

LEGEND

MEDICINE LAKE 83 C/13

CENOZOIC	QUATERNARY		
	PLEISTOCENE AND RECENT		Qsi Snowfields and glaciers
			Qls Landslide deposits
	Qd	till, alluvium, colluvium	
	JURASSIC		
	Jf	FERNIE GROUP: Dark grey to black shale; dark grey siltstone and sandstone; dark grey, platy, silty argillaceous limestone; brown limonite; quartz sandstone.	
	TRIASSIC		
	SPRAY RIVER GROUP (Rsm and Rwh)		
	Rwh	WHITEHORSE FORMATION: Light grey dolomitic siltstone and sandstone; red, green and brown mudstone and siltstone; limestone and dolomitic breccia.	
	Rsm	SULPHUR MOUNTAIN FORMATION: Dark grey and brown thin-bedded siltstone and sandstone; silty mudstone; shale and dolomitic siltstone.	
PERMIAN AND PENNSYLVANIAN			
PPrm	ROCKY MOUNTAIN GROUP: Light grey, cherty, quartz sandstone, massive chert, dolomitic sandstone; silty dolomite.		
MISSISSIPPIAN			
RUNDLE GROUP (Mmh-Mpk)			
Mmh	MOUNT HEAD FORMATION: Dense grey to brown dolomite and argillaceous dolomite, grey limestone and calcarenite; cherty and silty dolomite and limestone.	Mmh & Mtv MOUNT HEAD and TURNER VALLEY FORMATIONS Undivided	
Mtv	TURNER VALLEY FORMATION: Light grey, crinoidal calcarenite and dolomite; cherty limestone.		
Msh	SHUNDA FORMATION: Light to dark grey, dense, in part fenestral, limestone; calcarenite.	Msh & Mpk SHUNDA and PEKISKO FORMATIONS Undivided	
Mpk	PEKISKO FORMATION: Light grey, thick-bedded, crinoidal calcarenite and limestone.		
Mbf	EXSHAW AND BANFF FORMATIONS: Dark grey, finely crystalline thin-bedded limestone; dark brownish-grey shale and calcareous shale; brown argillaceous siltstone, argillaceous and cherty skeletal calcarenite and argillaceous dolomite; black, cherty, fissile shale and brown sandstone. Exshaw Formation only occurs east of Rocky River.		
DEVONIAN			
UPPER DEVONIAN			
Dpa	PALLISER FORMATION: Mottled dolomitic limestone, thickly bedded, massive; grey dense limestone; greyish-brown dolomite.		
Dss	SASSENACH FORMATION: Sandstone and siltstone, medium-bedded, fine-grained; silty and argillaceous limestone; dark grey, silty, calcareous shale.		
Dax	ALEXO FORMATION: Siltstone, light grey, calcareous, thin bedded, dense limestone and dolomite, calcarenites (mapped where Sassenach Formation cannot be distinguished from underlying carbonates).		
FAIRHOLME GROUP (Dab, Dsa, Dpx, Dca, Dma, Dfl)			
Dmh	MOUNT HAWK FORMATION: Mudstone, grey to brown, calcareous limestone nodules, limestone, argillaceous with brachiopods and corals; thin-bedded recessive.		
Dsa	ARCS MEMBER: Limestone, granular and thick-bedded; light grey dolomite, coarsely crystalline, vuggy.	Dsa GROTTO MEMBER: Dolomite and limestone, brown with corals, crinoids and also Amphipora sp. Dsx PEECHEE MEMBER: Dolomite and limestone light grey, coarse grained vuggy with some corals and Amphipora sp. Dsx SOUTHESK FORMATION	
Dsg			
Dsp			
Dpx	PERDRIX FORMATION: Shale, black calcareous, pyritic with calcareous nodules and thin beds of dark grey argillaceous limestone.		
Dca	CAIRN FORMATION: Massive to thickly bedded dark brownish-grey medium-crystalline dolomite with Amphipora sp. and Stromatopora beds; dark grey limestone, dolomitic limestone and dolomite in lower parts; minor cherts and breccias.		
Dma	MALIGNE FORMATION: Dark grey, dense, thin-bedded limestone with brachiopods.		
Dfl	FLUME FORMATION: Dark grey to brown, dense to fine grained, cherty, dolomitic limestone with Amphipora sp. and Stromatopora.		
NOTE: Dmh, Dpx and Dfl represent strata deposited basinward from the Southesk and Cairn Formations which represent reef fringed carbonate buildups.			
CAMBRIAN AND ORDOVICIAN			
EOsp	SURVEY PEAK FORMATION: Shale, grey, calcareous, inter-bedded with limestone partly dense, partly fragmental, partly algal masses; minor chert; basal shale; calcareous grey to blue weathering pale greenish-grey with minor limestone, mainly flat pebble conglomerate and siltstone.		
CAMBRIAN			
UPPER CAMBRIAN			
Elxu	LYNX GROUP (UPPER PART): Dolomite, mainly grey very finely crystalline grading to dolomitic siltstone, laminated, thick bedded to massive.	Elx LYNX GROUP	
Esu	SULLIVAN FORMATION: Inter-bedded grey, silty dolomitic shale and grey to brown silty dolomite grading to dolomitic siltstone.		
MIDDLE AND UPPER CAMBRIAN:			
Ewf	WATERFOWL FORMATION: Grey to pink very fine to micro-crystalline silty dolomite; dolomitic siltstone, chert nodules.		
MIDDLE CAMBRIAN			
Ear	ARCTOMYS FORMATION: Thinly inter-bedded purple-red green and grey shale; yellow dolomitic siltstone with ripple marks, mud cracks and salt casts and minor yellow weathering dolomite.		
Epk	PIKA FORMATION: Grey, dense, thinly bedded flaggy limestone with partings and nodules of dense dolomite; limestone pebble conglomerate, boulders, dolomitized equivalents, minor shale intervals near base.		
Eel	ELDON FORMATION: Dense predominantly grey dolomite, mottled, massive, dense limestone; dolomitized equivalents.		
Esi	SNAKE INDIAN FORMATION: Interbedded sequences of argillaceous limestone and calcareous shale, dense to silty resistant parted limestone; green and red silty shales and siltstone at base.		
LOWER CAMBRIAN			
Egg	GOGA GROUP: Resistant, light grey fine to coarse grained cross-bedded quartz sandstone; argillaceous sandstone and silty shale.		
WINDERMERE (HADRYNIAN)			
MIETTE GROUP (pEup, pEum, pEby, pEmp, pEng, pEof)			
pEum	UPPER MIETTE GROUP: Dark grey to black silty shale with shale fragments; variable amounts of boulders, sandstones; locally paraconglomerates at base with large dolomite clasts.	pEup UPPER MIETTE: (Group undivided): Lower part same as Pelite Unit; upper part highly variable sequence of argillaceous and quartzites alternating with dark grey shales. A few dolomite paraconglomerates possibly equivalent to Byng Formation.	
pEby	BYNG FORMATION: Dolomite, light brown to light grey dense with occasional algal structures, massive, grades along strike into pEup.		
pEmp	PELITE UNIT: Silty shale, brown to dark grey, laminated, minor sandstone and siltstone interbeds. Middle Miette Group		
pEng	GRIT UNIT: Ridge forming grits and sandstones, alternating with recessive dark grey slate and siltstone; sandstones poorly sorted, often graded.		
pEof	OLD FORT POINT FORMATION: Slates and siltstones grey, green, purple with varying amounts of pink to light green micritic limestone; limestone breccias and calcareous sandstones.		

