

HB Mine

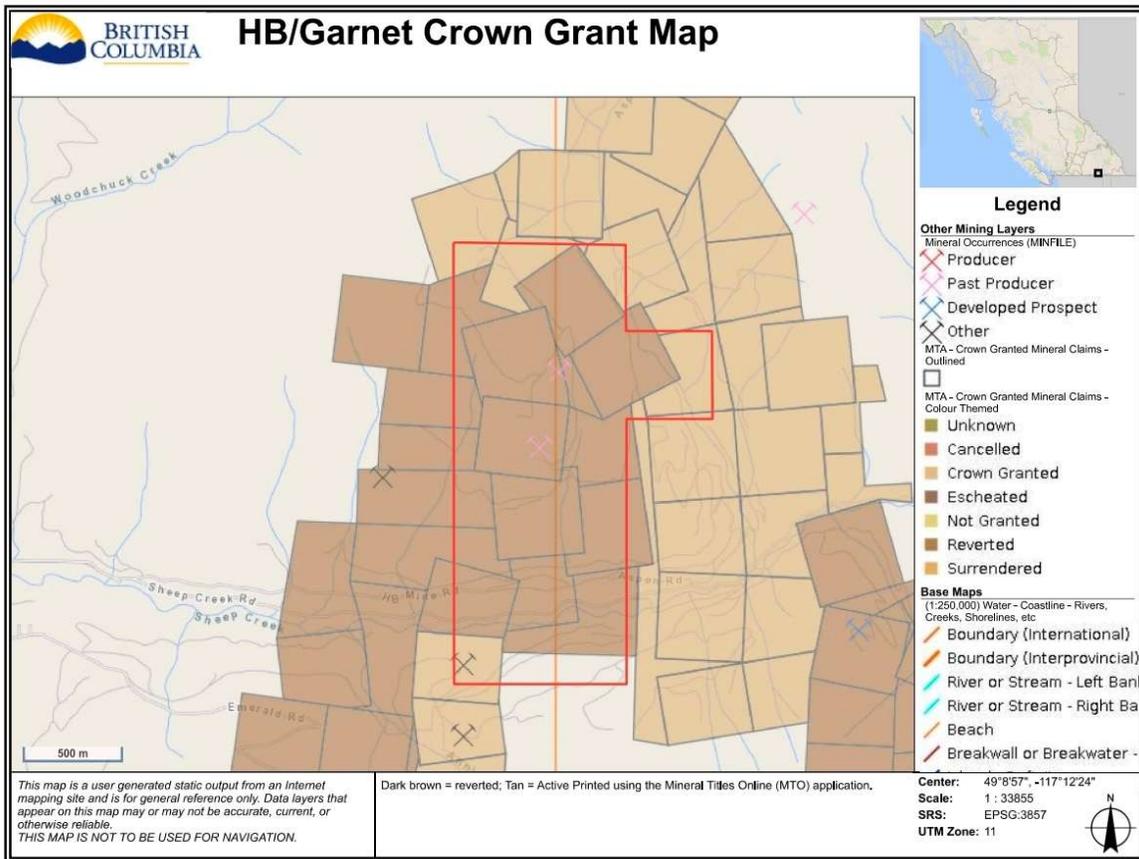
Historic Mine in the Sheep Creek Mining Camp

Commodities Lead, Zinc, Silver, Cadmium, Copper, Gold, Talc

232.42 Ha

The HB mine produced a total of 6,656,101 tonnes of ore in 29 years between 1912 and 1978. Recovered from this ore were 29,425,521 grams of silver, 49,511,536 kilograms of lead, 260,431,646 kilograms of zinc, 2,019,586 kilograms of cadmium, 105,412 kilograms of copper and 6,159 grams of gold. Measured and indicated reserves published December 31, 1978 by Canadian Pacific Limited were given as approximately 36,287 tonnes grading 0.1 per cent lead and 4.1 per cent zinc.

