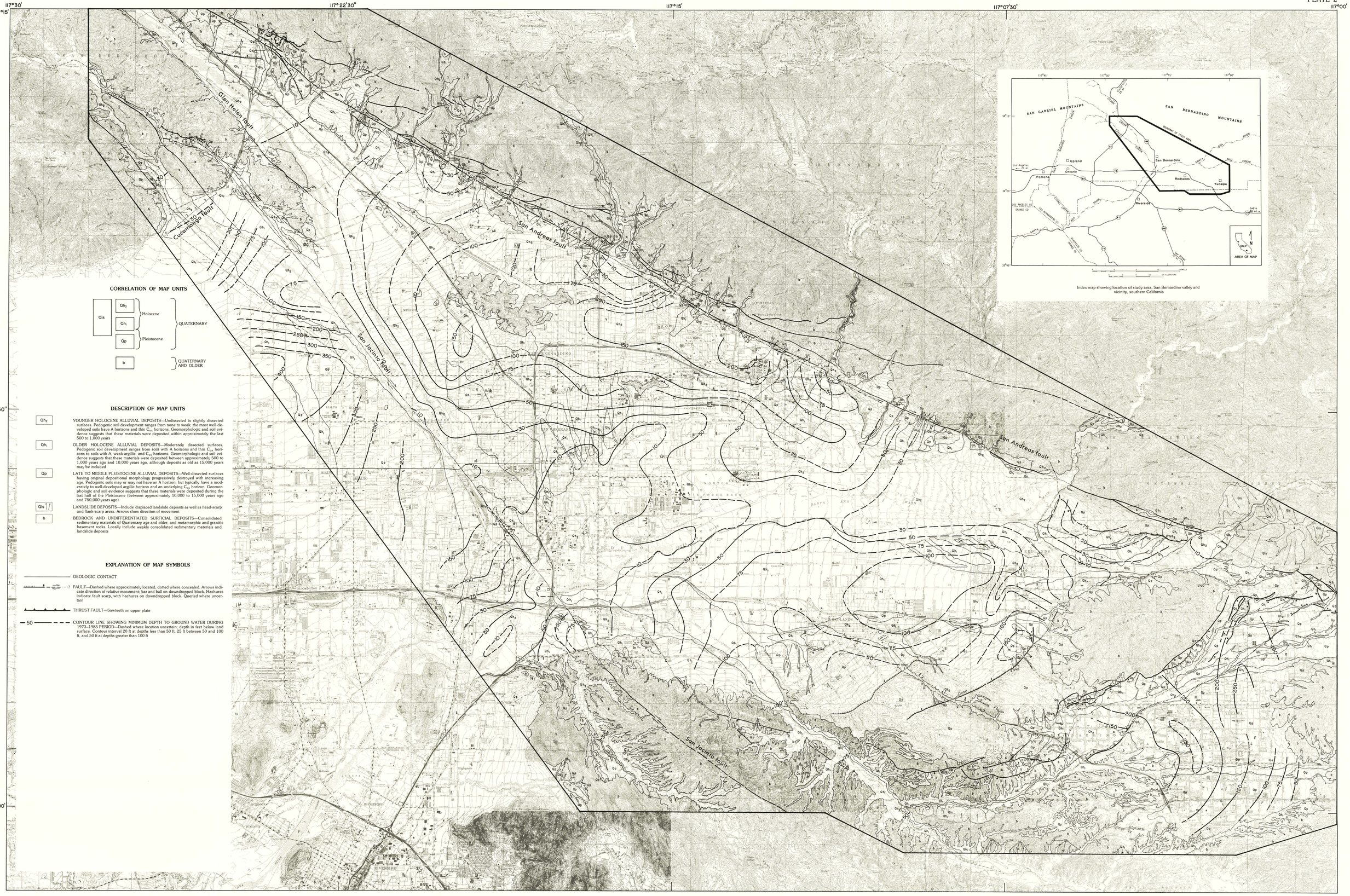

Index map showing location of study area, San Bernardino valley and vicinity, southern California

