

U. S. BUREAU OF MINES
Western Field Operation Center
East 360 3rd Ave.
Spokane, Washington 99202

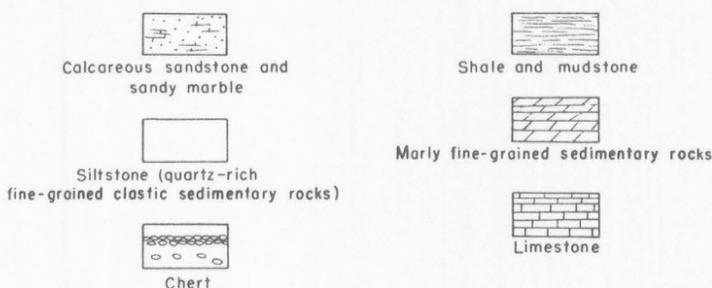
AGE	FORMATION AND APPROXIMATE AVERAGE THICKNESS	LITHOLOGY (Symbols show inferred parent rock)	FOSSILS ¹	TYPE SECTION
PERMIAN (?)	Bloody Mountain formation 3000 ft	Mesozoic meta-volcanic rocks Dense dark-gray pyritic siliceous hornfels; locally layers of siliceous calc-hornfels. Scour and fill and intraformational conglomerate near base. Overlain disconformably by metavolcanic rocks of Mesozoic age	Horn coral, compositoid brachiopod, Ramose bryozoans, small productid, <i>Neospirifer</i> sp., <i>Chonetes</i> aff. <i>C. subli-ratus</i> (Girty), <i>Spiriferella</i> ? sp.	North flank Bloody Mountain
	Lake Dorothy hornfels 1000 ft	Dense yellowish-gray to grayish-black thinly layered quartz-plagioclase-pyroxene hornfels (siliceous calc-hornfels); siliceous hornfels locally present near south boundary of quadrangle	Compositoid brachiopod, crinoid columns, sponge	Along trail between Lake Dorothy and Mildred Lake
PENNSYLVANIAN AND/OR PERMIAN (?)	Mildred Lake hornfels 750 ft	Fine-grained biotitic siliceous hornfels; white to greenish-gray siliceous calc-hornfels layers locally abundant		Southeast of Mildred Lake
	Mount Baldwin marble 500 ft	Fine-grained bluish-gray to dark-gray marble; chert locally abundant as irregular nodular beds and zones of nodules	<i>Linoproductus</i> , <i>Dictyoclostus coloradoensis</i> (Girty), <i>D. inflatus</i> (McChesney)	East wall of canyon of Laurel Creek
PENNSYLVANIAN (?)	Bright Dot formation 2000 ft	Dense gray to dark-gray pyritic siliceous hornfels and metachert; siliceous calc-hornfels intercalated with siliceous hornfels in a well-bedded sequence in upper part	Radiolarian tests	East of Bright Dot Lake

