



**EXPLANATION**

SEDIMENTARY AND METASEDIMENTARY ROCKS		IGNEOUS AND META-IGNEOUS ROCKS	
Recent	Dune sand	Recent volcanic: Qv <sup>1</sup> - rhyolite; Qv <sup>2</sup> - andesite; Qv <sup>3</sup> - basalt; Qv <sup>4</sup> - pyroclastic rocks	
QUATERNARY	Alluvium		
	Stream channel deposits		
	Fan deposits		
Pleistocene	Basin deposits		
	Salt deposits		
CENOZOIC	Quaternary lake deposits		
	Glacial deposits		
	Quaternary nonmarine terrace deposits		
	Pleistocene marine and marine terrace deposits		Pleistocene volcanic: Qp <sup>1</sup> - rhyolite; Qp <sup>2</sup> - andesite; Qp <sup>3</sup> - basalt; Qp <sup>4</sup> - pyroclastic rocks
	Pleistocene nonmarine		
	Plio-Pleistocene nonmarine		Quaternary and/or Pliocene cinder cones
	Undivided Pliocene nonmarine		
	Upper Pliocene nonmarine		
	Upper Pliocene marine		Pliocene volcanic: P <sup>1</sup> - rhyolite; P <sup>2</sup> - andesite; P <sup>3</sup> - basalt; P <sup>4</sup> - pyroclastic rocks
	Middle and/or lower Pliocene nonmarine		
Middle and/or lower Pliocene marine			
TERTIARY	Undivided Miocene nonmarine		
	Upper Miocene nonmarine		
	Upper Miocene marine		Miocene volcanic: M <sup>1</sup> - rhyolite; M <sup>2</sup> - andesite; M <sup>3</sup> - basalt; M <sup>4</sup> - pyroclastic rocks
	Middle Miocene nonmarine		
Oligocene	Middle Miocene marine		
	Lower Miocene marine		
Eocene	Oligocene nonmarine		Oligocene volcanic: O <sup>1</sup> - rhyolite; O <sup>2</sup> - andesite; O <sup>3</sup> - basalt; O <sup>4</sup> - pyroclastic rocks
	Oligocene marine		
Paleocene	Eocene nonmarine		Eocene volcanic: E <sup>1</sup> - rhyolite; E <sup>2</sup> - andesite; E <sup>3</sup> - basalt; E <sup>4</sup> - pyroclastic rocks
	Eocene marine		
Undivided	Paleocene nonmarine		
	Paleocene marine		
MESOZOIC	Cenozoic nonmarine		enozoic volcanic: C <sup>1</sup> - rhyolite; C <sup>2</sup> - andesite; C <sup>3</sup> - basalt; C <sup>4</sup> - pyroclastic rocks
	Tertiary nonmarine		
	Tertiary lake deposits		Tertiary intrusive (dykes) rocks: T <sup>1</sup> - rhyolite; T <sup>2</sup> - andesite; T <sup>3</sup> - basalt
CRETACEOUS	Tertiary marine		Tertiary volcanic: T <sup>1</sup> - rhyolite; T <sup>2</sup> - andesite; T <sup>3</sup> - basalt; T <sup>4</sup> - pyroclastic rocks
	Undivided Cretaceous marine		
	Upper Cretaceous marine		
	Lower Cretaceous marine		
	Knoxville Formation		Franciscan Formation
	Upper Jurassic marine		Mesozoic granitic rocks: g <sup>1</sup> - granite and adamellite; g <sup>2</sup> - granodiorite; g <sup>3</sup> - tonalite and diorite
	Middle and/or Lower Jurassic marine		Mesozoic basic intrusive rocks
	Triassic marine		Mesozoic ultrabasic intrusive rocks
	Pre-Cretaceous metamorphic rocks (is = limestone or dolomite)		Jura-Trias metamorphic rocks
	Pre-Cretaceous metasedimentary rocks		
PALEOZOIC	Paleozoic marine (is = limestone or dolomite)		Pre-Cretaceous metamorphic rocks
	Permian marine		Pre-Cretaceous metamorphic rocks
	Undivided Carboniferous marine		Pre-Cretaceous metamorphic rocks
	Pennsylvanian marine		Pre-Cretaceous metamorphic rocks
	Mississippian marine		Pre-Cretaceous metamorphic rocks
	Devonian marine		Pre-Cretaceous metamorphic rocks
	Silurian marine		Pre-Cretaceous metamorphic rocks
	Pre-Silurian metasedimentary rocks		Pre-Silurian metamorphic rocks
	Ordovician marine		Pre-Silurian metamorphic rocks
	Cambrian marine		Pre-Silurian metamorphic rocks
PRECAMBRIAN	Cambrian - Precambrian marine		Precambrian igneous and metamorphic rock complex
	Undivided Precambrian metamorphic rocks (p <sub>1</sub> = gneiss, p <sub>2</sub> = schist)		Undivided Precambrian granitic rocks
	Later Precambrian sedimentary and metamorphic rocks		
Earlier Precambrian metamorphic rocks			

HEAVY BORDER ON BOXES INDICATES UNITS THAT APPEAR ON THIS SHEET

**INDEX TO GEOLOGIC MAPPING**  
(COMPLETE INDEX ON EXPLANATORY DATA SHEET)

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- Woodring, W. P., and Bramlette, M. N., 1950.
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