

# IRON HORSE - BOLIVAR Au-Ag-Cu-Co Property

## Introduction

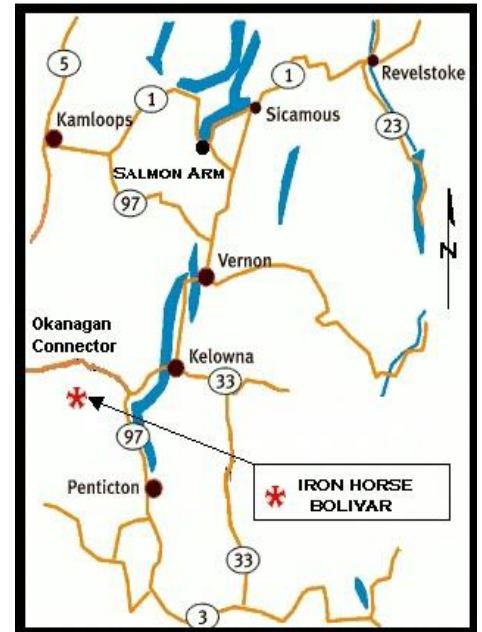
The Iron Horse, Bolivar and Silver King claims were located to cover high grade gold mineralization discovered by the drilling and the sampling of known surface showings.

The previously discovered gold mineralization was partially the result of a program funded by Placer Dome and Fairfield Minerals Ltd.

## Location & Access

The claims are located 15 kilometers west of Peachland BC approximately **8 Km. southeast of the past producing Brenda Mine open pit Cu - Mo mine.**

The Headwaters Lakes logging road transects the property providing good road access. Numerous access, spur and drill roads have been constructed for logging and by previous operators.



**NORTH HORSE STRIPPED AREA- MASSIVE SULPHIDE – Au-Ag-Cu-Co**

## Physiography

The property is on the eastern edge of the Trepanier Plateau. The claims straddle an easterly trending ridge that is flanked several Kilometres to the north by Peachland and to the south by Greata creeks.

Elevation in the claim area ranges from 900 metres to 1500 metres above sea level.

Bedrock exposures are generally greater than 30 percent on the steep slopes of the ridge but are generally covered by overburden in the valley bottoms.

Forest cover on the south facing slopes of the claims, is mostly mature ponderosa pine with interspersed grassy and open patches.

Annual temperatures range from -20 to +30 degrees Celsius. Annual precipitation is very low, the area is basically free of snow from early May to late October.

Numerous new logging roads have been constructed in the immediate claim area.

These new logging roads postdate the major exploration programs on the property and are targeted for future reconnaissance prospecting and sampling.

## History

Exploration in the claim area dates back to 1898, when shafts and tunnels were dug on gold and silver bearing quartz veins exposed on the property. These properties (reverted crown grants ), known as the Silver King, Rat, Greata, Mitchell and Alma Mater properties are located at the west end of the present BOLIVAR claim area.

Three shallow shafts and one deeper one (76m) were sunk. Four adits (to 70m) one crosscut (58m) were driven in intrusive and volcanic rocks. The target of this exploration was free milling gold; however, there is no record of any production.

The first known work in the area was completed on the Silver King and Alma Mater groups. These properties were comprised of the following (RCG's) reverted crown granted claims.

**The Silver King Group** - RCG's; Silver King, Mary F, Canadian King, Julia Anna, Lily R and Doctor L. The old workings on the Silver King are comprised of a 110-foot adit with a 20 foot crosscut, also a 25 foot winze with a 40 foot crosscut. This work encountered a 15-foot-wide vein of grey and white quartz, bearing values of silver with **free gold**.

**The Alma Mater Group** - RCG's; Alma Mater, Golden Crown, Mountain Queen, Shiloh, Arthur R, Golden Tarry and Rosebud. On these properties, the old workings consist of three adits that have been driven, 218 feet, 72 feet and 115 feet respectively.

Three shafts have also been dug; 14, 10, and 13 feet respectively. The target of this exploration was free milling gold in quartz.





Skarn hosted, Copper, Zinc, Gold and Silver massive sulfide mineralization has been discovered about four Km., to the north-east on the Iron Horse claim. Exploration consisting of mapping, trenching, soil geochemistry, geophysics and drilling has taken place on and near the IRON HORSE (L 4098), intermittently since the 1930's.

