock and soil units.
- Marine Terrace Deposits Second marine terrace associated with oxygen isotope substage 5a with Q_{t5a} indicating youngest terrace associated with stage 5a; Qt denotes marine terrace deposit of unknown age; medial to nearshore
- Qf3: Alluvial fan and fan terrace deposits Third alluvial fan terrace indicating relative age with 1 indicating youngest terrace deposit based on stratigraphic position, relative amount of incision, and established chronology. Commonly dissected fan surfaces composed of grave to cobble to boulder conglomerates in a clayey silty sand matrix to sandy
 - Quaternary alluvial fan terrace deposits that are not age-dated are correlated to regional aggradation events
- Paleofluvial deposits Undifferentiated paleostream channel and terrace deposits consisting of boulder to gravel conglomerates within a silty sand matrix.
- Q_{Sb}: Santa Barbara Formation Nearshore to distal marine sands with gravel to cobble conglomerates, fossiliferous limestone and silt interbeds; minor clay interbeds.
- QT_p: Pico Formation Marine conglomerates, sandstones, and siltstone with minor fossils
- T_m: Monterey Formation Undifferentiated diatomaceous, calcareous, and silicious shale with minor sandstone
- T_r: Rincon Formation Diatomaceous shale with thin beds of volcanic ash deposits with minor sandstone deposits.
- T_{vq}: Vaqueros Formation Sandstone wtih siltstone and shale interbeds.

Base Maps: Digital elevation model generated from Santa Barbara County Flood Control 0.6 m data (1991; 1965). United States Geological Survey 1950, rev. 1988, Goleta, California, 1:24,000 and 1951, rev. 1988, Dos Publos, California 7.5' Quadrangles, 1:24,000.



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