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

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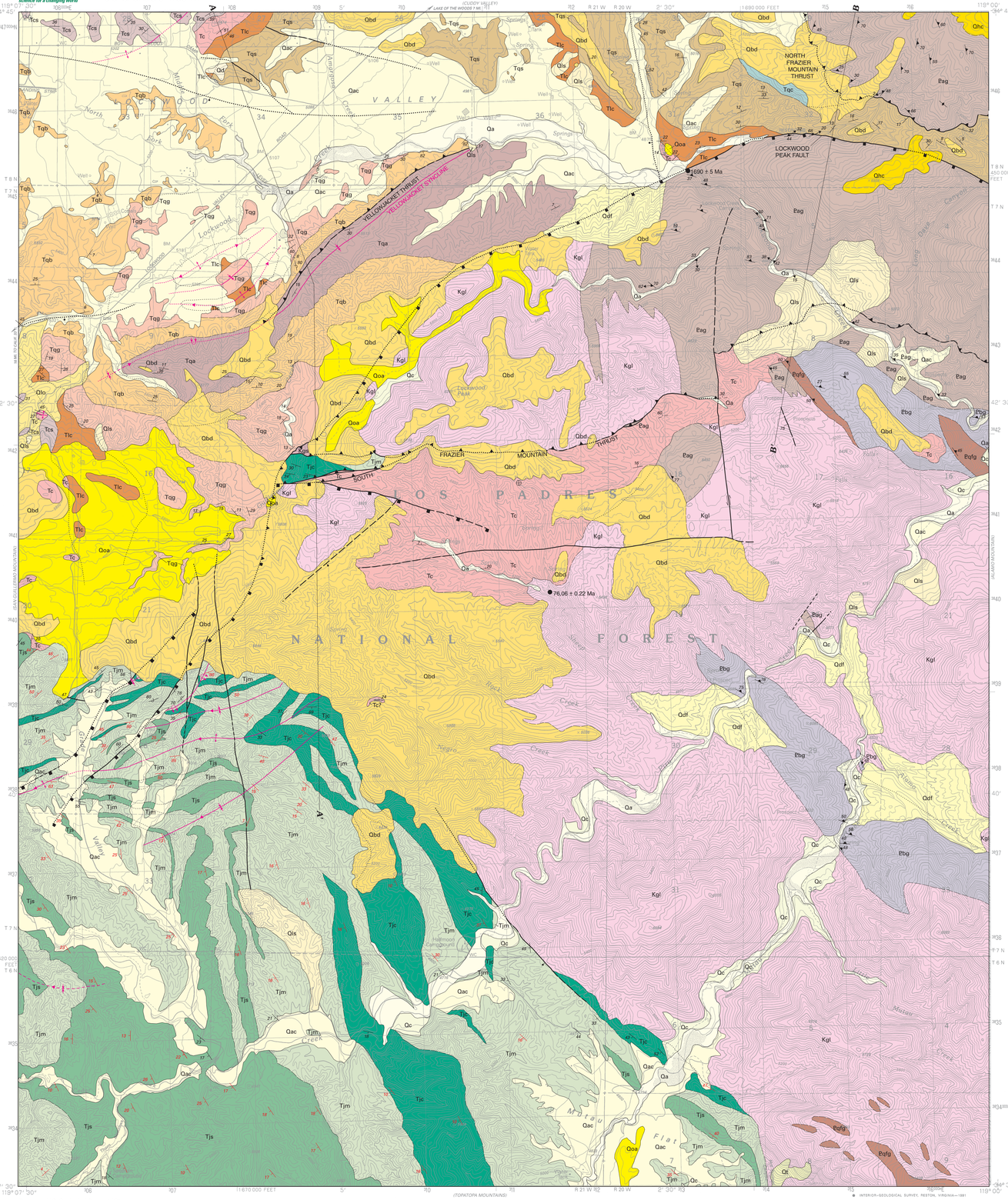
*Pamphlet accompanies map*




Base from U.S. Geological Survey, 1991

Lambert conformal conic projection, 1927 North American Datum
10,000-foot grid ticks: California Coordinate System, zone 5
1000-meter Universal Tranverse Mercator grid, zone 11

1991 MAGNETIC DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

Geology was mapped 1996-1997.
Digital Cartography by T. R. Brandt.
Cartographic assistance from O.D. Young.
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.

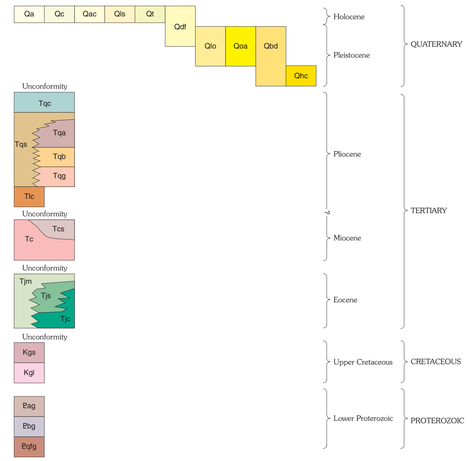
# GEOLOGIC MAP OF THE LOCKWOOD VALLEY QUADRANGLE, VENTURA COUNTY, CALIFORNIA

By

Karl S. Kellogg

2001

## CORRELATION OF MAP UNITS




## LIST OF MAP UNITS

- Qa — **Alluvium (Holocene)**
- Qc — **Colluvium (Holocene)**
- Qac — **Alluvium, loess, and colluvium, undifferentiated (Holocene)**
- Qls — **Landslide deposits (Holocene)**
- Qt — **Talus (Holocene)**
- Qdf — **Debris-flow deposit (Holocene and upper Pleistocene)**
- Qlo — **Older landslide deposit (upper? Pleistocene)**
- Qoa — **Older alluvium (upper? Pleistocene)**
- Qbd — **Boulder diamicton (Pleistocene)**
- Qhc — **High-level conglomerate (lower? Pleistocene)**

