

Mineralized Mesozoic EXPOSED in the Anahim area

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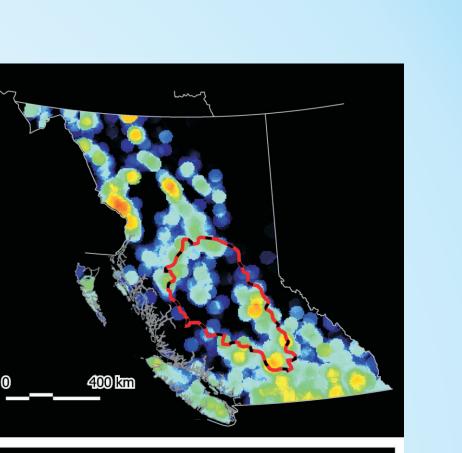
In an area extending from Kamloops northward to Smithers, and from the Coast Mountains eastward to the Rocky Mountain Trench, infestation by Mountain Pine Beetle was essentially continuous in 2004. We refer to this area as the Beetle Infested Zone (BIZ). It is predicted that only ~10% of the already diminished 2006 volume of pine will be left standing by 2016 (Eng et al., 2006). Geological Belts & BIZ Anticipating an economic downturn in the forestry sector ForestHealth Contiguous infestation (BIZ Beetle infested areas 2004 within the BIZ by 2015, the Provincial Government is supporting economic diversification throughout the region. Geological mapping and related studies in the Accreted volcanic Accreted oceanic Chezacut area are part of that provincial effort. Accelerated timber harvest and overburden disturbance, needle loss, and forest fires, create unprecedented opportunities to

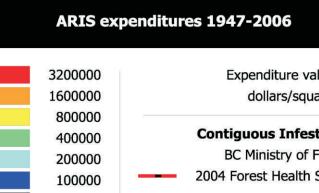
find never-before-seen outcrops of prospective rocks within the BIZ.

Unexplored Potential

Most parts of the BIZ have been avoided by mineral explorationists, because of perceived lack of outcrop and veneers of young, unmineralized volcanic deposits and glacial debris.

However, exposures of basement rocks throughout the BIZ show that the pre-Cenozoic geologic fabric continues in the subsurface. So too, will the related belts of high mineral potential. Areas within the same geological belts show 400% more recorded mineral production south of the BIZ (Fig. right). (ARIS, above). Note extension of high value Clearly, there is more left to discover in belts north and south of the BIZ than in many other parts of the the BIZ. province.





BIZ exploration deficit as shown by density of

Chezacut Structure

Evidence of deformation can be found in rocks of all ages within the Chezacut map area. Deformation is most intense in the oldest rocks — folded strata of presumed

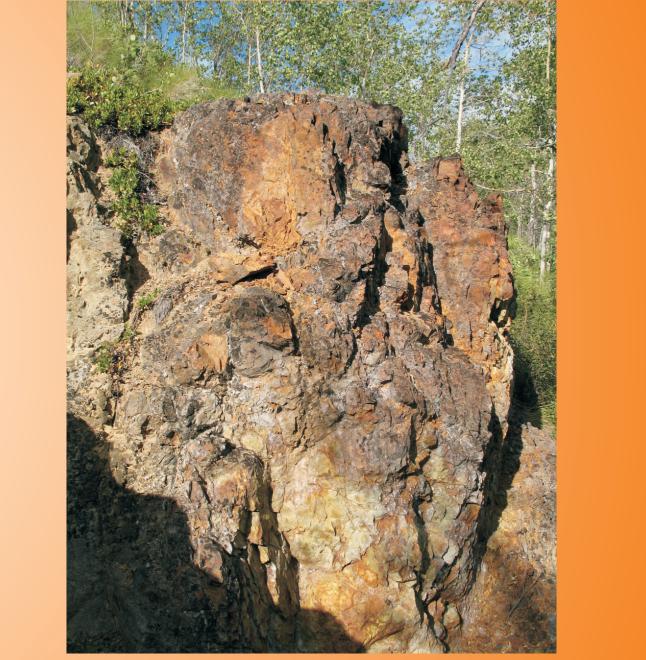
> Mesozoic age. However, even rocks that may be as young as Quaternary display evidence of contractional deformation. Mesozoic rocks are dominated by massive volcanic strata that do not readily reveal deformational fabrics, but tight folds and overturned beds can be observed where these rocks are interbedded with sedimentary strata. In some areas, a spaced cleavage or weak phyllitic fabric is developed.

