UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the
U.S. BUREAU OF INDIAN AFFAIRS

WATER-RESOURCES INVESTIGATIONS
OPEN-FILE REPORT 80-960
FIGURE 2

Base from U. S. Geological Survey
Warner Springs 1960, Clark Lake 1960,
Santa Ysabel 1960, and Borrego 1959, 1:62,500

Geology from published maps by F. H. Weber (1963), W. R. Moyle, Jr. (1968, 1971), F. W. Giessner, B. A. Winters, and J. C. McLean (1971). F. W. Giessner and M. J. Mermod (1974), and T. H. Rogers (1965)

1 0 1 2 3 4 MILES

1 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 40 AND 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

14½°
TRUE NORTH
MAGNETIC NORTH

APPROXIMATE MEAN
DECLINATION 1970

CORRELATION OF MAP UNITS

Qya	Holocene	QUATERNARY	
Qp			
Qoa	Pleistocene		
Qof			
QTc	Pliocene - Pleistocene	QUATERNARY and TERTIARY	
pTt	Cretaceous	PRE-TERTIARY	
pTb			

DESCRIPTION OF MAP UNITS

Qya YOUNGER ALLUVIUM (Quaternary) - Boulders, gravel, sand, silt, and clay beneath alluvial fans and plains; largely above the water table, but, where saturated, yields as much as 200 gallons per minute to wells

Qp PLAYA DEPOSITS (Quaternary) - Clay with some sand and silt. Above the regional water table in this area

Qoa OLDER ALLUVIUM (Quaternary) - Arkosic gravel, sand, silt, and clay, generally weathered and unconsolidated. Yields as much as 200 gallons per minute to wells where saturated

Qof OLDER FAN DEPOSITS (Quaternary) - Boulders, gravel and sand, partly consolidated to consolidated. Yield as much as 200 gallons per minute to wells where saturated

QTc CONTINENTAL DEPOSITS (Quaternary and Tertiary) - Partly consolidated conglomerate, fanglomerate sandstone, claystone, siltstone, and clay. May yield 1 to 5 gallons per minute to wells; water generally unsuitable for domestic use

pTt TONALITE (Pre-Tertiary) - Igneous rocks comprising Tonalite, of Cretaceous age. Will yield 10 to 30 gallons per minute where rocks are highly fractured or deeply weathered

pTb BASEMENT COMPLEX (Pre-Tertiary) - Igneous and metamorphic rocks, of Cretaceous age or older. May yield 1 to 8 gallons per minute where rocks are highly fractured or deeply weathered

—?—? GEOLOGIC CONTACT - Approximately located. Queried where position is uncertain

FAULT - Dashed where approximately located; dotted where concealed

GEOLOGIC MAP OF THE LOS COYOTES INDIAN RESERVATION AND VICINITY, SAN DIEGO COUNTY, CALIFORNIA