



EXPLANATION

SEDIMENTARY ROCKS		IGNEOUS ROCKS	
Recent	Qal Alluvium (Sand and gravel)	as Augite syenite	CARBONIFEROUS, TRIASSIC (?), AND JURASSIC
QUATERNARY	Qdb Debris (From hydraulic mining)	qpt Quartz porphyrite	
Miocene or Eocene	Tr Rhyolite tuff (Sandy or clayey, interstratified with gravel)	pd Porphyrite and diabase (With their tuffs and breccias)	
TERTIARY	Jm Mariposa formation (Clay-slate with quartz)	asc Amphibolite schist	
Upper Jurassic	Cc, Ccm Calaveras formation (Siliceous and clay-slates, and sandstone, micaceous and quartzite schists metamorphosed by contact with granodiorite, Ccm)	KNOWN GOLD-BEARING FORMATIONS	
CARBONIFEROUS		Known course of auriferous channels under volcanic capping	
		Probable course of auriferous channels under volcanic capping	
		Quartz vein (Direction and dip of known croppings)	
		Quartz vein (Probable croppings)	
		SPECIAL SYMBOLS	
		Strike and dip of stratified rocks	
		Strike and vertical dip of stratified rocks	
		Strike and dip of schistosity	
		Strike and vertical dip of schistosity	
		Strike and dip of joint structure	
		Pit of hydraulic mine	
		Iron prospect	
		Vertical shaft	
		Inclined shaft	
		Tunnel	
		Tunnel of known length direction doubtful	
		Altitude of the Miocene surface under volcanic capping	

GEOLOGIC MAP OF THE GRASS VALLEY QUADRANGLE AND ADJACENT AREA, NEVADA COUNTY, CALIFORNIA

Base by Geological Survey
Surveyed in 1891
Mine shafts revised in 1934

Scale 1:30,000
0 1000 2000 3000 4000 5000 Feet
Contour interval 20 feet.

Datum is mean sea level.
1939

Geology by W. Lindgren, with a few minor additions by W. D. Johnston, Jr.