

TABLE OF GEOLOGICAL FORMATIONS - PEACE RIVER ARCH & NW WCSB REGION

EON	ERA	PERIOD	EPOCH/STAGE	ASTEROID EVENT	AGE mybp	TECTONICS	LITHOLOGIES	VOLCANICS															
CENOZOIC	QUATERNARY	RECENT	HOLOCENE		.01 - 0.1	F R A C T U R E : U L T I M A T E : I N V A S I O N ?	Recent River Gravels																
		Pleistocene	PLEISTOCENE	Whitecourt	0.1 - 1.6		Pleistocene Glaciofluvial Gravels																
		TERTIARY	PLIOCENE		1.6 - 5.3		Unit 1 Late Pleistocene Saskatchewan Gravels	WHITESTONE MARKER ? & MONTAG.DIMs (Stapleton, 1998)															
			MIOCENE		5.3 - 23.7		Unit 2 Preglacial Quaternary Gravels																
			OLIGOCENE		23.7 - 36.6		Unit 3 Tertiary Preglacial Fluvial																
			EOCENE		36.6 - 49-50 57.8 52		Unit 4 oldest Tertiaries (Cowen, 1994; Edwards et al, 1996)																
	PALEOCENE		57.8 - 66.4	Sweetgrass Intrusions 49-50 KNEEHILLS Volcanics 52 (Ritchie, 1957; Dufresne, 1996) 66	BLACK BUTTE DIATREME Lac de GRAS KIMBERLITES																		
	MESOZOIC	FORMATIONS	PEACE RIVER			ARCH	WESTERN CANADIAN SEDIMENTARY BASIN																
			MONTANA GROUP	Wapiti	Notikewan Hill Surface Elevations	66.4-	72 - 74 74	Marine, dark grey Continental, SST, coal, grey shales	Belly River bentonite Mt. LAKE, Lac de GRAS KIMBERLITES														
			SMOKY GROUP	Paskwaskau	Chinook	80		Shales, silty Shales Concretions															
			COLORADO GROUP	Bad Heart	Wapiabi/Marshybank equivalent?	82	82+- (Collum '98 85.5? Coniacian?)	BH-Marine/green-brown oolitic ironstone/fumarolic hydrothermal brown SST. 83m.y. SST & Conglomerated dark Shales	LEGEND KIMBERLITES 1st White Specks														
			UPPER CRETACEOUS	Kaskapau	Opabin	Haven	Vimy	Sunkey	85 > > 86 ± 3 86 - 88	<LIARD <UP-LIFT Intruded into Western Interior Seaway ?	BUFFALO HILLS KIMBERLITES												
				FORT ST. JOHN GROUP	Dunvegan	Upper Shaftsbury	88 ± 5	88-89 90 - 92 94-101	Continental deltaic to Marine SST and Shales	Montag Surf Elev.- 2nd White Specks Fort a la Corne, SK													
FISH SCALES MARKER				FISH SCALES ZONE	Steen River	95 / 96 95		Marine Shales/Fossils Biotic Die-off	Crowsnest Volcanics														
LOWER SHAFTESBURY				Peace River	Spirit River	Loon River	97	97-98	dark grey shales Sandstones SST, shales	& STURGEON LAKE Viking bentonites KIMBERLITES													
MANNVILLE/BULLHEAD GROUP				Bluesky	Gething	Cadomin	Nikanassin	106 144	SST and shales SST and shales conglomerates														
JURASSIC			FERNIE GROUP	Rock Creek	Nordeg	208		as above															
TRIASSIC			SCHOOLER CREEK GROUP	Baldonnel	Charlie Lake/Boundary	Halfway	Doig	Montney	245	as above													
PERMIAN			DIABER GROUP	Belloy	320			SST, Dolomites															
PALAEOZOIC			PENNSYLVANIAN (CARBONIFEROUS)	STODDART GROUP	Taylor Flat	Kiskatinaw	Golata	Dawson Cr. & Fort St. John Graben in-fill	Limestones Sandstones Shales														
	RUNDLE GROUP	Debolt		Shunda	Pekisko	Banff	352	Limestones and Dolomites															
	WABAMUN GROUP	WINTERBURN GROUP		WOODBEND GROUP	Ireton	Leduc	BEAVERHILL LAKE GROUP	Swan Hills - Waterways	Slave Point	Ft. Vermillion	ELK POINT GROUP	Watt Mtn.	Gilwood/	Rainbow/Muskeg	Keg River	Contact Rapids	Red Beds	Ernestina Lake	Lotsberg	Red Beds	395		
	MISSISSIPPIAN	Banff		360	as above	Exshaw Tufts																	
	DEVONIAN	WABAMUN GROUP	WINTERBURN GROUP	WOODBEND GROUP	Ireton	Leduc	BEAVERHILL LAKE GROUP	Swan Hills - Waterways	Slave Point	Ft. Vermillion	ELK POINT GROUP	Watt Mtn.	Gilwood/	Rainbow/Muskeg	Keg River	Contact Rapids	Red Beds	Ernestina Lake	Lotsberg	Red Beds	395		
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	CAMBRIAN	(MID CAMBRIAN)			510-544																		
		PROTEROZOIC	PRECAMBRIAN	(Legend - West Peace Arch Formations Montagneuse shown bold/underlined)	2500	4000																	
	ARCHEAN																						

- Oil
- ☀ Gas
- ☀ Astrobleme
- Clastics
- Carbonates
- Evaporites

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(from: assessment report AGS MIN_19990025, Stapleton)

GEOLOGICAL TABLE OF FORMATIONS
ARRIBA Land & Minerals Corp.

Sources: Okulitch, GSC, 1995; Santiago, 1996; Leckie, 1997; Geological Atlas of the Western Canadian Sedimentary Basin, 1994 (Cross-section A-A' p.28; 7-8-87-6W6M) Hitchon et al.; CSPG Volume 38A, 1990; Dufresne et al '96; Alberta ERCB Table of Formations 2009 and Stapleton, 1999, figure 13, Table 3, p. 26.