

NEW DOLLY VARDEN MINERALS
MAPLE BAY PROJECT
Portland Canal, British Columbia.
108 P/5
GEOLOGY

Regional Geology

The Maple bay Prospect is situated in a large roof pendant (about 8 miles E-W by more than 12 miles N-S) or embayment in the granitoid rocks of The Coast Range Batholith. The southern two kilometers of the present claim group are probably largely underlain by these granitic rocks.

The rocks in the pendant strike north to Northeast and dip steeply to the east for the most part.

On the east side of the pendant, at Anyox, copper was once mined from volcanogenic massive sulfide bodies found at or near the contact between black, cherty, pyritic, argillite (slate) and pillow lavas. The rocks in the Anyox area are reported to be isoclinally folded with steep west limbs and the beds on the east sides more gently dipping to the east.

Property Geology

The pyritic black chert was found to outcrop on the north claim boundary on the Mt. Tournay ridge line. Some pillow lavas were noted in a number of locations, particularly within a few hundred meters of the legal claim post Maple 1&2. The possibility then exists that the Volcanogenic Massive Sulfide (VMS) contact horizon may cross part of the claim group.

There are then two possible sources for the copper mineralization in the quartz, chalcopyrite, pyrrhotite, pyrite veins found on The Maple Bay property.

Firstly the copper could have its Origin as the late magmatic differentiation residue from the cooling of the Coast Range Batholith melt.

Secondly the veins could be the feeder channels of the VMS deposits found in overlying rocks as at Anyox. There is however a lack of wall rock alteration around the

veins visited by the author. Usually such feeder systems are quartz, copper stockworks with notable alteration halos around them. Such an alteration source could be located in an area where the known veins appear to merge. This area would most likely be north of The Gertie and Bluebell veins and west of the Thistle, Anaconda, Princess veins. The rocks in this area were not examined so the presence of increased alteration there is not known.

The most likely source of the mineralised quartz, chalcopyrite, pyrrhotite, pyrite veins is folding (or faulting) that opened large fissures cutting the bedding at a very small angle. these fissures were later filled with quartz, then quartz, sulfides and carbonate. Beds not normal to the strain direction received little distension and were filled with quartz in the first quartz filling phase. The second solution phase, quartz, sulfide, carbonate filled the remaining open structures in the large veins. The veins may have been reopened prior to this second phase as evidenced by the sugary texture to the quartz in some of the sulfide rich veins.

Lead Zinc Mineralization

Traces of Galena and sphalerite mineralization (hitherto mentioned in one report on the property, but no location was given) has been located in the present field investigation. Galena and sphalerite along with the chalcopyrite were found in the vein and rock in the Queen part of the Eagle-May Queen vein as well as in a black limestone included with volcanic rocks outcropping a few meters north of the vein.

Similar mineralization occurs in the eastern extension of the United vein structure found in this seasons field work.

In Helen Creek chalcopyrite along with galena and sphalerite was found associated with quartz veins or pods and their enclosing chloritic tuffaceous rocks. Sulfides also occur there in siliceous volcanic rocks at this location.

This lead, zinc mineralization may mark the fringes of the source of the mineralising copper solutions as underlined in the text above.

Folding

Present field mapping recorded some steep westerly dipping beds. This may simply be the warping of the beds or it could indicate steeply dipping fold planes. The scale of the mapping does not permit the resolution of this question. An examination of the 1994 air photos of the property would be very useful in tracing the strata and locating any such folding of the beds.

In the Helen Creek work, measured rock attitudes indicates the presence of an anticline plunging to the Southwest.

Small scale folding was observed at the eastern termination of the Eagle-May Queen vein and could be the cause of it pinching out here. The same could be said for the eastern ending of the United Vein Extension, located a few hundred meters to the north.

The author noted that the large vein systems examined and traced eastward are all steeply dipping and end near a N-S line approximately coinciding with the Maple LCP 1&2 N-S line. East of this line the quartz veins contain no sulfides are rarely over one meter thick and dip shallowly 18° - 30° north through Northwest. This may relate in some way to the reported fold pattern at Anyox a few miles to the west. If this fold hinge line? does limit the presence of large vein structures then the eastern claims have greatly reduced potential for long, wide mineralised veins. Large ice fields and steep walled glacial valleys will make prospecting these claims very difficult. Four days or less would permit examination of the accessible ridges east of Mt. Tournay.

Overview

The largest problem to the development of a mine at Maple Bay is road access from tidewater at Maple Bay and portals at the 2000 ft levels of the Eagle..., Anaconda, Princess veins. Such a road would be very expensive to construct and maintain.

If tonnage were proved down to elevations of 1000 - 500ft. or lower a road to this elevation would not require so much of the production profits. Such a low level portal would develop for production a greater tonnage of ore more rapidly.

Any of the three vein systems has the potential to develop a significant quantity of ore but the Outsider alone does not have the difficult access problem.