



EXPLANATION		
Qs	Coluvium (Side rock)	Quaternary
Qal	Deposits in the present stream valleys, and alluvial fans	
Q1g	Terrace and bench gravels	Pleistocene and Recent
Tt	Lacustrine and fluvial deposits (With some mud flows. Sand, gravel, and diatomaceous earth. Contains much volcanic material and grades into tuffs and breccias. The lower part of this formation intertongues with the Columbia River basalt and locally underlies it. Gravels below the Dooly rhyolite breccia are also included)	
Tcr	Columbia River lava (Chiefly olivine basalt but includes much basic andesite)	Miocene
Td	Dacite (Probably intrusive)	
Tab	Andesitic tuff-breccia	Tertiary
Ta	Flow-banded red andesite with a little rhyolite	
Tdr	Dooly rhyolite breccia (Rhyolite and subordinate andesitic breccias and flows)	Miocene (?)
sg	Biotite-quartz diorite	
ag	Albite granite	Post-Jurassic (?)
tr	Trondhjemite (Oligocene-quartz diorite)	
hqd	Hornblende-quartz diorite	Post-Carboniferous (?)
sp	Serpentine derived from gabbro or peridotite	
gb	Gabbro, gb	Mesozoic
mg	Metagabbro, mg	
Cc8	Clover Creek greenstone	Permian
gns	Greenstone of unknown age and origin (probably includes both intrusive and extrusive rocks)	
Ce Is	Elkhorn Ridge argillite (Argillite, tuff, and chert, with subordinate limestones, ls, and greenstone masses)	Carboniferous
RELATIONS UNKNOWN		
RELATIONS UNKNOWN		Paleozoic
Burnt River schist (Various greenstones, schists, quartz schist, conglomeratic schist, slate, and quartzite, and some interbedded limestone separately mapped)		
Pre-Carboniferous (?)		Pennsylvanian (?)
Pre-Carboniferous (?)		may be younger

ENGRAVED FROM 1901 BY U.S.G.S.  
 R. U. Goode, Geographer in charge.  
 Triangulation by S.S. Gannett.  
 Topography by R.H. Mc. Kee.  
 Surveyed in 1898-99.

Geology by James Gilluly assisted by J. C. Reed, R. B. Stewart, C. F. Park, Jr. and H. G. Mitchell. Surveyed in 1929-30.

Scale 1:25,000  
 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.  
 (Adjustment indicates that elevations on this map should be increased 8 feet.)  
 1937

Geologic boundaries: Solid line, probably correct within 200 feet; dotted line, less accurately located.