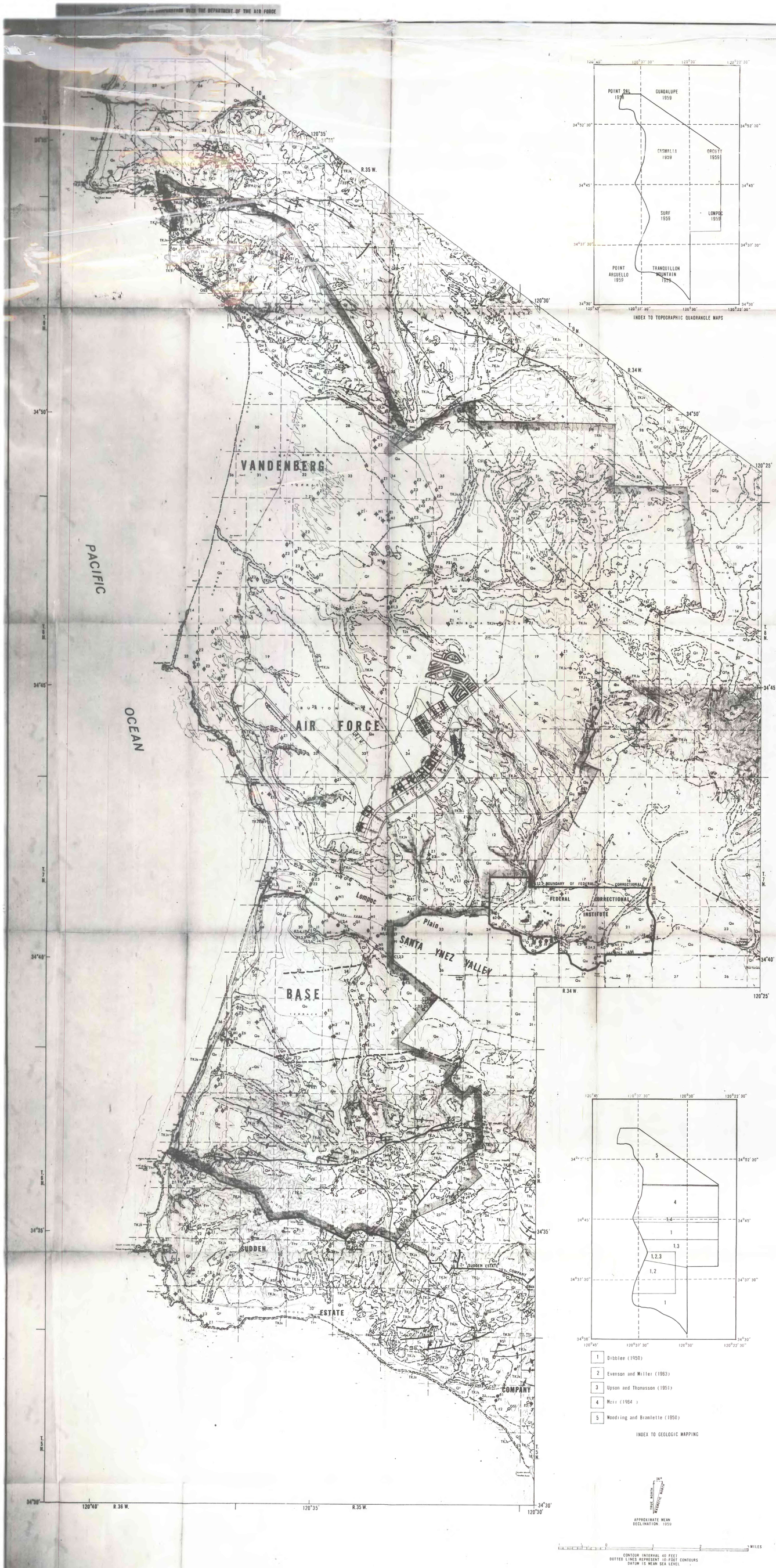
PREPARED IN COOPERATION WITH THE DEPARTMENT OF THE AIR FORCE



INDEX TO TOPOGRAPHIC QUADRANGLE MAPS

1. Dibblee (1950)
2. Evenson and Miller (1963)
3. Upson and Thomasson (1951)
4. Merr (1964)
5. Woodring and Bramlette (1950)

INDEX TO GEOLOGIC MAPPING

INDEX MAP OF CALIFORNIA

16° TRUE NORTH MAGNETIC NORTH

APPROXIMATE MEAN DECLINATION, 1959

0 1 2 3 MILES

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

EXPLANATION

UNCONSOLIDATED DEPOSITS

Recent

Qa — Alluvium

Gravel, sand, silt, and clay; permeable; where saturated yields water freely to wells

Qs — Windblown sand

Windblown sand; in places anchored by vegetation; permeable; probably contains local perched water bodies

Ls — Landslide deposits

Landslide and [illegible] principally [illegible]; fresh; where [illegible]

Pleistocene

Qt — Terrace deposits

Gravel, sand, silt, and clay on marine and stream terraces; moderately permeable; in most places above the water table

UNCONFORMITY

Qc — Orcutt Sand

Gravel, sand, silt, and clay; includes some marine deposits; moderately permeable; where saturated yields water to wells

Pliocene and Pleistocene(?)

UNCONFORMITY

Qfp — Paso Robles Formation

Gravel, sand, silt, clay, and some fresh-water limestone; low permeability; yields water freely to deep wells

Pliocene

Tc — Careaga Sand

Fine to medium marine sand, silt, and some gravel; moderately permeable; where saturated yields water to wells

CONSOLIDATED ROCKS

Miocene

Tlv — Tranquillon Volcanics of Dibblee (1950)

Rhyolite, rhyolitic agglomerate and tuff; fractures yield water to springs

Tv — Vaqueros Sandstone

Marine sandstone, brown, coarse to medium and conglomerate; yields water to springs and wells

Eocene

Ttc / Ttm — Tejon Formation

Ttc, Cozy Dell Shale Member of Kerr and Schenck (1928); gray and brown marine shale, interbedded with sandstone; does not yield water to wells

Ttm, Matilija Sandstone Member of Kerr and Schenck (1928); white, medium sandstone with some conglomerate; yields water to wells and springs

TKJs — Sedimentary rocks

Conglomerate, sandstone, siltstone, mudstone, shale, diatomite, and limestone; yield some water to wells from fractures

TKJi — Igneous and metamorphic rocks

Include igneous and metamorphic rocks of the Franciscan Formation of Jurassic and Cretaceous age and igneous and metamorphic rocks of probable Tertiary age; yield some water to wells from fractures and deeply weathered zones

QUATERNARY

TERTIARY AND QUATERNARY(?)

TERTIARY

PRE-TERTIARY AND TERTIARY

Boundary of Vandenberg Air Force Base

Approximate geologic contact

Fault, dashed where approximately located, dotted where concealed, queried where doubtful

Anticline, showing crestline and direction of plunge, dashed where inferred

Syncline, showing troughline and direction of plunge, dashed where inferred

Area of ground-water discharge

Well with pump rating of 5-hp or more

Domestic, stock, observation, test, or unused well

Dry or destroyed well

Destroyed oil well

Flowing well

Flowing spring

Seep

WELL- AND SPRING-NUMBERING SYSTEM

Letter after well or spring indicates position in section, thus:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

For a complete description of numbering system, see text

MAP OF VANDENBERG AIR FORCE BASE AND VICINITY, CALIFORNIA

SHOWING GEOLOGY AND LOCATION OF WELLS AND SPRINGS