CORRELATION OF MAP UNITS

Qls	Qh_2	Holocene	QUATERNARY
	Qh_1		
	Qp	Pleistocene	
	b		QUATERNARY AND OLDER

DESCRIPTION OF MAP UNITS

Qh_2 — YOUNGER HOLOCENE ALLUVIAL DEPOSITS—Undissected to slightly dissected surfaces. Pedogenic soil development ranges from none to weak; the most well-developed soils have A horizons and thin C_{ca} horizons. Geomorphologic and soil evidence suggests that these materials were deposited within approximately the last 500 to 1,000 years

Qh_1 — OLDER HOLOCENE ALLUVIAL DEPOSITS—Moderately dissected surfaces. Pedogenic soil development ranges from soils with A horizons and thin C_{ca} horizons to soils with A, weak argillic, and C_{ca} horizons. Geomorphologic and soil evidence suggests that these materials were deposited between approximately 500 to 1,000 years ago and 10,000 years ago, although deposits as old as 15,000 years may be included

Qp — LATE TO MIDDLE PLEISTOCENE ALLUVIAL DEPOSITS—Well-dissected surfaces having original depositional morphology progressively destroyed with increasing age. Pedogenic soils may or may not have an A horizon, but typically have a moderately to well-developed argillic horizon and an underlying C_{ca} horizon. Geomorphologic and soil evidence suggests that these materials were deposited during the last half of the Pleistocene (between approximately 10,000 to 15,000 years ago and 750,000 years ago)

Qls — LANDSLIDE DEPOSITS—Include displaced landslide deposits as well as head-scarp and flank-scarp areas. Arrows show direction of movement

b — BEDROCK AND UNDIFFERENTIATED SURFICIAL DEPOSITS—Consolidated sedimentary materials of Quaternary age and older, and metamorphic and granitic basement rocks. Locally include weakly consolidated sedimentary materials and landslide deposits

EXPLANATION OF MAP SYMBOLS

GEOLOGIC CONTACT

FAULT—Dashed where approximately located, dotted where concealed. Arrows indicate direction of relative movement; bar and ball on downdropped block. Hachures indicate fault scarp, with hachures on downdropped block. Queried where uncertain

THRUST FAULT—Sawteeth on upper plate

50 — CONTOUR LINE SHOWING MINIMUM DEPTH TO GROUND WATER DURING 1973–1983 PERIOD—Dashed where location uncertain; depth in feet below land surface. Contour interval 20 ft at depths less than 50 ft, 25 ft between 50 and 100 ft, and 50 ft at depths greater than 100 ft

Base from U.S. Geological Survey, 1:24,000 Devore, 1966; El Casco, Redlands, Sunnymead, Keller Peak, 1967; Fontana, Harrison Mtn., Riverside East, Riverside West, San Bernardino North, San Bernardino South, Yucaipa, 1967 (photorevised 1973)

SCALE 1:48 000

1 ½ 0 1 2 3 4 5 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVALS 20 and 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology compiled from published and unpublished 1:24,000-scale geologic quadrangle maps as follows: the Devore quadrangle (D.M. Morton and J.C. Matti, unpublished mapping, 1975–1986); the San Bernardino North quadrangle (Miller, 1979; S.E. Carson and J.C. Matti, unpublished mapping, 1980–1986); the Harrison Mtn. quadrangle (S.E. Carson and J.C. Matti, unpublished mapping, 1980–1986); the Riverside West quadrangle (Rogers, 1967); the Riverside East quadrangle (Rogers, 1965); the Redlands quadrangle (Morton, 1978b; J.C. Matti and S.E. Carson, unpublished mapping, 1980–1986); the Yucaipa quadrangle (J.C. Matti, D.M. Morton, B.F. Cox, S.E. Carson, and T.J. Fortner, unpublished mapping, 1975–1986); the Sunnymead quadrangle (Morton, 1978a); and the El Casco quadrangle (J.C. Matti and D.M. Morton, unpublished mapping, 1975–1986)

CONTOUR MAP SHOWING MINIMUM DEPTH TO GROUND WATER, SAN BERNARDINO VALLEY AND VICINITY, 1973-1983