LEGEND

SEDIMENTARY ROCKS

QUATERNARY

Recent

Qal — Alluvium (shown only in larger valleys)

Pleistocene

Qs — Dune sand

Qt — Terrace deposits (including alluvium except in larger valleys)

UNCONFORMITY

TERTIARY

Pliocene

Tf — Fernando formation

UNCONFORMITY

Miocene

Tm — Monterey shale (siliceous, bituminous, diatomaceous shales and limestone)

Tt — Tuff interbedded with the Monterey

Eocene-Miocene

Tvl — Limestone near summit of Vaqueros formation

Ttv — Vaqueros, Sespe, and Tejon formations, undifferentiated (including some Monterey in Santa Ynez Range. Sandstone, shale, conglomerate, and limestone)

CRETACEOUS-TERTIARY

Undifferentiated Tertiary-Cretaceous

KT — Pre-Monterey (sandstone, shale, and conglomerate)

CRETACEOUS

Lower Cretaceous

Kk — Knoxville formation (Sandstone, shale, and conglomerate)

UNCONFORMITY

JURASSIC?

Jf — Franciscan formation (chiefly serpentine intruded in sandstone, jasper, and assovated metamorphic glaucophane schist)

Asphalt

IGNEOUS ROCKS

PRE-TERTIARY? TERTIARY

d — Post-Monterey intrusives (intrusive diabase)

b — Pre-Monterey intrusives (intrusive basalt, diabase, gabbro, peridotite, and serpentine)

SYMBOLS

- Anticline
- Anticline where doubtful
- Anticline overturned
- Anticline plunging
- Syncline
- Syncline where doubtful
- Syncline overturned
- Syncline plunging
- Faults
- Faults where doubtful
- Dip and amount
- Horizontal beds
- Vertical dip
- Oil well
- Oil well abandoned

A — A Cross Sections (See Pl. VII)

E. M. Douglas, Geographer.
R. B. Marshall, Topographer in charge.
Topography by S. N. Stoner.
Triangulation by U. S. Coast and Geodetic Survey and C. F. Urquhart.
Surveyed in 1903 and 1904.

PRELIMINARY GEOLOGIC AND STRUCTURAL MAP OF THE LOMPOC AND GUADALUPE QUADRANGLES, CALIFORNIA INCLUDING A LARGE PART OF THE SANTA MARIA OIL DISTRICT

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 miles

Geology by Ralph Arnold, Robert Anderson, H. R. Johnson, and H. W. Fairbanks.
Surveyed in 1906.