**Quatal Formation (Pliocene)**

- Tqc — **Sandstone and conglomerate member**
- Tqs — **Sandstone and siltstone member**
- Tqa — **Arkosic member**
- Tqb — **Brown member**
- Tqg — **Green claystone and sandstone member**
- Tlc — **Lockwood Clay (Pliocene or Miocene)**
- Tc — **Caliente Formation, undifferentiated (Miocene)**
- Tcs — **Green claystone and sandstone member**

**Juncal Formation (Eocene)**

- Tjm — **Mixed shale and sandstone member**
- Tjs — **Sandstone member**
- Tjc — **Conglomerate member**
- Kgs — **Quartz monzonite of Sheep Creek (Upper Cretaceous)**
- Kgl — **Granodiorite of Lockwood Mountain (Upper Cretaceous)**
- Ꝑag — **Frazier Mountain augen gneiss (Lower Proterozoic)**
- Ꝑbg — **Biotite gneiss (Lower Proterozoic)**
- Ꝑqfg — **Quartzofeldspathic gneiss (Lower Proterozoic)**

**Contact** -- Dashed where approximately located, dotted where concealed

**Normal fault** -- Dashed where approximately located; showing dip where known; dotted where concealed; bar and ball on downthrown side

**Reverse fault** -- Dashed where approximately located; dotted where concealed; rectangles in upper plate

**Tear fault** -- Dashed where approximately located; dotted where concealed; arrows show apparent strike-slip movement

**Thrust fault** -- Dashed where approximately located; dotted where concealed; sawteeth on upper plate

**Plunging anticline** -- Trace of axial plane; dotted where concealed; showing direction of plunge

**Plunging anticline** -- Trace of axial plane; dashed where inferred; dotted where concealed; showing direction of plunge

**Overturned anticline** -- Trace of axial plane

**Overturned syncline** -- Trace of axial plane; dotted where concealed

**Strike and dip of beds**

- 40 — Inclined
- 50 — Inclined -- from Dibblee (1979)
- 60 — Inclined -- approximate
- Horizontal
- 70 — Overturned

**Strike and dip of foliation**

- 60 — Inclined
- Vertical

**Bearing and plunge of lineation**

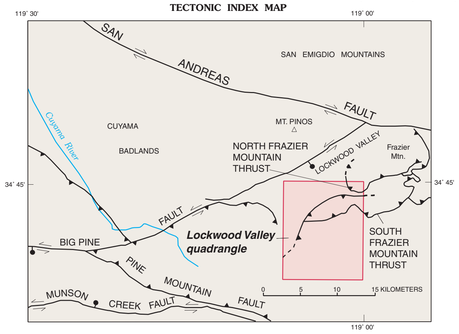
- 35

**Strike and dip of foliation and bearing and plunge of associated lineation**

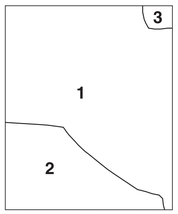
- 60, 45

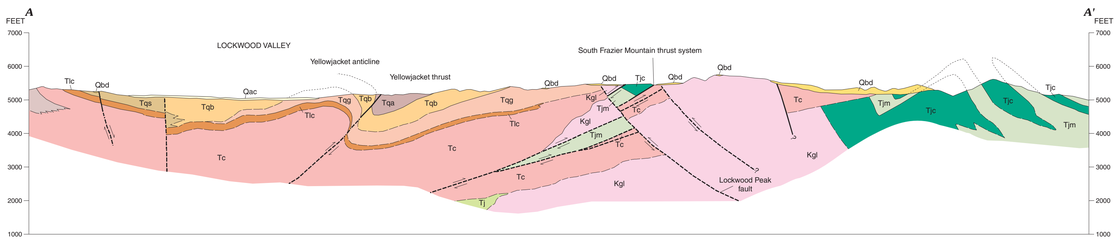
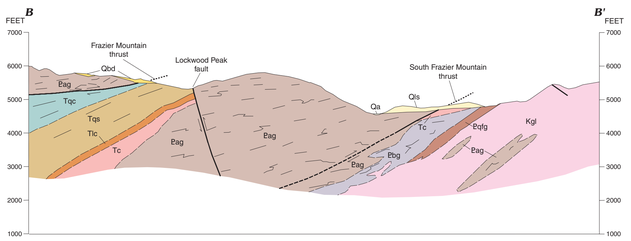
●1690 ± 5 Ma — **Uranium - Lead zircon date** (W.R. Premo, unpub. data, 1997)

## TECTONIC INDEX MAP




## SOURCES OF GEOLOGICAL DATA




1. K.S. Kellogg, unpublished mapping, 1996-97
2. Modified from Dibblee, 1979
3. Some foliation attitudes from Carmen, 1964.