SYMBOLS

Landslide (Qls) boundary	.....
Quaternary (Qd) boundary	.....
Geologic boundary (defined, approximate, assumed, assumed projection under younger deposits)	.....
Bedding Tops known (inclined, vertical, horizontal, overturned)	.....
Bedding tops not known (inclined, vertical)	.....
Cleavage	.....
Thrust Faults (teeth on upthrust side; defined, approximate, assumed, assumed projection under younger deposits)	.....
Faults, genetic type unknown (defined, approximate, assumed)	.....
Anticline, trace of axial surface (upright, overturned)	.....
Syncline, trace of axial surface (upright, overturned)	.....
Fossil locality (G.S.C. catalogue locality number)	Ⓢ 72613
Stratigraphic section, locus of measurements (numbers refer to internal cataloguing system, studied by)	.....

GEOLOGY By E.W. Mountjoy and R.A. Price based on studies of vertical air photographs (1964-1975), ground and air observations by J.D. Arken, H. Bielestein, D.G. Cook, E.W. Mountjoy, and R.A. Price (1964-1966); and E.W. Mountjoy (1974-1975), and published geological maps

Note! The style of folding in the upper and middle Miette units is diagrammatically shown. Because of their small size some folds are not shown on the geological map. To obtain a better appreciation of the structure within the Miette Group see the report by Chalkworth et al. (1967, 116. Res. Council Bull. 23)

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