Foliated Eocene (left A), reverse faults in Quaternary volcanic rocks (B). Overturned Mesozoic strata (above right).

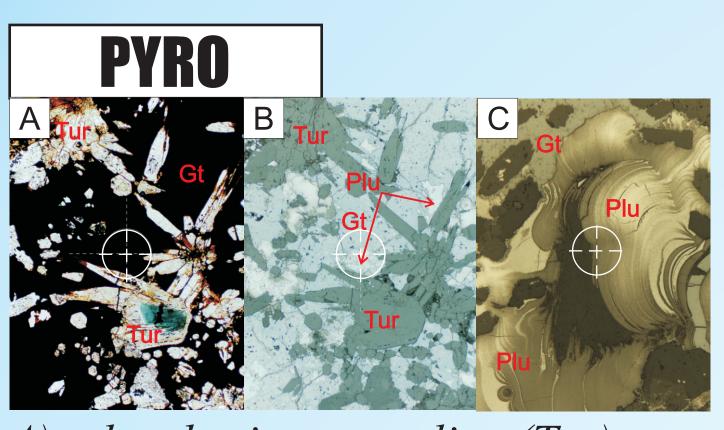
What's in it for you?

In at least some, and perhaps most regions of the BIZ, a reputation of low mineral prospectivity and unbroken cover is unjustified --a bonus for modern explorationists because there's more left to explore.

(Photo: case in point, Vampire occurrence).



New Mineral Showings



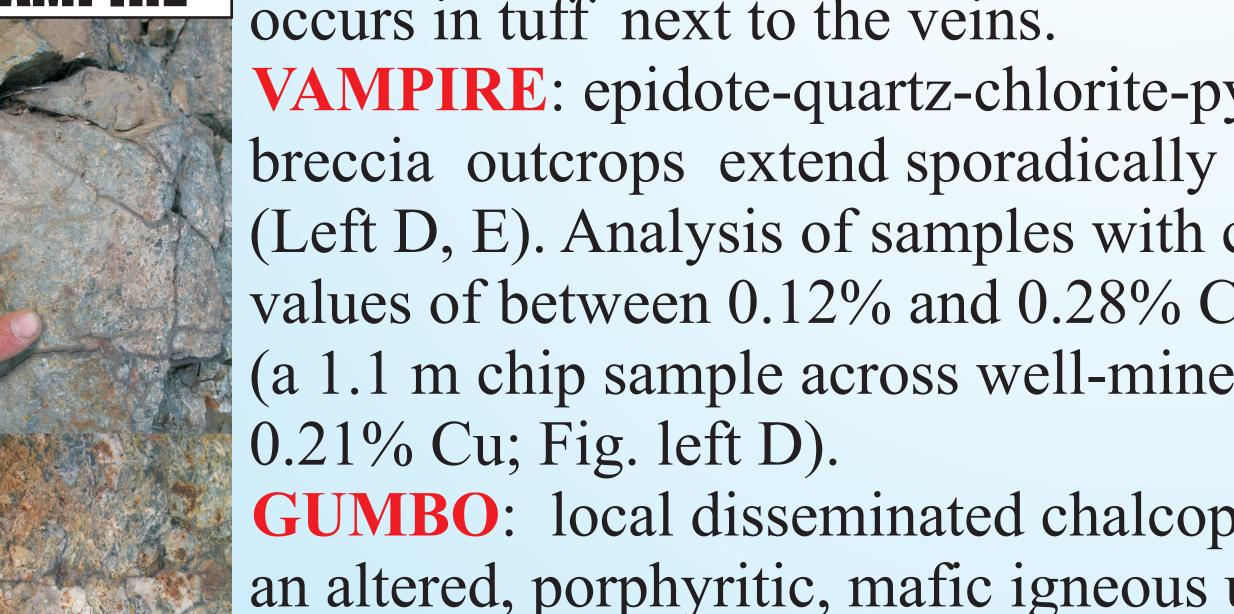
internal reflections (B), hematite and pyrolusite (Pru, comprises most of C). Crosshairs circle is 200 µm

Prior to 2007, only a single MINFILE occurrence, the Chili, was reported for the Chezacut area. The Chili occurrence is a shear-related quartz stockwork with Ag-Au-rich chalcopyrite (Nebocat, 1983). During 2007 fieldwork, 5 new occurrences were discovered: PYRO: 10 m by 25 m area of coarse breccia with hematite-goethite-pyrolusite-rich cement with

metal values of Au160 ppb, As1200 ppm, Zn 3000 ppm, Ag 11 ppm, Bi 30 ppm, Te 13 ppm.