ORDOVICIAN OR SILURIAN (?) (DEFINITELY PREDATES BRIGHT DOT FORMATION)		CONVICT LAKE BLOCK		
Sandstone and hornfels of Sevehah Cliff (informal group)	Upper sandstone unit 3000 ft	Light- to moderate-gray calcareous quartz sandstone; locally, recrystallized calcite exceeds sand grains in percentage; prominent thin brecciated layers of metachert; some muscovite (andalusite) hornfels and micaceous siliceous hornfels; siliceous calc-hornfels locally abundant near top	Graptolite? Radiolarian tests	Sevehah Cliff and North flank of Laurel Mountain
	Upper hornfels unit 1500 ft	Dark-gray muscovite (andalusite) hornfels and dark-gray metachert Thin discontinuous calcareous quartz sandstone layer	Radiolarian tests	
	Intermediate sandstone unit 1200 ft	Light- to moderate-gray calcareous quartz sandstone		
	Intermediate hornfels unit 500 ft	Light- to dark-gray dense to fine-grained laminated muscovite-biotite siliceous hornfels		
	Lower sandstone unit 1200 ft	Light-gray calcareous quartz sandstone Laminated to thin-bedded light- and dark-gray siliceous hornfels interbedded with medium- to yellowish-gray siliceous calc-hornfels		
	Lower hornfels unit 1500 ft	Laminated to very thin bedded dark-gray siliceous hornfels, medium-gray siliceous calc-hornfels, and minor light-gray calcareous quartz sandstone		
	Thick-bedded dark-gray siliceous hornfels interlayered with medium-dark-gray to moderate-red-brown quartz sandstone			
Mount Morrison sandstone 1500 ft	White to medium dark-gray calcareous quartz sandstone			Southwest of Convict Lake
	Dense laminated siliceous hornfels, marble, and siliceous calc-hornfels White to medium-dark-gray calcareous quartz sandstone, locally crossbedded			
CARADOC	Siliceous calc-hornfels member 300 ft	Dense thinly laminated to very thin bedded siliceous calc-hornfels; color varies from grayish black through olive gray to grayish orange or very pale orange; local siliceous hornfels layers		Southeast side Convict Lake
	Convict Lake formation 1500 ft	Fine-grained thinly laminated to very thick bedded dark- to medium-dark-gray carbonaceous siliceous hornfels; lesser amounts of quartz sandstone, slate, metachert, and marble	<i>Orthograptus</i> sp., <i>Climacograptus</i> sp., <i>Dicranograptus</i> sp.	
ORDOVICIAN (?)	Mount Aggie formation 2500+ ft	Interbedded very thin to thick-bedded slate, marble, and pelitic hornfels. Southward calcareous quartz sandstone, siliceous hornfels, and siliceous calc-hornfels are common. Calcareous quartz sandstone lentil near top at southernmost extremity		Northwest side of Convict Lake
	Buzztail Spring formation 2500 ft (?)	Thin-bedded marble and pelitic hornfels		South side of McGee Creek (opposite Buzztail Spring)
		Calcareous quartz sandstone member 350 ft (?)	Light-colored calcareous quartz sandstone Interlayers of dark-colored pelitic hornfels, slate, metachert, calcareous quartz sandstone, marble, and siliceous calc-hornfels; marble locally makes up as much as 50 percent of section south of McGee Creek	

ORDOVICIAN		MCGEE MOUNTAIN BLOCK		
CARADOC	Sandstone 1500+ ft (?)	Medium- to medium-dark-gray fine- to coarse-grained calcareous quartz sandstone	<i>Orthograptus</i> sp.	Top and north and south flanks of McGee Mountain
		Dark metachert, slate, and siliceous hornfels lentil		
	Slate 750 ft (?)	Medium- to medium-dark-gray fine- to coarse-grained calcareous quartz sandstone	Lingulid? Brachiopods?	East flank of McGee Mountain
ARENIG	Slate and marble 500 ft (?)	Medium dark-gray to grayish-black laminated pelitic hornfels, slate, and metachert; subordinate calcareous layers		East flank of McGee Mountain
		Medium- to dark-gray pelitic hornfels, slate and metachert intercalated with yellowish-gray, light-greenish-gray, and light-gray siliceous calc-hornfels and light-gray marble		South side of McGee Creek (west flank of Nevahbe Ridge)
ORDOVICIAN (?)	Siliceous hornfels 1500 ft (?)	Medium-dark-gray fine-grained biotitic siliceous hornfels; some light- and dark-gray laminated metachert and slate; interlayers of bluish-gray fine-grained marble; marble forms lentil 300 ft thick north of McGee Creek; small amounts of andalusite hornfels	<i>Orthograptus</i> ? sp., <i>Climacograptus</i> ? sp., <i>Tetragraptus</i> cf. <i>T. fruiticosis</i> Hall.	West flank of Nevahbe Ridge
	Hilton Creek marble 1500+ ft (?)	Dark-colored micaceous siliceous hornfels, slate, andalusite hornfels, and siliceous calc-hornfels		West side of Hilton Creek

¹ See text for more complete list

EXPLANATION
(Symbols denote inferred parent rock)



GENERALIZED COLUMNAR SECTION OF THE METASEDIMENTARY ROCKS OF PALEOZOIC AGE, MOUNT MORRISON QUADRANGLE, MONO AND FRESNO COUNTIES, CALIFORNIA