More recent exploration has been focused on porphyry copper molybdenum deposits and gold bearing veins and structures associated with intrusive, volcanic and sedimentary units.

### **Regional Geology**

The area is underlain by large pendants of sedimentary and volcanic rocks of the upper Triassic Nicola group, which are cut by Triassic to Jurassic age Nelson Plutonic rocks.

### **Property Geology**

The claims are underlain by sedimentary and volcanic rocks of the upper Triassic Nicola Group. These units consist mostly of andesitic to dacitic volcanics, with minor interbeds of argillaceous sediments. These units are largely hornfelsed with minor development of calcsilicate minerals.

These rocks have been intruded by dikes and sills of diorite and granodiorite of the Early Jurassic Penask Batholith. Carbonate horizons have been recrystallized to marble and metasomatized to skarn at, or near intrusive contacts.

Drusy limonitic quartz veins with boxwork textures contain disseminated to massive sulphides. The veins cut all of the lithologies and range from a few centimeters to over three meters wide.

### **Mineralization**

No single lithology or rock type on the property is favored for the occurrence of gold. Gold mineralisation occurs in several different modes, including **Massive sulphide** lenses, silicified and **hornfelsed volcanics**, sulfide poor garnetite **skarn**, pyritic bleached **diorite**, quartz- arsenopyrite **veins** and as fine disseminated **native gold** in marble. Prospecting and sampling of trenches have identified mineralisation with high gold values.

### **Some of the results of the surface sampling are as follows:**

- A continuous chip sample in garnetite skarn with 2% arsenopyrite assayed **15.6 g/t gold over 1.5 metres.**
- A section across a garnet skarn near the foot wall contact of a low angle fault assayed **38.3 g/t (1.12 opt ) gold over 1.5 m.**
- A section across an arsenopyrite vein with clay gouge yielded **15.7 g/t gold over 0.8 m.**
- A section of altered diorite with disseminated pyrite and arsenopyrite assayed **8.2 g/t gold over 2 m.**

Grab sampling of surface exposures have returned values ranging from 0.16 to **11.19 ounces per tonne gold.**

Fine Visible Gold has been identified within stockwork chalcedonic veins cutting silicified marble units containing disseminated pyrite and arsenopyrite.



STOCKWORK CHALCEDONIC (EPITHERMAL?)  
QUARTZ VEINS CUTTING MARBLE



**The results of some of the drilling on the property are as follows:**

- A section of fine-grained siliceous rock yielded **14.33 g/t Au over 1.52 metres.**
- A section of altered, sericitized and silicified sheared mudstone with traces of pyrite and arsenopyrite assayed **16.2 g/t Au over 1.0 m.**

This intersection was within a section averaging **9.38 g/t Au over 2.5 m.**

Hole 88-20 assayed **5.8 g/t gold over 6 metres**, within this intersection a **3 metre section assayed 9.2 g/t gold.**

An assay from hole 88-20 assayed **14.9 g/t gold over 1.52 metres** and was associated with a pink skarn containing 4% disseminate and massive pyrite.

Assays greater than 0.5 g/t gold have come from all 12 holes drilled and no one lithology was favored. Gold bearing intersections have been included in; skarn, marble, diorite and granodiorite, quartz veins, limestone, argillite, and andesite all containing traces of pyrite.  
**Some significant RC drill chip sample results:**

(Several other, highly anomalous results have been noted over longer intersections)

- **3.1 metres - 4.04 g/t gold**
- **6.0 metres - 5.28 g/t gold**
- **3.0 metres - 8.39 g/t gold**
- **9.1 metres - 2.60 g/t gold**
- **1.6 metres - 14.3 g/t gold**
- **4.6 metres - 4.50 g/t gold**