It is part of a 350m zone with secondary silica and tourmaline. OROVAIN / PUNKY: sets of subparallel 0.5 to 8 cm thick quartz-epidoteprehnite veins cut lapilli tuff. At Orovain, they are spaced ~1 m (Fig. C, right), and exposed over a 50 by 75 m area. Mineralization is native copper

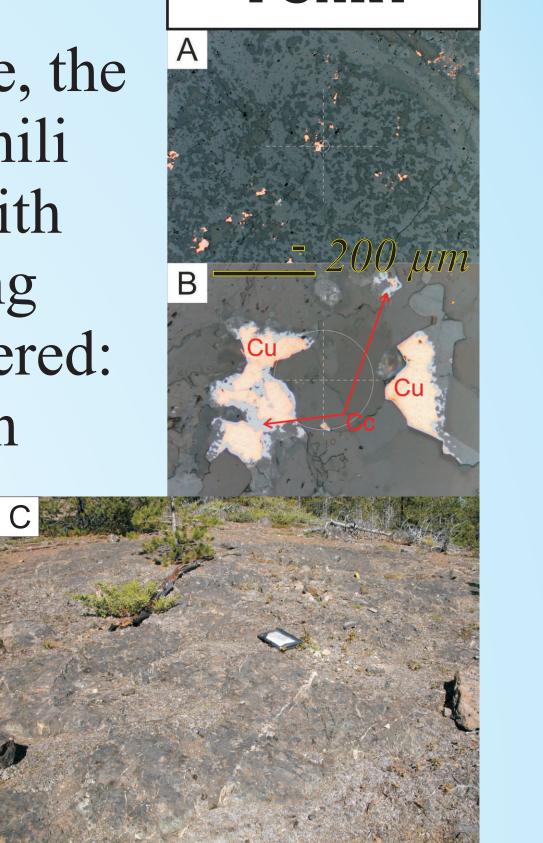
VAMPIRE (>1%) mantled by chalcocite (Fig. top right). Copper also occurs in tuff next to the veins.



VAMPIRE: epidote-quartz-chlorite-pyrite-altered volcanic breccia outcrops extend sporadically for approximately 110 m (Left D, E). Analysis of samples with chalcopyrite returned values of between 0.12% and 0.28% Cu and up to 0.5 ppm Ag (a 1.1 m chip sample across well-mineralized outcrop returned

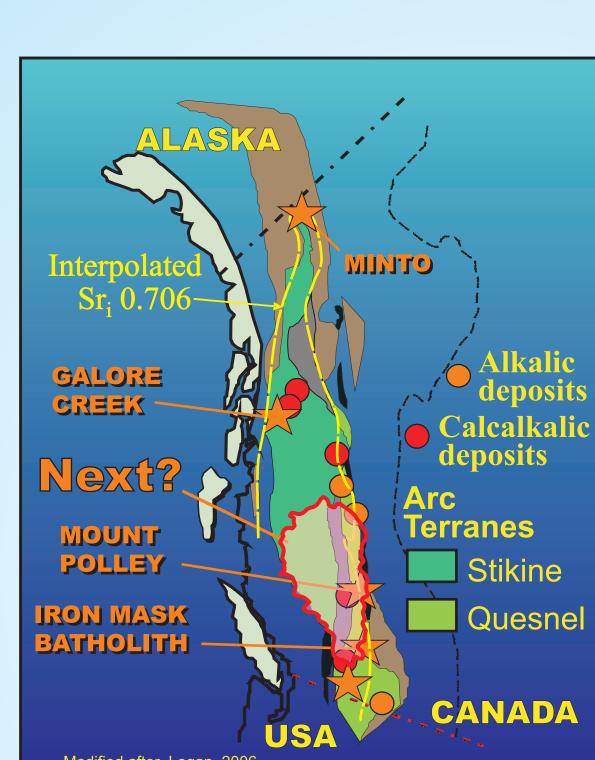
GUMBO: local disseminated chalcopyrite and pyrrhotite in an altered, porphyritic, mafic igneous unit (Right D, E). Samples from the showing returned elevated levels of Cr (518) ppm, possible contamination from mill), Ni (150 ppm) and Zn (180 ppm) relative to other samples analyzed.

