GEOLOGIC MAP AND SECTIONS OF SAN CLEMENTE ISLAND, CALIFORNIA

Geology by F. H. Olmsted, October–December 1955

Base from U. S. Geological Survey quadrangle maps of North, South, and Central San Clemente Island, California. Editions of 1950

Scale 1:31,680

1 0 2 Miles

Contour interval 20 feet
Datum is mean sea level

EXPLANATION

Recent

Qf — Alluvial-fan deposits
Ill-sorted masses of gravel, sand, and silt

Qs — Younger sand deposits
Well-sorted, loose windblown sand

Pleistocene(?)

Qso — Older sand deposits
Sand, silt, and clay, mostly weathered and locally cemented by calcium carbonate

QUATERNARY

Miocene

Ts — Marine sedimentary rocks
Predominantly thin-bedded siltstone, shale, diatomite, and limestone, and a basal sandstone composed of volcanic detritus

Tr — Rhyolite
Massive to prominantly flow-banded porphyritic rock, and minor tuff

Td — Dacite
Dense, generally nonvesicular, and only slightly porphyritic flow rock

Ta / Tap — Andesite
Somewhat heterogeneous sequence of volcanic flows and pyroclastic rocks, Ta, in places highly fractured and vesicular; porphyritic phase, Tap, possibly of dacitic composition; mapped only in northern part of island

TERTIARY

Contact
Dashed where uncertain; dotted where concealed

Fault
Dashed where uncertain; dotted where concealed. Arrows show relative movement. U, upthrown side; D, downthrown side. Location of San Clemente fault uncertain

Fault
Showing relative movement. A, away from observer; T, toward observer. Shown on sections only

Anticline
Showing direction of plunge

Syncline
Dashed where uncertain; dotted where concealed

Strike and dip of bedding planes or flow layers

Horizontal bedding or flow layer

Base of flow or stratum

F5 — Fossil-collecting locality described in text

Landslide area

Depth contours
Interval 100 fathoms, datum is mean lower low water. Submarine topography from U.S. Coast and Geodetic Survey chart 5111

INDEX MAP

CALIFORNIA
San Pedro
San Clemente Island
San Diego

TRUE NORTH
MAGNETIC NORTH
15°

SAN CLEMENTE FAULT

Castle Rock
Northwest Harbor
West Cove
Wilson Cove
Eel Point
Seal Cove
MIDDLE RANCH
White Rock
Lost Point
Mosquito Cove
Pyramid Cove
Pyramid Head
Horse Cove
China Point

A–A′, B–B′, C–C′ — Sea level, 2000′, 4000′