

CALIFORNIA GEOLOGICAL SURVEY
 MICHAEL REICHLER, ACTING STATE GEOLOGIST

STATE OF CALIFORNIA - GRAY DAVIS GOVERNOR
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 DEPARTMENT OF CONSERVATION - DARRYL YOUNG, DIRECTOR

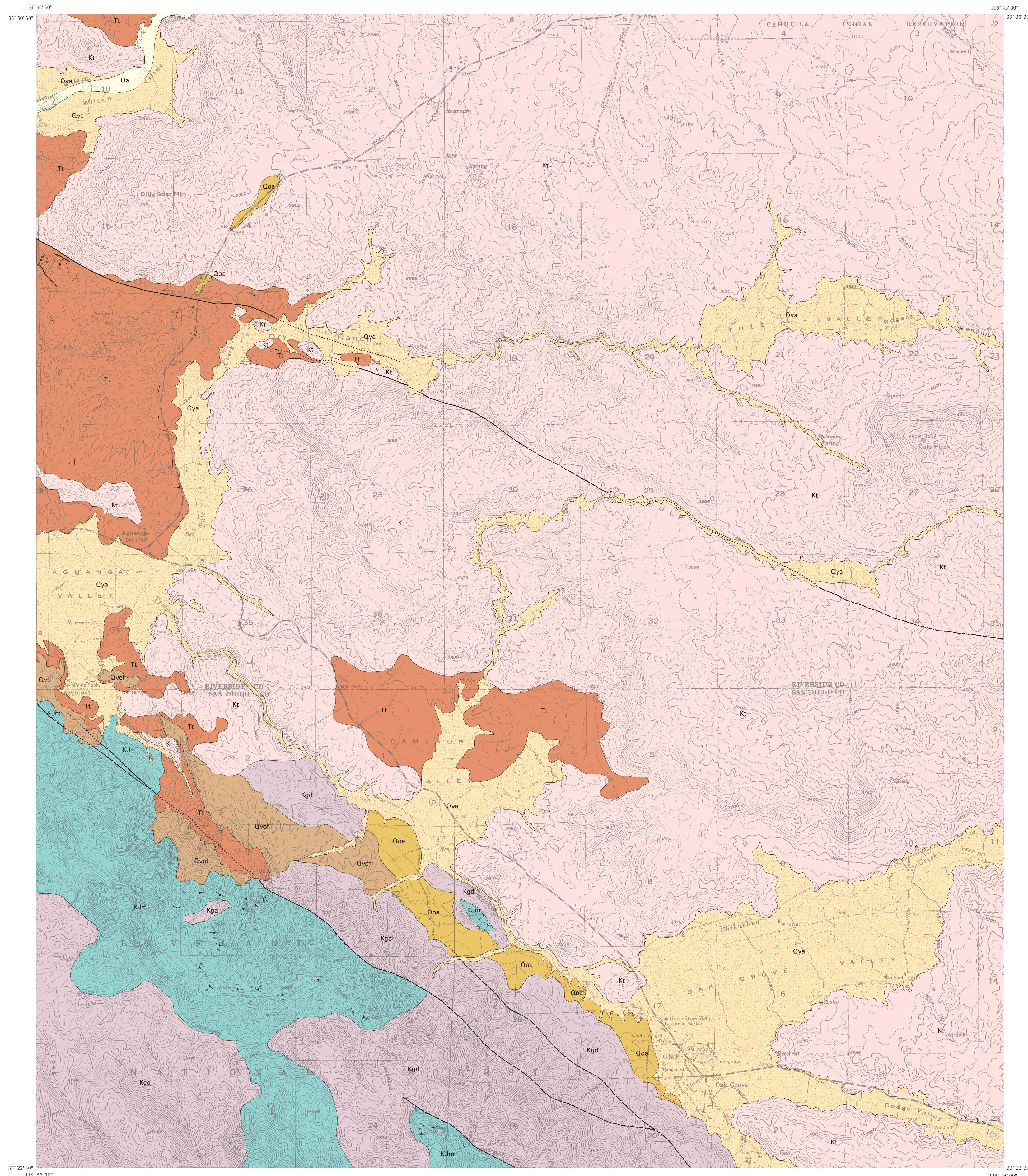
Prepared in cooperation with the U.S. Geological Survey



