

ECONOMIC GEOLOGY SHEET

CALIFORNIA  
BIG TREES QUADRANGLE

LEGEND



**SURFICIAL ROCKS**  
(Areas of surficial rocks are shown by patterns of dots and circles.)

**SUPERJACENT SERIES**

- Pa1 Alluvium (bottom lands and meadows)
- Pm Moraines
- Pgv River gravels (in part auriferous)

**SEDIMENTARY ROCKS**  
(Areas of sedimentary rocks are shown by patterns of parallel lines.)

**NEOCENE**

- Ng Auriferous river gravels

**BED-ROCK SERIES**

- Cc Calaveras formation (argillite, limestone, quartzite, and marble; schist contains gold quartz veins)
- Ns Limestone (in the Calaveras formation)

**IGNEOUS ROCKS**  
(Areas of igneous rocks are shown by patterns of triangles and rhombs. Metamorphism is indicated by short dashes combined with the igneous patterns.)

**SUPERJACENT SERIES**

- Nat Andesitic tuff and breccia
- Nl Latite
- Nbl Biotite latite
- Nb Basalt
- Nr Rhyolite

**BED-ROCK SERIES**

- Dikes of various rocks (syenite, diorite, dioritic porphyry, dioritic gabbro, and undetermined rocks)
- sy Syenite
- grd Granodiorite, quartz-diorite, granite, and gneiss
- gb Gabbro
- py Pyroxenite (in part altered to amphibolite)
- am Amphibolite (schistose and massive, derived from porphyrite and other igneous rocks)

**EARLIER THAN THE LATE CRETACEOUS, CHICO FORMATION**

**Known productive formations**

- Auriferous gravels
- Limestone and marble

**Other symbols:**

- Dip and strike of stratified rocks
- Vertical dip and strike of stratified rocks
- Dip and strike of schistosity
- Vertical dip and strike of schistosity
- Gold quartz veins
- Gold quartz mines
- DRIFT Drift mines in auriferous gravels
- HYDR Hydraulic mines in auriferous gravels
- Quarries
- Gold prospects
- Other prospects

A. H. Thompson, Geographer.  
E. M. Douglas, Topographer in charge.  
Triangulation by H. C. Feussler.  
Topography by R. H. McKee.  
Surveyed in 1890-91.

Scale 125,000  
1 1/2 0 1 2 3 4 5 Miles  
1 1/2 0 1 2 3 4 5 Kilometers  
Contour interval 100 feet.  
Datum is mean sea level.  
Edition of Jan. 1899.

Turner  
Ransome  
Turner

Geology by H. W. Turner.  
Assisted by F. L. Ransome.  
Surveyed in 1891, 95, and 96.