

EXPLANATION

UNCONSOLIDATED DEPOSITS

Qds

Dune sand
Loose, wind-deposited sand along the coast. Probably above the zone of ground-water saturation

Qal

Younger alluvium
Gravel, sand, and clay underlying alluvial plains. Lower part is the principal source of water to wells in the Santa Ynez River flood plain. Low permeability in smaller valleys

Qls

Landslide
Slump or landslide debris in Canada Honda; small amounts of water supplied to seeps

Qo

Oreutt sand
Sand, clay, and some gravel of nonmarine origin. Yields water to wells, but is generally of low permeability

Tc

Careaga sand
Marine sand and some gravel, locally fossiliferous, unconsolidated where below the zone of ground-water saturation. Gravel zones are less permeable than younger alluvium of Santa Ynez River flood plain

CONSOLIDATED ROCKS

Tsq

Sisquoc formation
Diatomite and diatomaceous clay shale; would not yield water to wells

Tm

Monterey shale
Siliceous and diatomaceous shales; contains some water in fractures

Ttrv

Tranquillon volcanics of Dibblee (1950)
Rhyolite and rhyolitic agglomerate and tuff. Fracture systems supply water to several springs

Tr

Rincon shale
Bentonitic and siliceous claystone. Would not yield water to wells

Tv

Vaqueros formation
Sandstone and conglomerate. Probably would yield small amounts of water to wells

Tes

Gaviota formation of Effinger (1935) and Sacate formation of Kelley (1943)
Sandstone and shale. Thick sandstone units might yield some water to wells

Ttc

Tejon formation
Ttc, Cozy Dell shale member of Kerr and Schenk (1928). Gray and brown shale. Would not yield water to wells
Ttm, Matilija sandstone member of Kerr and Schenk (1928). Thick-bedded sandstone, minor shale and conglomerate. Yields water in small quantities to wells

Tan

Anita shale of Kelley (1943)
Gray clay shale and greenish-brown sandstone. Would not yield water to wells

Tca

Espada formation of Dibblee (1950)
Greenish-brown silty claystone and thin beds of sandstone. Would not yield water to wells

Jn

Honda formation of Dibblee (1950)
Clay shale and thin beds of sandstone. Would not yield water to wells

Jf

Franciscan formation (as used by Dibblee, 1950)
Serpentinized pyroxenite. May contain some water in fractures