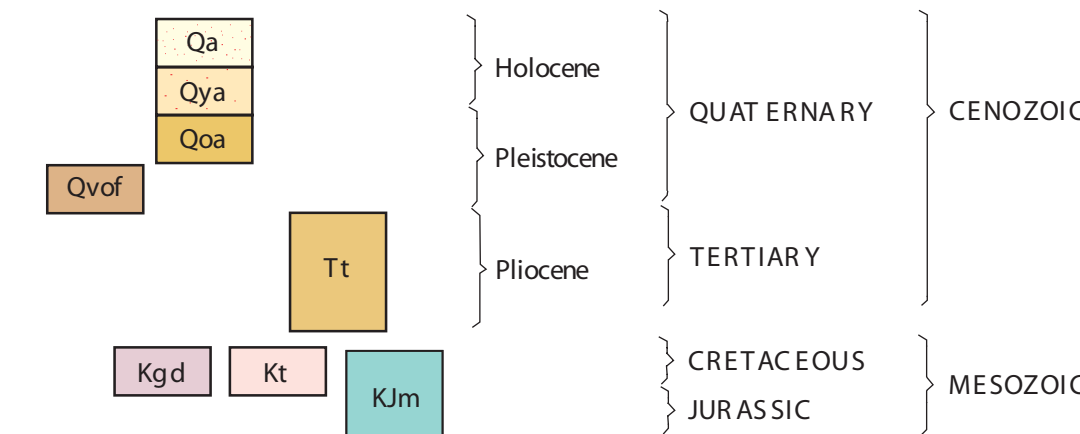
GEOLOGIC MAP OF THE
 AGUANGA 7.5' QUADRANGLE
 SAN DIEGO AND RIVERSIDE COUNTIES, CALIFORNIA:
 A DIGITAL DATABASE



Geologic Mapping by
 Siang S. Tan and Michael P. Kennedy
 2003
 Digital Preparation by:
 Kelly Corriea