OROVAIN/



(Po) and yellow chalcopyrite (Cpy) as irregular clots and dustings (reflected light); and; E) actinolite (Act), and chlorite, replace the cores of altered phenocrysts, possibly pyroxene(?).

Mineralized arcs

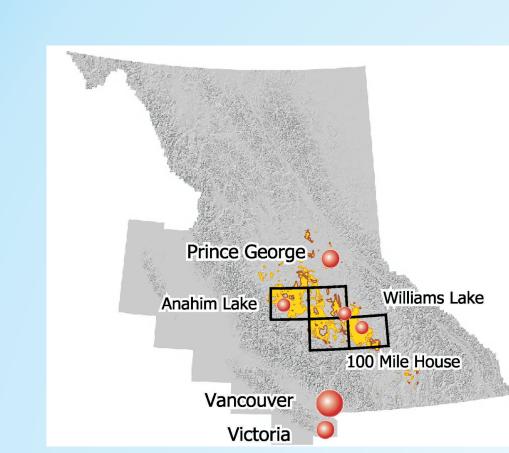


period of Cu-Au±Ag min-

Quesnel and northern Stikine arcs. However, no coeval deposits are yet known in southern Stikine arc, which underlies the western half of the BIZ. Yet another indication that the BIZ offers...

MORE TO EXPLORE.

Chilcotin Gp. & till extents



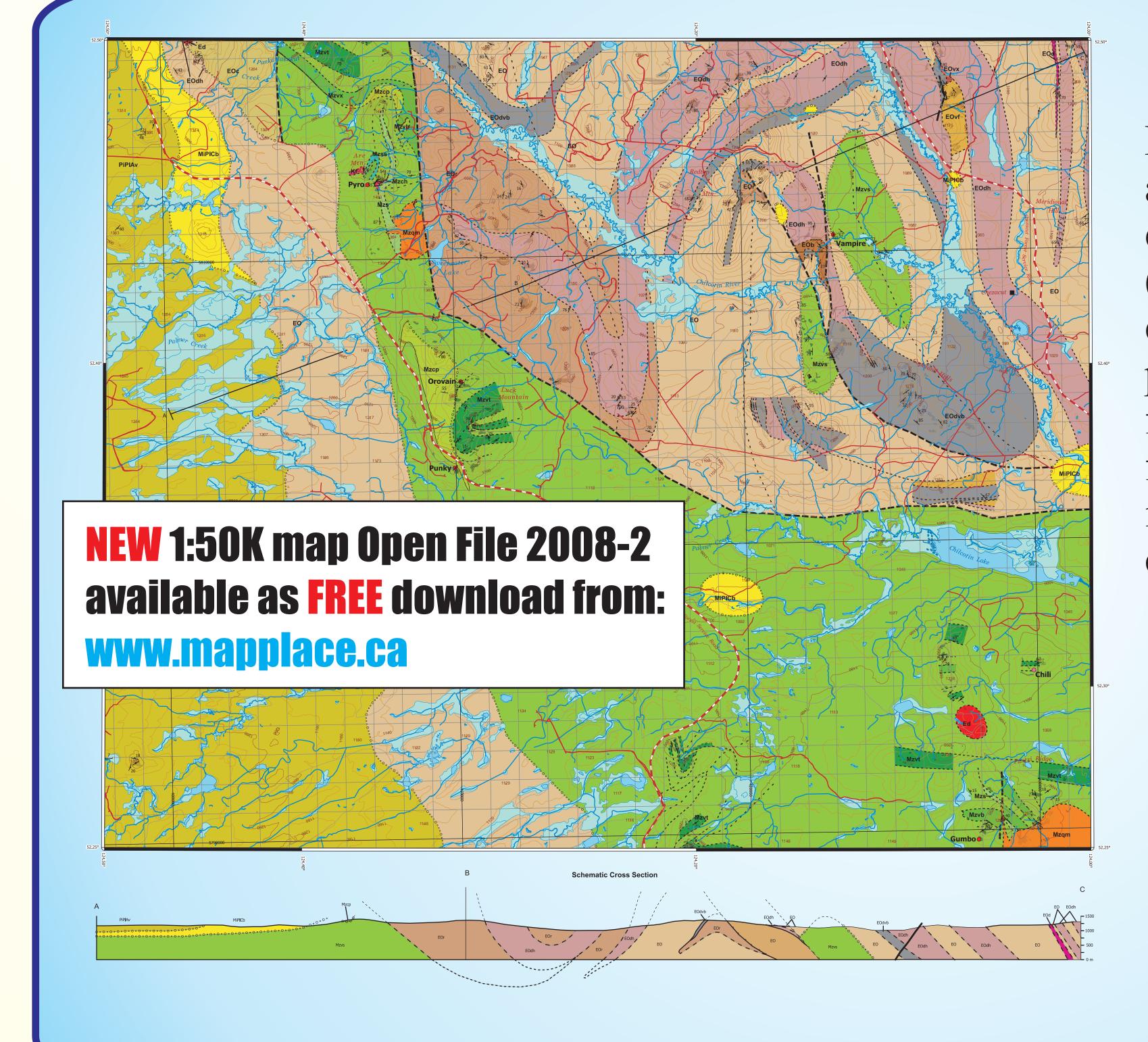
An assumed thick Chilcotin Group cover has been a significant deterrent to mineral exploration in the BIZ. However, if our preliminary model of Chilcotin Group thickness is correct, then the Chilcotin Group is regionally much thinner than generally presumed. The model predicts that more than 80% of Chilcotin Gp. is less than 25m thick,

