Preliminary Geologic Map available from:
http://www.conservation.ca.gov/cgs/rghm/rgm/preliminary_geologic_maps.htm

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Prepared in cooperation with the U.S. Geological Survey,
Southern California Areal Mapping Project

GEOLOGIC MAP OF THE MATILIJA 7.5' QUADRANGLE VENTURA COUNTY, CALIFORNIA: A DIGITAL DATABASE

VERSION 1.0

By
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Digital Database
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2006

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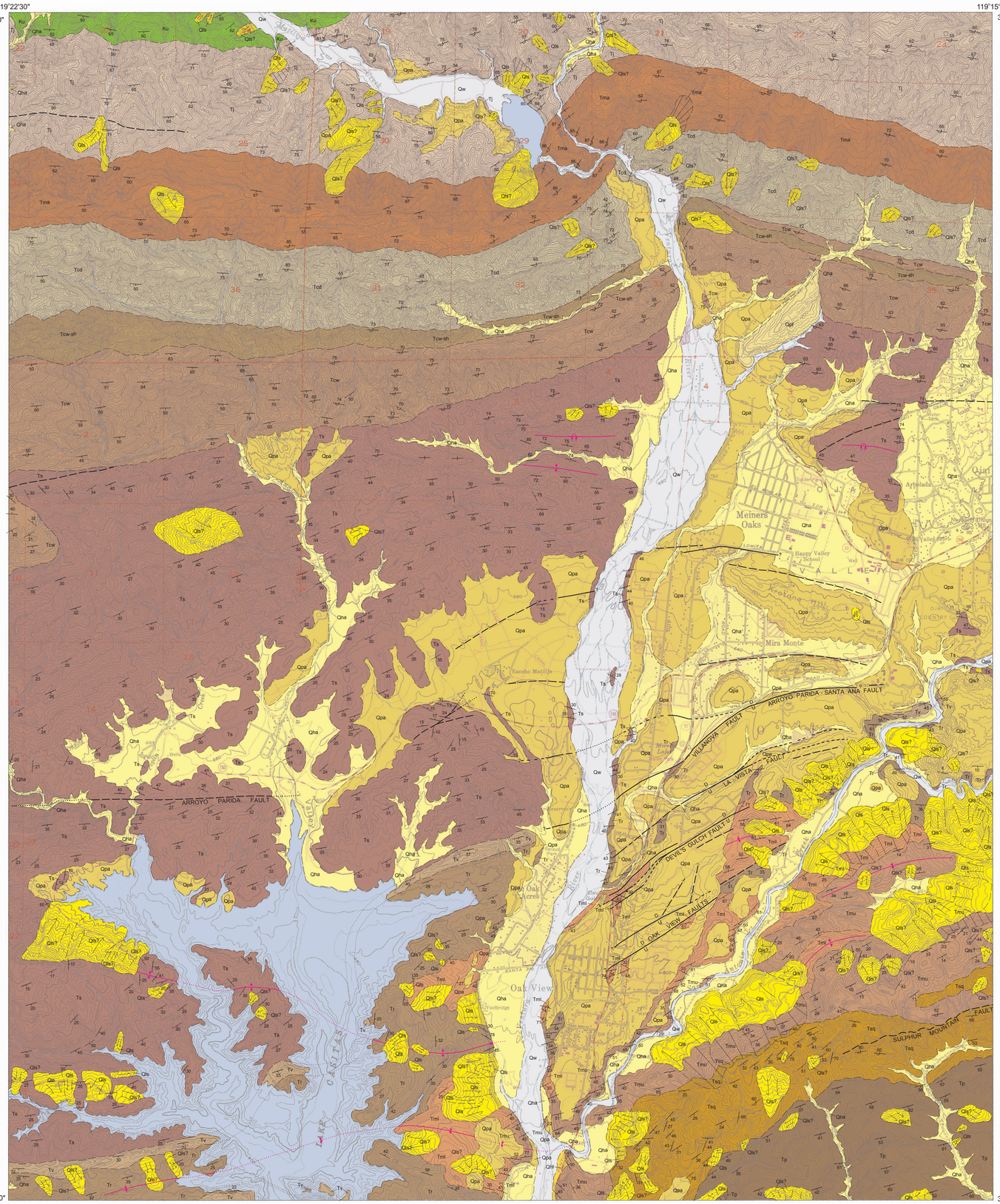
2. California Geological Survey, 801 K Street, MS 12-32, Sacramento, CA 95814

119°22'30" 119°15'00"
34°30'00" 34°30'00"



34°22'30" 34°22'30"
119°22'30" 119°15'00"

Topographic base from U.S. Geological Survey
Matilija 7.5-minute Quadrangle, 1988
UTM projection, North American Datum 1927

UTM GRID AND 1988 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Scale 1:24,000