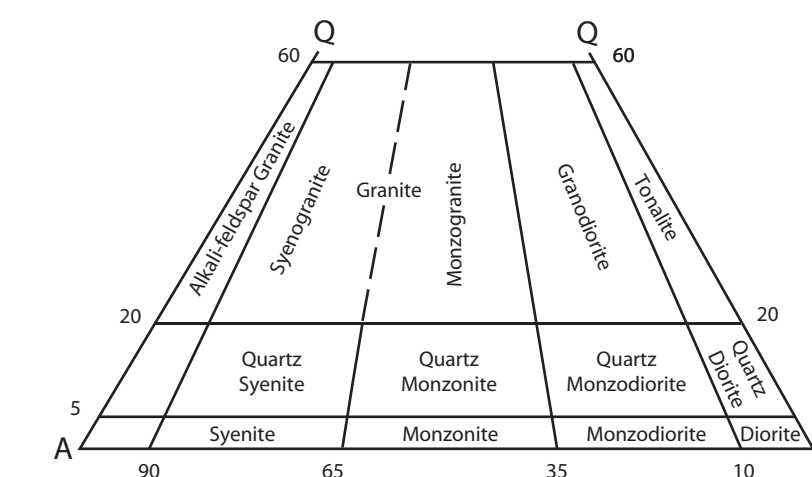


CORRELATION OF MAP UNITS



MAP SYMBOLS

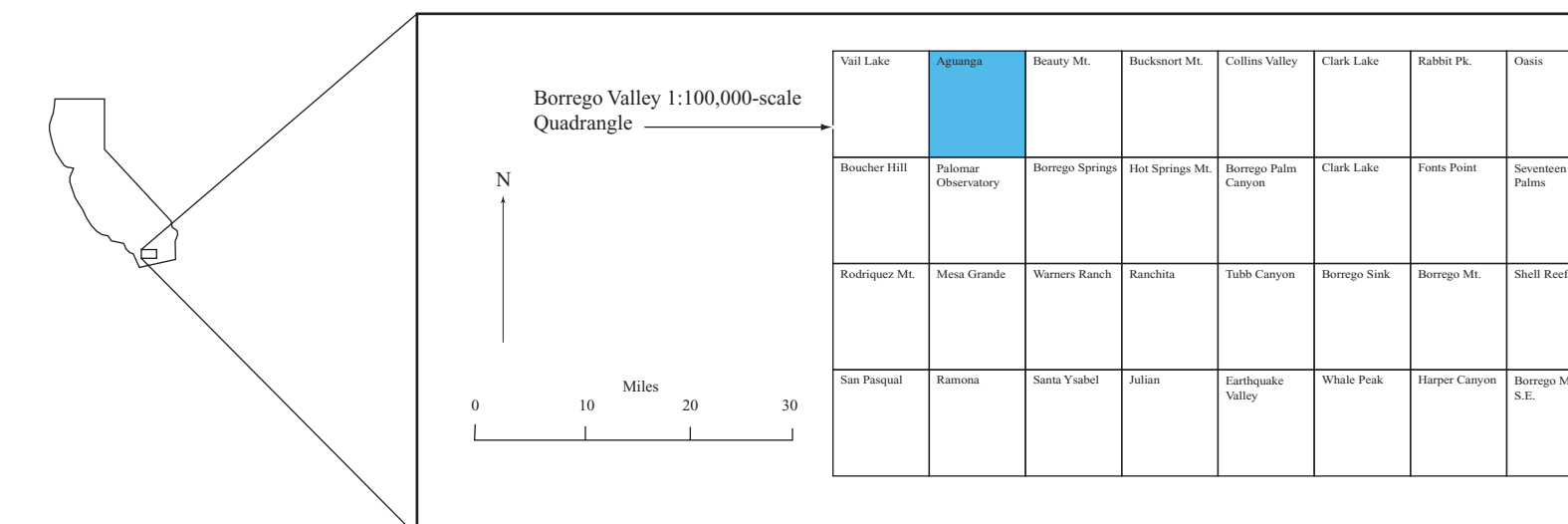
- Contact—Contact between geologic units; dotted where concealed.
- Fault—Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
- Landslide—Arrows indicate principal direction of movement. Queried where existence is questionable.
- Strike and dip of sedimentary beds.
- Strike and dip of foliation in metamorphic rock.



Classification of plutonic rock types (from IUGA, 1973, and *Streckeisen, 1973).
 A, alkali feldspar; P, plagioclase feldspar; Q, quartz.

*Streckeisen, A.L., 1973, Plutonic rocks—Classification and nomenclature recommended by the IUGA Subcommittee on Systematics of Igneous Rocks, *Geotitles*, vol. 18, pp. 26-30.

INDEX MAP



DESCRIPTION OF MAP UNITS

MODERN SURFICIAL DEPOSITS—Sediment that has been recently transported and deposited in channel and washes, on surfaces of alluvial fans and alluvial plains, and on hill slopes and in artificial fills. Soil-profile development is non-existent. Includes:

Qa Alluvial flood plain deposits (late Holocene)—Active and recently active alluvial deposits along canyon floors. Consists of unconsolidated sandy, silty, or clay-bearing alluvium. Does not include alluvial fan deposits at distal ends of channels

Qya Young alluvial flood plain deposits (Holocene and late Pleistocene)—Mostly poorly consolidated, poorly sorted, permeable flood plain deposits

Qoa Old alluvial flood plain deposits undivided (late to middle Pleistocene)—Fluvial sediments deposited on canyon floors. Consists of moderately well consolidated, poorly sorted, permeable, commonly slightly dissected gravel, sand, silt, and clay-bearing alluvium

