

Abstract title: Brett Epithermal Gold Property, Southern British Columbia

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The Brett property is an Eocene-aged epithermal gold prospect in southern British Columbia. Gold mineralization has been known on the property since the early 1980's but the geological and structural setting of the area has been poorly understood and the full potential of the mineralizing system has not been appreciated. Ximen Mining Corp. acquired this property late in 2013 and completed a \$1 million exploration program in 2014. This work has resulted in a new metallogenic model, indicates the district-scale potential for gold mineralization, and shows potential for both high-grade veins and for lower grade, bulk tonnage mineralization.

The Eocene volcanic host rocks to gold mineralization on the property occur within a fault-bounded graben. A trans-tensional structural setting is recognized. Both normal and strike-slip faults are present. Mineralization is hosted within a near flat-lying sequence of interlayered mafic to intermediate flows and volcanoclastics, and is controlled both by stratigraphy and structures within the graben.

Epithermal quartz and quartz-carbonate veins (with gold mineralization) were emplaced along early northwest and north-trending, steeply west-dipping structures. Shortly after, or contemporaneous with veining, feldspar-amphibole porphyritic dykes intruded along these same structures. The dykes are both spatially and genetically related to gold mineralization, with amethystine fillings to miarolitic cavities within dykes. Late dextral strike-slip displacement along northwest-trending structures dismembers the earlier emplaced epithermal veins along these structures. Most of the historical exploration on the property focussed on one particular northwest trending fault, the Main Zone, with results from drilling including 2.29 m @ 78.5 g/t Au, 1.45 m @ 62.1 g/t Au, 2.85 m @ 24.9 g/t Au and 2.19 m @ 18.5 g/t Au. Although these, and other, good gold results were returned from historic drilling, quartz veins along the northwest structure are broken and discontinuous. North trending structures appear unaffected by this late-stage faulting, and as such are better exploration targets for preserved epithermal veins.

Characteristics of the host rocks affect the style of alteration and mineralization. In competent volcanic lithologies, the system manifests as high-grade veins and stockwork zones, with narrow alteration envelopes. More permeable lapilli tuff and interflow volcanic breccia is pervasively silicified with lower grade, potential bulk tonnage gold mineralization, and with broad haloes of argillic and propylitic alteration.

Unaltered host rocks to mineralization are strongly magnetic. The alteration associated with mineralization is magnetite-destructive, and magnetics is thus a useful exploration tool, particularly in areas of limited rock exposure. Ximen completed the first ever ground geophysical survey on the Brett property in 2014 and identified a 1 square km strong magnetic low anomaly northwest of the Main Zone. The magnetic low anomaly remains open to the north, beyond the limits of the survey. An induced polarization survey was then completed, and 2 strong IP chargeability anomalies were identified. The coincident magnetic/IP target occurs in an area of thick cover, with only rare outcrop. Those outcrops display strong silicification, advanced argillic alteration, pyritization, and local quartz stockwork veining. The size and strength of the anomaly suggests a large alteration zone, extending laterally well beyond the known exposures, and indicates potential for a sizeable low-grade bulk tonnage system. The type-example for this deposit style is New Gold's Blackwater deposit in central BC.

Ximen is currently completing a 3000 m diamond drill program on the Brett property, to test both high-grade vein targets and to test the coincident mag low/IP chargeability anomalies for bulk tonnage mineralization.

