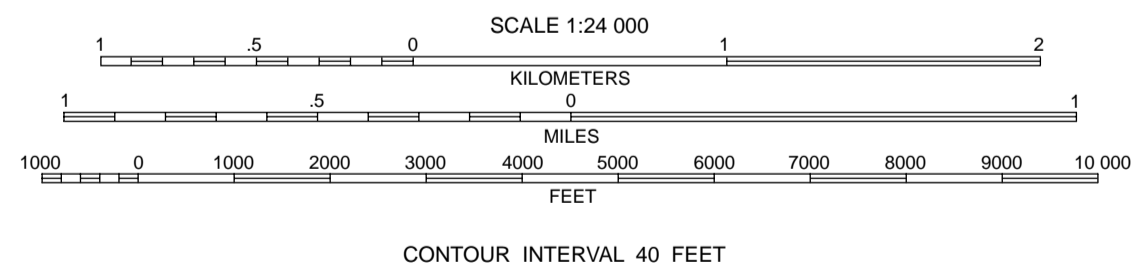
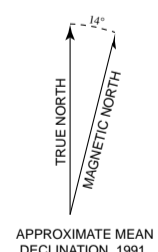


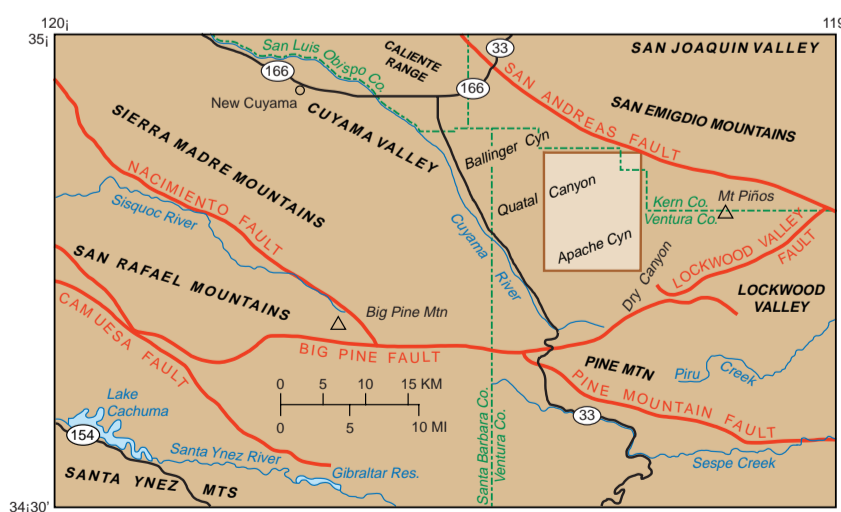
Base from U.S. Geological Survey
7.5 Apache Canyon quadrangle, 1991
Polyconic projection



