U.S. DEPARTMENT OF THE INTERIOR U.S. GEOLOGICAL SURVEY GEOLOGIC MAP OF THE SAWMILL MOUNTAIN QUADRANGLE, KERN AND VENTURA COUNTIES, CALIFORNIA By Karl S. Kellogg and Daniel P. Miggins 2002 OPEN FILE REPORT 02-406 Version 1.0 Pamphlet accompanies map

Geology was mapped 1997-1998. Digital assistance by Amy L. Zoller and D. Paco VanSistine. This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic code.

This map was produced on request, directly from digital files, on an electronic plotter. It is also available as a PDF file at http://pubs.usgs.gov/of/2002/ofr-02-402

Base compiled from aerial photographs taken 1987. Field checked 1988. Map edited 1991. Lambert Conformal Conic projection. 1927 North American datum. 10,000-foot grid based on California coordinate system, zone 5 1,000-meter Universal Transverse Mercator grid ticks, zone 11.

DESCRIPTION OF MAP UNITS

Surficial Deposits:

Qlsr Recent landslide deposits (Holocene)
Qa Alluvium (Holocene)
Qac Alluvium and colluvium (Holocene)
Qc Colluvium (Holocene)
Qw Wetland deposits (Holocene)
Qls Landslide deposits (Holocene and/or upper Pleistocene)
Qf1 Younger fan deposits (Holocene)
Qf2 Older fan deposits (Holocene? and upper Pleistocene)
Qf3 Highly dissected fan deposits (middle? Pleistocene)
Qd Diamicton (middle? Pleistocene)
Qae Alluvium of San Emigdio Mesa (middle? Pleistocene)

Units South of San Andreas Fault:

QTm Morales Formation (Pleistocene and Pliocene) Tqb Brown member Tqw White arkosic sandstone member Tlc Lockwood Clay (Pliocene?) Tc Caliente Formation, undifferentiated (Miocene) Tcu Upper Caliente Formation, undifferentiated Tcp Sedimentary breccia and sandstone of Cowhead Potrero Tcw White sandstone and conglomerate member Tcr Red sandstone and siltstone member Tcc Volcanic-clast conglomerate member Tcg Granite-clast conglomerate member Tca Arkosic member

Plush Ranch Formation (lower Miocene and upper Oligocene):

Tps Sandstone member Tpbx Granite-megabreccia member Tpba Basalt member Tpb Granite- and gneiss-breccia facies Tpbn Gneiss-breccia facies Ts Simmler Formation (lower Miocene to upper Eocene) Tmsh Marine shale (lower Eocene) Tmy Sawmill Mountain mylonite (Paleocene?) Tps Pelona Schist (early Paleocene) Kpb Metabasalt Kgp Granite of Mt. Pinos (Cretaceous) Kgpb Border phase Kgro Orange granite (Cretaceous) Kgrn Granite of Cerro Noroeste (Cretaceous) Kgdg Granodiorite gneiss (Cretaceous) KXgb Granite of Cerro Noroeste and biotite gneiss, undivided (Cretaceous and Lower Proterozoic?) KXmg Migmatitic biotite gneiss (Cretaceous and lower Proterozoic?) JXqz Quartzite (Jurassic?, Triassic? and (or) Lower Proterozoic?) JXma Marble (Jurassic?, Triassic? and (or) Lower Proterozoic?) Xbg Biotite gneiss (Lower Proterozoic?) Xbhg Biotite-hornblende gneiss (Lower Proterozoic?) Xag Biotite augen gneiss (Lower Proterozoic?)—

Rocks north of San Andreas fault:

Tt Temblor Formation (middle? Miocene) TKmbx Mylonite breccia (lower Tertiary to Cretaceous?) Kgr Granitic rocks (Cretaceous) Kgd Quartz diorite and granodiorite (Cretaceous)

Metamorphic rocks in roof pendants and inliers in granitic rocks (Jurassic, Triassic, and (or) Paleozoic:

cghf Hornfels cgms Meta-sandstone cgmw White marble cgmg Gray marble cgqz Quartzite

Rocks in the San Andreas fault zone:

QTgo Fault gouge (Holocene to Miocene Twa White arkosic sandstone and conglomerate (Miocene) Kgbx Green silicified metasedimentary rocks (Cretaceous)