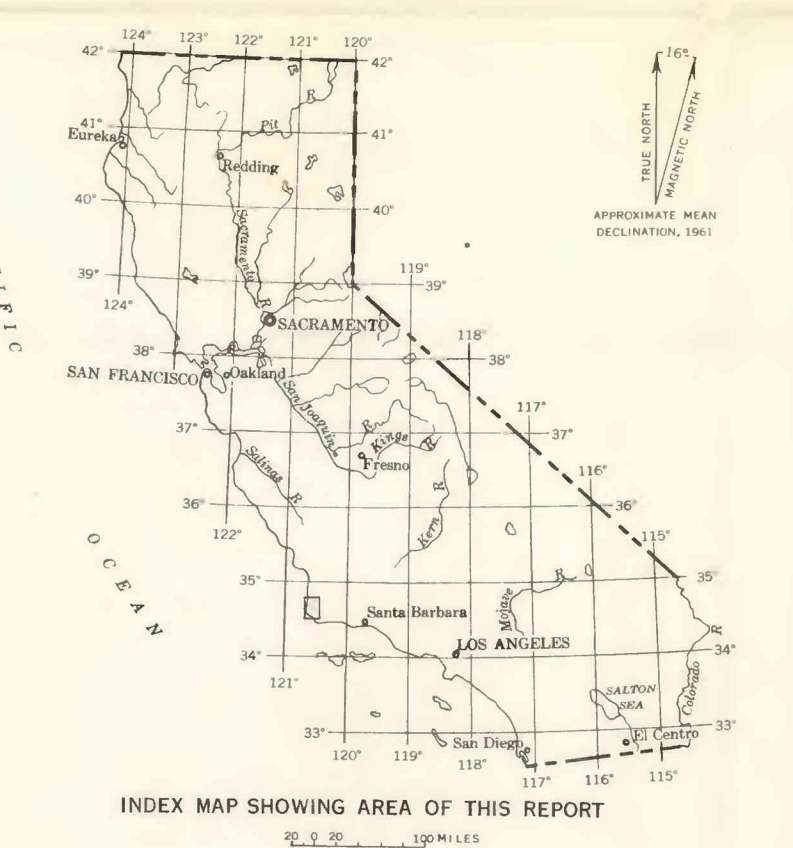
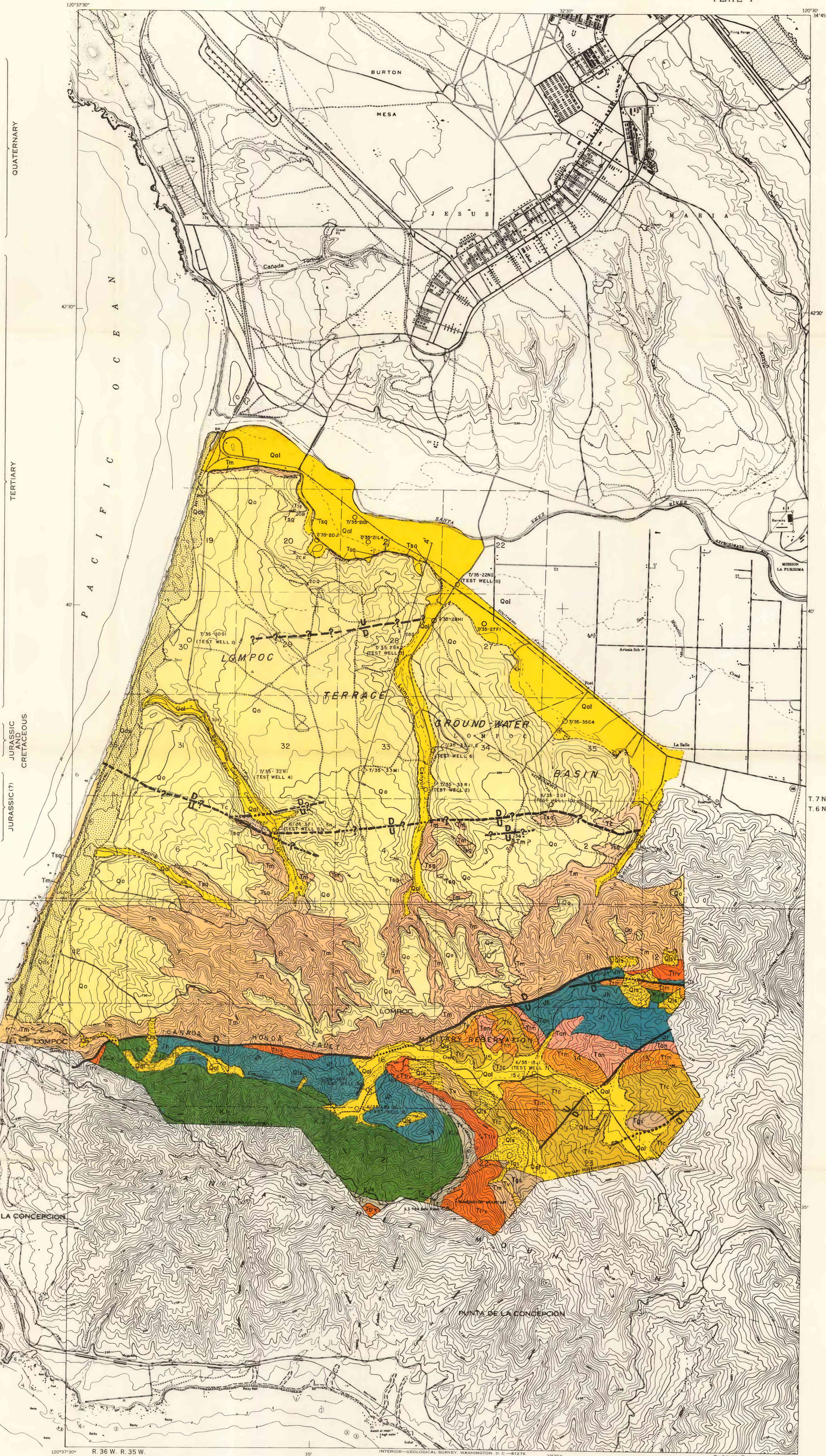
Contact
Dashed where approximately located

Fault
Dashed where approximately located; dotted where concealed. Queries indicate probable fault. U, upthrown side; D, downthrown side

Water well
6/24-35J1 (TEST WELL 7)

Abandoned oil-test well
7/35-33M1

Sampling point for chemical analysis of surface waters, springs, and seeps
S3



MAP SHOWING GEOLOGY AND LOCATION OF WELLS OF THE POINT ARGUELLO NAVAL MISSILE FACILITY, CALIFORNIA

SCALE 1:31 680
CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

R. 36 W. R. 35 W. Base from Army Map Service Point Arguello, El Tranquillon, and Surf quadrangles. INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—61276. R. 35 W. R. 34 W. Geology from T. W. Dibblee, Jr., 1950; modified by G. A. Miller and R. E. Evenson, 1958.