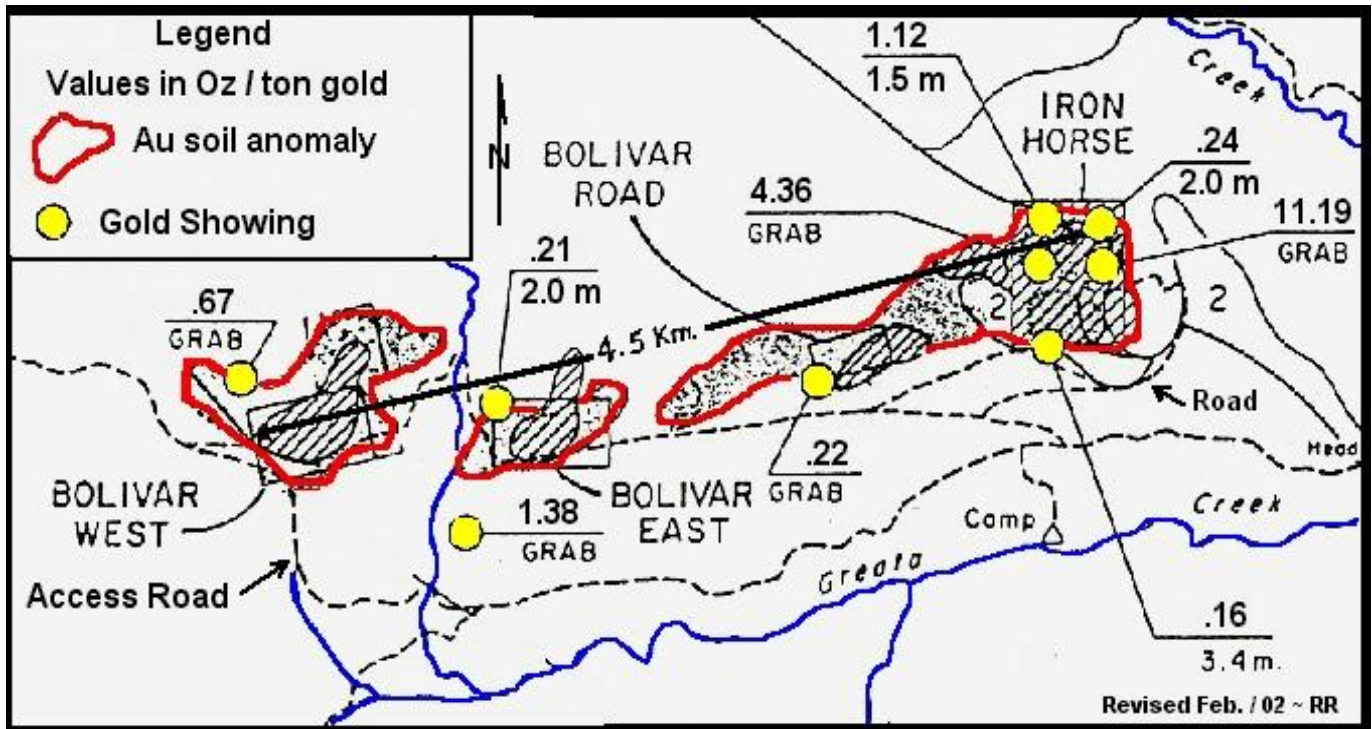
Sampling by the BC Geological survey has identified highly anomalous values in copper, zinc, gold, silver, bismuth, and cobalt.

One such sample ran up to **1 percent copper and 19 grams per tonne gold and 13 g/t silver.**

Significant economic minerals found on this property are;

**Gold, Copper, Zinc, Molybdenum, Silver and Cobalt.**





**Map results are posted in ounces per tonne (opt) gold**

Several large gold geochemical soil anomalies have been defined over an area greater than four- and one-half kilometers in length.

The concentrations of gold in the soil deemed to be anomalous ranges from 20 ppb to 50 ppb. With areas of higher gold in soil, ranging upwards of (490ppb).



**Au-Ag-Cu-Co**

## Conclusions & Recommendations

The previous operators of the property have outlined large areas of **gold mineralisation** that occurs in several types of lithologies over a **four- and one-half kilometer** length. **High Grade Gold** intercepts have come from volcanic, sedimentary and intrusive rocks on the property.

Because of the widespread nature and various types of occurrences of gold, plus the fact that visible gold has been found within stockwork chalcedonic quartz veinlets cutting a marble unit. **Epithermal gold potential...**

Further exploration on this property is warranted. The focus for the next stage of exploration should be concentrated on exploring for a large bulk tonnage type of deposit. As well as correlating the existing high-grade gold intercepts.

Contact us for more information...



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