Contour Interval 40 Feet
Dotted Lines Represent Half-Interval Contours

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Unit Explanation

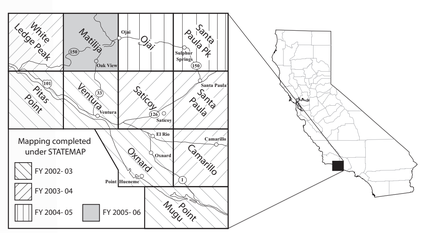
- **Qw** — **Active wash deposits within major river channels (Holocene)** - Composed of unconsolidated silt, sand and gravel.
- **Qha** — **Alluvial and colluvial deposits, undivided (Holocene)** - Located on the floors of valleys; includes active stream deposits in hill slope areas; composed of unconsolidated sandy clay with some gravel.
- **Qhf** — **Alluvial fan deposits (Holocene)** - Deposited by streams emanating from mountain canyons onto alluvial valley floors; deposits originate as debris flows, hyper-concentrated mudflows, or braided stream flows; composed of moderately to poorly sorted, and moderately to poorly bedded, sandy clay with some gravel.
- **Qls** — **Landslide deposits (Holocene to late Pleistocene)** - Includes numerous active landslides, composed of weathered, broken up rocks; extremely susceptible to renewed landsliding, including their head scarp areas.
- **Qpa** — **Alluvial deposits, undivided (late Pleistocene)** - Consists of semi-consolidated silt, sand, clay, and gravel.
- **Qpf** — **Alluvial fan deposits (late to middle Pleistocene)** - Semi-consolidated poorly sorted gravel, boulder, sand, silt and clay; often form elevated, slightly tilted, terraces on hill slope areas.
- **Tp** — **Pico Formation, undivided (Pliocene)** - Composed of claystone, siltstone, and sandstone; locally pebbly; generally susceptible to landsliding.
- **Tsq** — **Sisquoc Shale (Pliocene-Miocene)** - Silty shale and claystone; generally susceptible to landsliding. Locally contains siliceous shale similar to the Monterey Formation.
- **Tmu / Tml** — **Monterey Formation (middle and late Miocene)** - Consists of siliceous and diatomaceous shale and some sandstone and limestone; generally susceptible to landsliding. Tml = lower section, containing punky thin-bedded shale; Tmu = upper section, composed of platy brittle siliceous thin-bedded shale.
- **Tr** — **Rincon Shale (early Miocene)** - Composed of shale and siltstone; generally susceptible to landsliding.
- **Tv** — **Vaqueros Sandstone (early Miocene)** - Consists of sandstone, locally calcareous.
- **Ts** — **Sespe Formation (Oligocene)** - Composed of sandstone; locally pebbly, siltstone and claystone; rocks are generally reddish in color.
- **Tcw / Tcw-sh** — **Coldwater Sandstone (late Eocene)** - Composed of hard arkosic sandstone with siltstone and shale interbeds; locally reddish in color, similar to appearance of Sespe Formation. Tcw-sh consists predominantly of shale.
- **Tcd** — **Cozy Dell Shale (late Eocene)** - Consists of micaceous shale with arkosic sandstone interbeds; generally susceptible to landsliding.
- **Tma** — **Matilija Sandstone (middle to late Eocene)** - Composed of hard arkosic sandstone with micaceous shale interbeds.
- **Tj** — **Juncal Formation (early to middle Eocene)** - Consists of micaceous shale with arkosic sandstone interbeds; generally susceptible to landsliding.
- **Ku** — **Unnamed conglomerate (late Cretaceous)** - Conglomerate with arkosic sandstone and micaceous shale interbeds.

Unit Correlation

Qw	Qha	Qhf	Qls	Holocene	QUATERNARY; CENOZOIC
		Qpa		Pleistocene	QUATERNARY; CENOZOIC
		Qpf			QUATERNARY; CENOZOIC
		Tp		Pliocene	TERTIARY; CENOZOIC
		Tsq		Miocene	TERTIARY; CENOZOIC
		Tmu			TERTIARY; CENOZOIC
		Tml			TERTIARY; CENOZOIC
		Tr			TERTIARY; CENOZOIC
		Tv			TERTIARY; CENOZOIC
		Ts		Oligocene	TERTIARY; CENOZOIC
		Tcw / Tcw-sh		Eocene	TERTIARY; CENOZOIC
		Tcd			TERTIARY; CENOZOIC
		Tma			TERTIARY; CENOZOIC
		Tj			TERTIARY; CENOZOIC
		Ku		CRETACEOUS	MESOZOIC

Symbol Explanation

- Contact between map units - Dashed where approximately located or inferred; dotted where concealed.
- Fault - Solid where accurately located; long dash where approximately located; short dash where inferred; dotted where concealed; queried where location is uncertain. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
- Axis of anticline - Approximately located; dotted where concealed. Arrow indicates direction of plunge.
- Axis of syncline - Approximately located; dotted where concealed.
- Axis of overturned syncline - Approximately located; dotted where concealed.
- Strike and dip of bedding.
- Vertical bedding.
- Strike and dip of overturned bedding.
- Landslide - Arrows indicate principal direction of movement, queried where existence is questionable; hachured where headscarp is mappable; some geologic features are drawn within headscarp.



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