Tt Temecula Arkose (late Pliocene)—The Temecula Arkose is pale greenish-yellow, well-indurated, medium- and coarse-grained sandstone with thin interstratified beds of fine-grained, tuffaceous sandstone, siltstone and claystone. The Temecula Arkose has been assigned an Irvingtonian I age based on a first occurrence of Tetramerx (Woodburne, 1987) placing it at approximately 1.9 Ma (late Pliocene)

Qvof Very old alluvial fan deposits (middle to early Pleistocene)—Mostly well-dissected, well-indurated, reddish-brown sand and gravel alluvial fan deposits

SEDIMENTARY ROCKS

Tt Temecula Arkose (late Pliocene)—The Temecula Arkose is pale greenish-yellow, well-indurated, medium- and coarse-grained sandstone with thin interstratified beds of fine-grained, tuffaceous sandstone, siltstone and claystone. The Temecula Arkose has been assigned an Irvingtonian I age based on a first occurrence of Tetramerx (Woodburne, 1987) placing it at approximately 1.9 Ma (late Pliocene)

PLUTONIC ROCKS

Kgd Granodiorite and hybrid granitic rocks undivided (mid-Cretaceous)—Mostly deeply weathered, medium- to coarse-grained, hornblende biotite granodiorite. Also includes a wide variety of hybrid granitic rocks. In addition some assemblages include large proportions of schist and gneiss.

Kt Tonalite undivided (mid-Cretaceous)—Mostly massive, coarse-grained, light gray, hornblende biotite tonalite

METAMORPHIC ROCKS

Kjm Metavolcanic and metasedimentary rocks undivided (Cretaceous and Jurassic)—Mostly Mesozoic schist, gneiss and quartzite. Commonly mixed with metagranitic rocks.

PREVIOUS STUDIES REFERRED TO

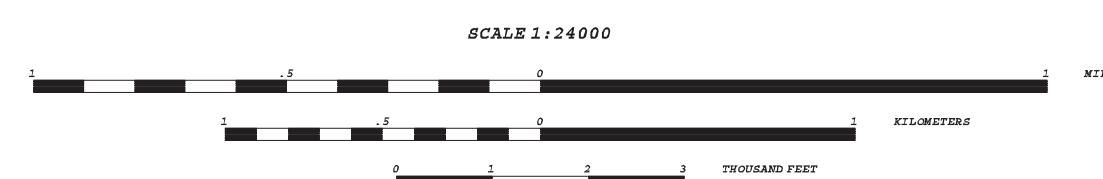
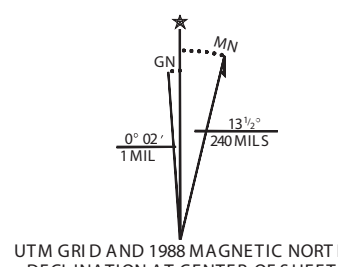
Mann, J.F., 1955, Geology of a portion of the Elsinore Fault Zone California: Division of Mines and Geology Special Report 43, p. 22, map scale 1:62,500.

Weber, F.H., Jr., 1963, Geology and mineral resources of San Diego County, California: California Division of Mines and Geology, County Report 3, Plate 1, scale 1:120,000.

Weber, F.H., Jr. and Rogers, T.H., 1964, Reconnaissance mapping for the State Geologic Map, Aguanga 7.5' quadrangle: California Division of Mines and Geology, unpublished map, scale 1:24,000.

Woodburne, M.O., 1987, editor, Cenozoic mammals of north America: Geochronology and biostratigraphy: Berkeley and Los Angeles Univ. California Press, 336 p.

Topographic base by U.S. Geological Survey
 7.5' Aguanga Quadrangle
 Polyconic projection, contour interval 20 feet
 dotted lines 10 feet.



This report is preliminary and has not been reviewed for conformity with California Department of Conservation, California Geological Survey editorial standards.

