

**Table 1: Table of Formations in the Fernie-Elk Valley Area
Part A: Triassic to Quaternary**

System/ Series	Formation and Thickness		Lithology
Quaternary			till, sand and gravel
unconformity			
Miocene	St.Eugene Formation (Rocky Mountain Trench only) <i>50 m exposed, total thickness unknown</i>		colluvium, fanglomerate, sand, silt and gravel
Oligocene	Kishenehn Formation (Flathead Valley only) <i>0-5000m</i>		varicoloured sandstone, mudstone, clay, oil shale, limestone, conglomerate and megabreccia
unconformity			
Upper Cretaceous	Alberta Group	Belly River Formation <i>1370m</i>	continental sandstones, shales, and minor amounts of coal
		Wapiabi Formation <i>600-700m</i>	dark shale, siltstone, fine sandstone, calcareous shale and limestone
		Cardium Formation <i>100-150m</i>	marine sandstone, siltstone and shale
		Blackstone Formation <i>30-250m</i>	dark shale, fine sandstone, siltstone, limestone and calcareous shale
unconformity			
Lower Cretaceous	Blairmore Group 635-2400m	Crowsnest Formation <i>0-400m</i>	alkaline tuff, volcanic breccia, volcanic conglomerate, and trachyte
		Ma Butte Formation <i>120-1875m (latter is combined thickness with Beaver Mines Formation in the Fernie Basin)</i>	quartz-chert sandstones, grey siltstones and red mudstones, igneous and quartzite-chert pebble conglomerate
		Beaver Mines Formation <i>450-1875m (latter is combined thickness with Ma Butte Formation in the Fernie Basin)</i>	grey to green feldspathic sandstone and arkose, siltstone, and grey to maroon mudstone, igneous pebble conglomerate
		Gladstone Formation <i>80-450m</i>	fine quartz-chert sandstone, siltstone, and green and red mudstone; limestone and calcareous mudstone in upper part
		Cadomin Formation <i>15-75m</i>	chert pebble conglomerate and sandstone, grey, green, and red mudstone
		Pocaterra Creek Member <i>0-90 m</i>	
unconformity			
Jurassic	Kootenay Group	Elk Formation <i>0-475m</i>	sandstone, conglomerate, siltstone, thin coal
		Mist Mountain Formation <i>75-665m</i>	siltstone, sandstone, mudstone, shale, coal
		Morrissey Formation <i>25-65 m</i>	fine to medium sandstone with conglomeratic beds in the upper part, and rare mudstone, siltstone and coal.
		Fernie Formation <i>175-400m</i>	dark shales, sandstone, siltstone, limestone, basal coquina and phosphate pebble conglomerate
unconformity			
Triassic	Spray River Group	Whitehorse Formation <i>0-10 m</i>	calcareous and dolomitic sandstone and siltstone, sandy dolomite and solution breccia
		Sulphur Mountain Formation <i>0-496 m</i>	dark shale and siltstone, calcareous and dolomitic siltstone, dolomite and sandstone
unconformity			