

STRUCTURE SECTIONS

LEGEND

SURFICIAL ROCKS

**Pl**  
 Alluvium  
*(mostly debris from hydraulic gravel mines)*

SEDIMENTARY ROCKS

**Nr**  
 Rhyolite-tuff  
*(sandy or clayey, interstratified with gravel)*

**Ng**  
 Auriferous river gravels  
*(with bed of clay sand, and some rhyolite tuff)*

**Cc**  
 Calaveras formation  
*(black shales and clay-slates)*

**Ccb**  
 Calaveras formation  
*(oolitic breccias with some porphyrite tuff)*

**Ccm**  
 Calaveras formation  
*(interstratified with some shales and sandstones with some porphyrite)*

IGNEOUS ROCKS

**Na**  
 Andesite  
*(tuff and breccia)*

**grd**  
 Granodiorite

**di**  
 Diorite

**pt**  
 Porphyrite  
*(hornblende or augite with some diorite)*

**ptb**  
 Porphyrite-breccia

**qpt**  
 Quartz porphyrite

SPECIAL 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
- Dip and strike of joint structure
- Dip of hydraulic mines
- Vertical shafts
- Inclined shafts
- Tunnels
- Tunnels of known length but direction doubtful
- Elevation of the Neocene surface under volcanic capping (bed rock)

Known productive formations

- Quartz veins (direction and dip of known outcrop)
- Quartz veins (probable outcrop)
- Known course of auriferous Neocene drainage channels under volcanic capping
- Probable course of auriferous Neocene drainage channels under volcanic capping
- Auriferous gravels
- Bed rock (exposed by hydraulic mining)

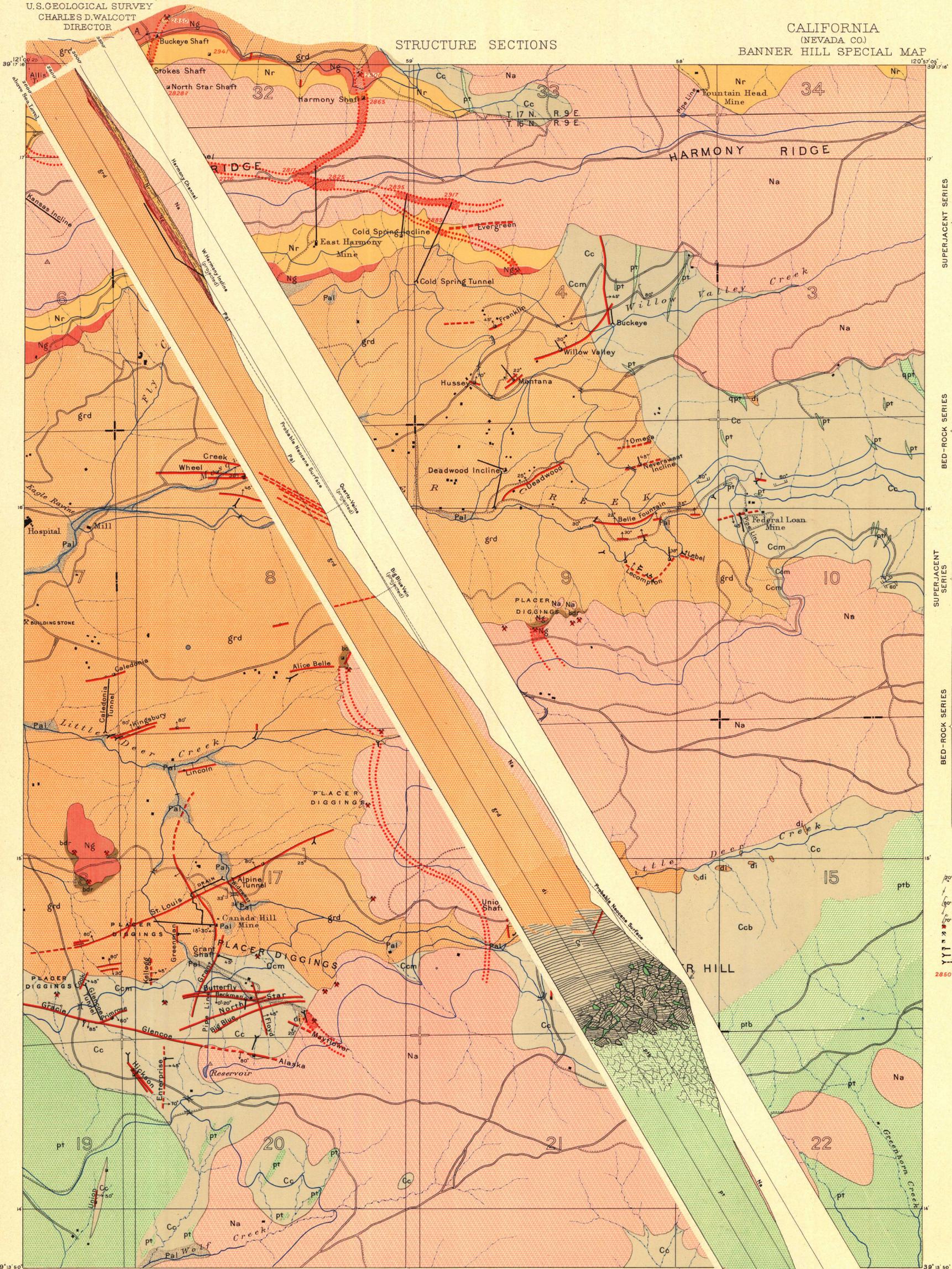
PLEISTOCENE

NEOCENE

CARBONIFEROUS

NEOCENE

EARLIER THAN THE LATE CRETACEOUS



A.H. Thompson, Geographer.  
 E.M. Douglas, Topographer in charge.  
 Triangulation by E.M. Douglas.  
 Topography by A.F. Dunnington and R.B. Marshall.  
 Surveyed in 1892.



Scale 1:2000  
 1000 2000 3000 4000 Feet  
 1 Kilometer

Geology by W. Lindgren.  
 Surveyed in 1893-94.