and nearly 35% is less than 5m thick. It is also less extensive than previously mapped: 96% less in the Chezacut area. If the Anahim volcanic belt is included with the Chilcotin Group, there is still a 62% aerial decrease.

Till cover can be problematic, but composition of cobbles

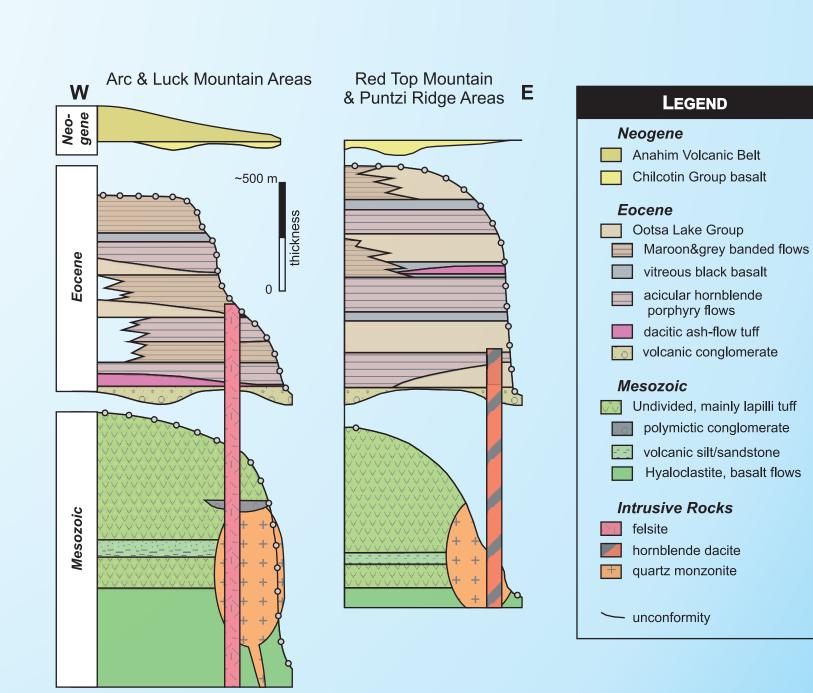
in basal till give some indication of local bedrock. To see bedrock one must get beyond the roads: <2.5% of outcrop is within 15 m of roads.

For more information on the Chilcotin Group thickness see UBC work by R-E Farrell et al. (2007) and Andrews and Russell (2007).



Chezacut mapping

Mesozoic strata are more abundant and extensively intruded than previously thought (nearly 240% of that in Massey et al., 2005). Eocene strata are probably deformed by broad folding, not solely by block faulting. Mesozoic strata are interpreted as exposed in the core of a broad anticline.



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