Prepared in cooperation with the
U.S. BUREAU OF LAND MANAGEMENT

EXPLANATION

DESCRIPTION OF GEOLOGIC UNITS

QTo — UNCONSOLIDATED DEPOSITS--Unconsolidated to highly indurated sand, silt, clay, and gravel. Amount of induration increases with age and depth of deposits. Deposits range in age from Holocene to Pliocene. These deposits yield small to large (1 to 1200 gallons per minute) quantities of water to wells, depending upon the type of deposits encountered — QUATERNARY AND TERTIARY

pQr — CONSOLIDATED ROCK--Consolidated rocks are composed of rhyolite, andesite, basalt, limestone, dolomite, granite, tonalite, diorite, gneiss, quartz monzonite, and schist. These rocks range in age between Tertiary and pre-Cambrian. Yields small quantities of water to wells and springs where rocks are highly fractured — PRE-QUATERNARY

MAP SYMBOLS

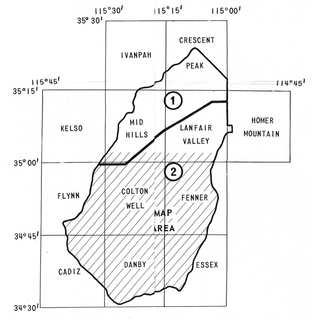
- GEOLOGIC CONTACT
- FAULT--Approximately located, queried where doubtful. D, downthrown side; U, upthrown side
- SURFACE-WATER DRAINAGE DIVIDE
- GROUND-WATER DRAINAGE DIVIDE
- DIRECTION OF GROUND-WATER MOVEMENT
- 1100 — WATER-LEVEL CONTOURS, 1981--Show altitude of water level, in feet, approximately located. Contour interval variable. National Geodetic Vertical Datum of 1929
- A — A' — LINE OF SECTION--Used to calculate outflow
- WELL AND NUMBER --
  - 8R1 / 33E1 — Domestic, stock, or unused / Dry or destroyed
- SPRING AND NUMBER --
  - 8RS1 / 32DS1 — Flowing / Dry

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 System, see text

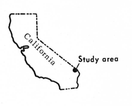


INDEX TO TOPOGRAPHICQUADRANGLES AND GEOLOGIC MAPPING

Compiled by:

(1) California Division ofMines and Geology. Modified by W. R. Moyle, Jr., 1981(unpublished)

(2) Southern Pacific LandCo. (1959-60)



APPROXIMATE MEAN DECLINATION, 1956

1 ½ 0 1 2 3 4 MILES
3000 0 3000 6000 9000 12000 15000 18000 21000 FEET
1 ½ 0 1 2 3 4 5 KILOMETERS

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

GENERALIZED GEOLOGIC MAP OF FENNER VALLEY AND VICINITY, SAN BERNARDINO COUNTY, CALIFORNIA, SHOWING DIRECTION OF GROUND-WATER MOVEMENT, WATER-LEVEL CONTOURS, LINE OF SECTION, AND LOCATION OF WELLS AND SPRINGS

Base from U.S. Geological Survey 1:250,000 topographic quadrangles, scale 1:62,500

Location of wells and springs by J. D. Horne, John Van Den Bergh, and D. A. Freiwald, 1982