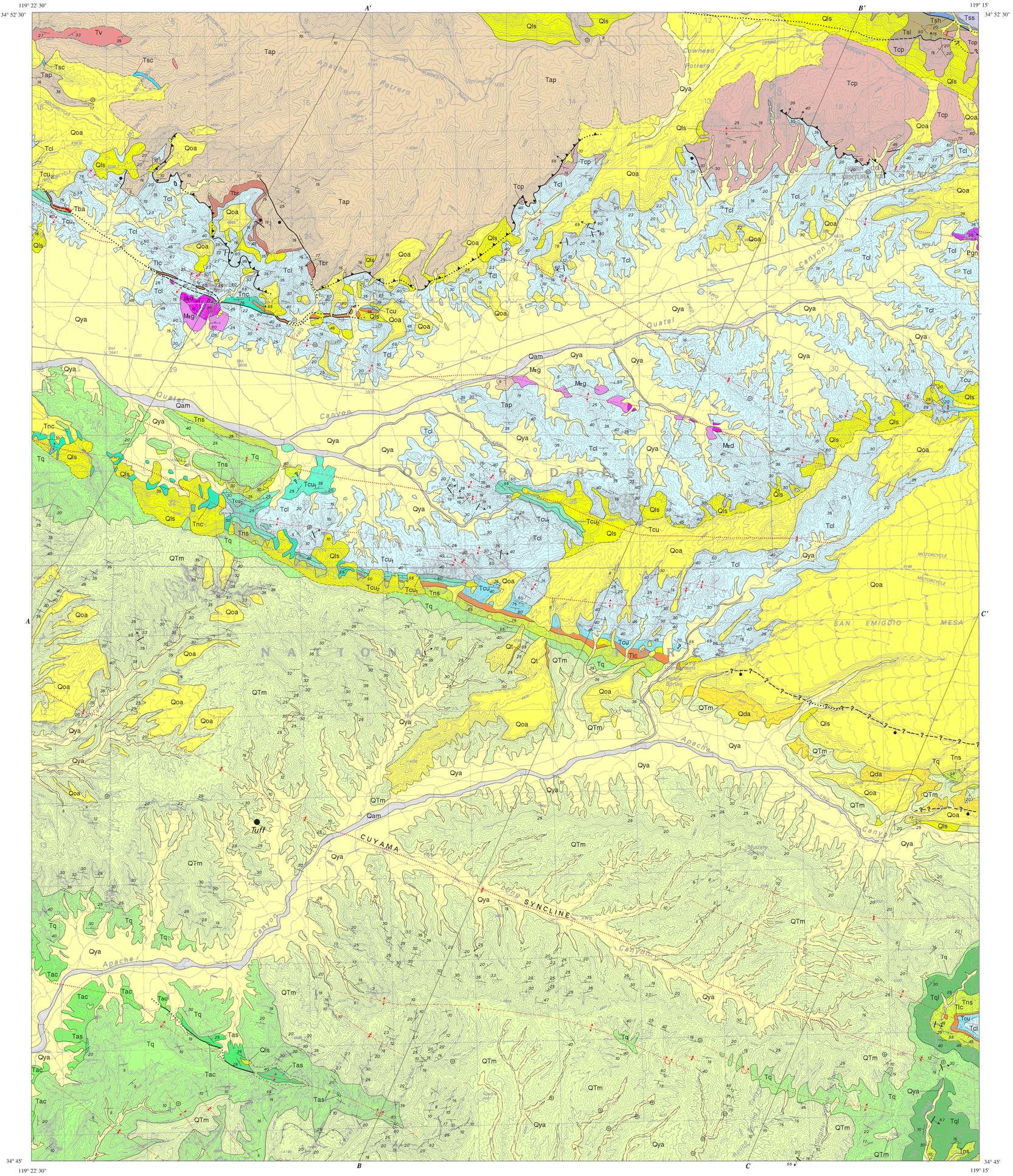
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
CALIFORNIA DIVISION OF MINES AND GEOLOGY

OPEN-FILE REPORT
00–359, Version 1.0 (SHEET 1 OF 2)
Pamphlet accompanies map



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?)**

Qt — **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)**

Sandstone and conglomerate of lower Apache Canyon (Pliocene or late Miocene)—Divided into:

Tas — **Sandstone**

Tac — **Conglomerate**

Tlc — **Lockwood Clay (Pliocene)**

Tba — **Basalt (Miocene?)**

Caliente Formation (late and middle Miocene)—Consists of:

Tcu — **Upper part, undivided (late Miocene)**—Locally divided into:

Tcu_2 — **Unit 2**

Tcu_1 — **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)**

Tsc — **Sandstone and conglomerate (Miocene)**

Tv — **Vaqueros Formation (lower Miocene)**

Tsi — **Simmler(?) Formation (Oligocene?)**

Sandstone and shale (Tertiary?)—Consists of:

Tss — **Upper sandstone unit**

Tsh — **Lower thin-bedded sandstone and shale unit**

Granite and diorite (Mesozoic?)—Consists of:

Mzg — **Granite**

Mzd — **Diorite**

Pgn — **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

Strike and dip of beds

50 — **Inclined**

Vertical

Horizontal

80 — **Overturned**

65 — **Strike and dip of foliation**—Origin not determined

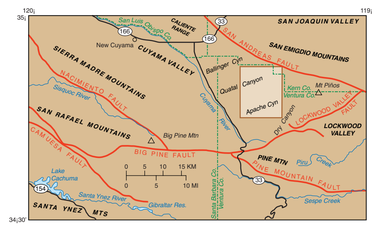
55 — **Strike and dip of metamorphic foliation**

Marker bed

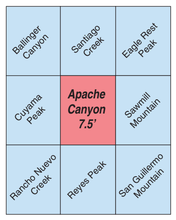
Ground-failure crown scarp

Locality of analyzed tuff in Morales Formation

LOCATION OF CUYAMA 30'X60' QUADRANGLE



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



SURROUNDING 7.5' QUADRANGLES

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

Version 1.0

By
Paul Stone

Digital preparation by
Pamela M. Cossette

2000