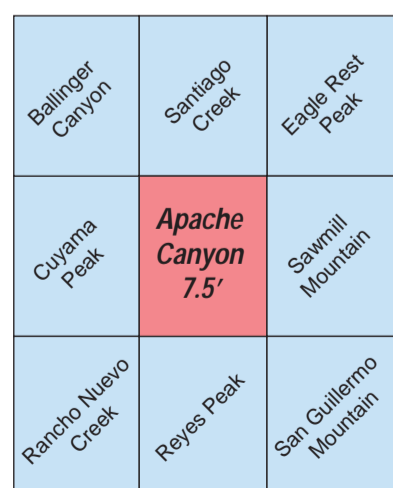
Geology mapped by
Paul Stone, 1997-99



LOCATION OF CUYAMA 30'X60' QUADRANGLE

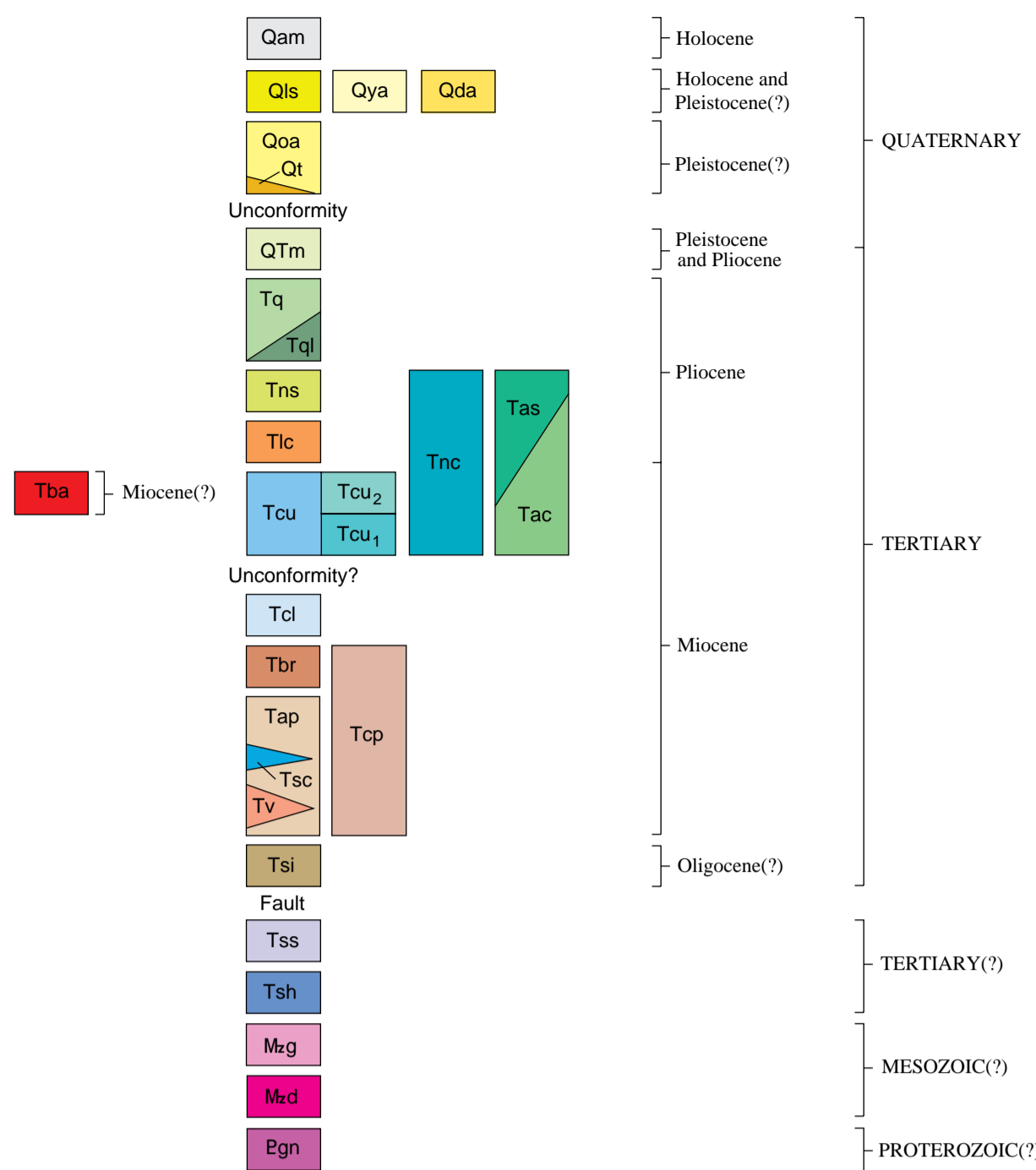


LOCATION OF APACHE CANYON 7.5' QUADRANGLE IN
CUYAMA 30'X60' QUADRANGLE



SURROUNDING 7.5' QUADRANGLES

CORRELATION OF MAP UNITS



LIST OF MAP UNITS

(see pamphlet for Description of Map Units)

Qam	Alluvium of modern stream channels (Holocene)
Qls	Landslide deposits, talus, and colluvium (Holocene and Pleistocene?)
Qya	Young alluvium (Holocene and Pleistocene?)
Qda	Debris-apron deposits (Holocene or Pleistocene)
Qoa	Old alluvium (Pleistocene?)
Ql	Tuff(?) (Pleistocene?)
QTm	Morales Formation (Pleistocene and Pliocene)
Tq	Quatal Formation (Pliocene)—Includes:
Tql	Lower part
Tns	Sandstone of Nettle Spring (Pliocene)
Tnc	Sandstone of Nettle Spring and upper part of Caliente Formation, undivided (Pliocene and late Miocene)
Tas	Sandstone and conglomerate of lower Apache Canyon (Pliocene or late Miocene)—Divided into:
Tac	Sandstone
Tlc	Conglomerate
Tba	Lockwood Clay (Pliocene)
Tba	Basalt (Miocene?)
Tcu	Caliente Formation (late and middle Miocene)—Consists of:
Tcu2	Upper part, undivided (late Miocene)—Locally divided into:
Tcu1	Unit 2
Tcl	Unit 1
Tcl	Lower part (late and middle Miocene)
Tbr	Sandstone of Blue Rock Spring (Miocene)
Tcp	Sedimentary breccia and sandstone of Cowhead Potrero (Miocene)
Tap	Sedimentary breccia of Apache Potrero (Miocene)
Tac	Sandstone and conglomerate (Miocene)
Tv	Vaqueros Formation (lower Miocene)
Tsi	Simmler(?) Formation (Oligocene?)
Tss	Sandstone and shale (Tertiary?)—Consists of:
Tsh	Upper sandstone unit
Tsh	Lower thin-bedded sandstone and shale unit
Mg	Granite and diorite (Mesozoic?)—Consists of:
Md	Granite
Md	Diorite
Egn	Gneiss (Proterozoic?)

—	Contact
- - -	Contact—Approximately located
- - - - -	Contact—Inferred
- - - ? - -	Contact—Questionable
65°	Fault—Showing dip where known. Bar and ball on downthrown side. Dotted where concealed
- - - - -	Fault—Inferred. Dotted where concealed
- - - ? - -	Fault—Questionable. Bar and ball on downthrown side. Dotted where concealed
35°	Thrust or reverse fault—Showing dip where known. Teeth on upthrown side. Dotted where concealed
- - - + - -	Anticline—Trace of axial surface; approximately located. Dotted where concealed
- - - + - -	Anticline—Trace of axial surface; inferred. Dotted where concealed
- - - + - -	Overturned anticline—Trace of axial surface; approximately located. Dotted where concealed
- - - + - -	Overturned anticline—Trace of axial surface; inferred. Dotted where concealed
- - - + - -	Syncline—Trace of axial surface; approximately located. Dotted where concealed
- - - + - -	Syncline—Trace of axial surface; inferred. Dotted where concealed
50°	Strike and dip of beds
+	Inclined
+	Vertical
+	Horizontal
+	Overturned
50°	Strike and dip of foliation—Origin not determined
55°	Strike and dip of metamorphic foliation
- - - - -	Marker bed
- - - - -	Ground-failure crown scarp
●	Locality of analyzed tuff in Morales Formation

GEOLOGIC MAP AND DIGITAL DATABASE OF THE APACHE CANYON 7.5' QUADRANGLE, VENTURA AND KERN COUNTIES, CALIFORNIA

Version 1.0

By
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Digital preparation by
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2000