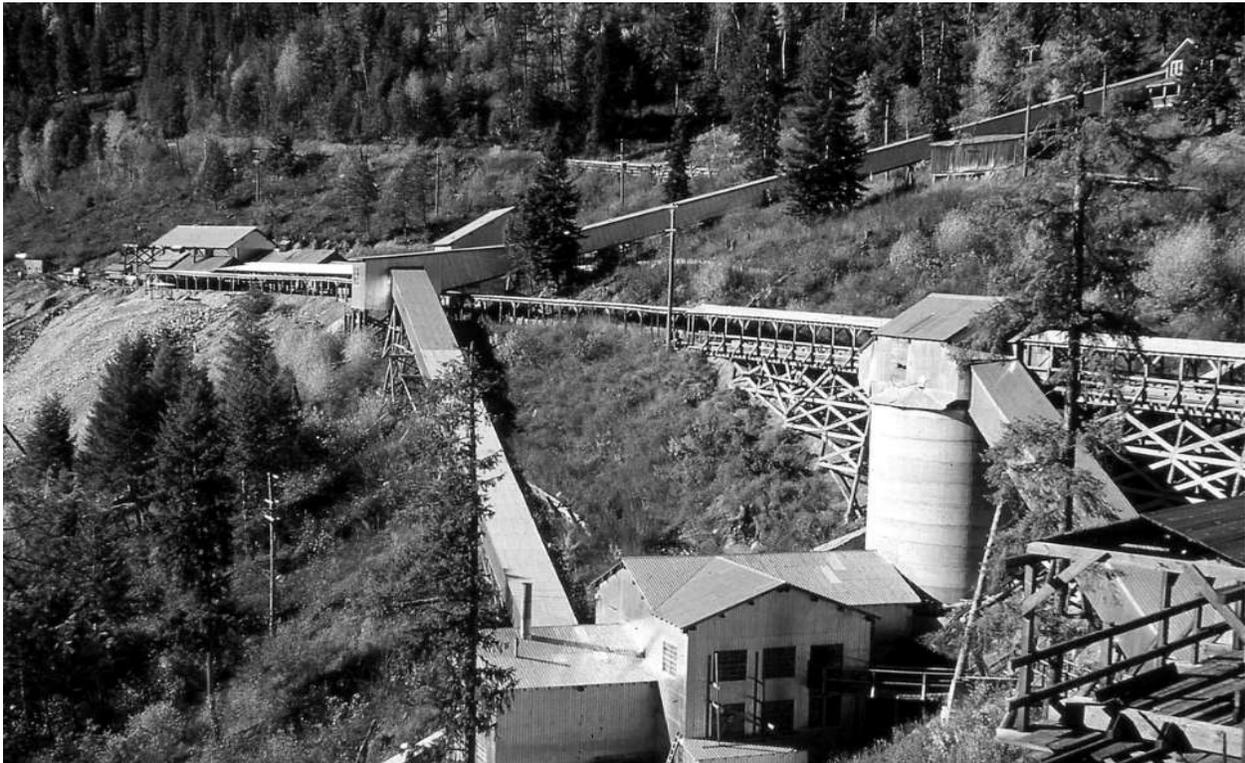
Measured and indicated reserves, as of December 31, 1978, were reported at 409000 tons, at 0.1 per cent lead and 4.1 per cent zinc on the Garnet.



HB Mine

The HB orebodies are currently thought to be Kootenay Arc-type carbonate hosted sedimentary exhalative (SEDEX) deposits. The orebodies are located within dolomitized limestone of the Lower Cambrian Laib Formation, Reeves Member (correlative with limestone of the Badshot Formation). The east boundary of the Laib Formation is in contact with argillites of the Lower to Middle Ordovician Active Formation, on a fault contact, with the Active rocks overthrust from the east over the Reeves rocks.

Two distinct calcareous layers of the Reeves Member can be recognized in the area, an upper one about 110 metres thick separated from a lower 12-metre member by 15 to 30 metres of micaceous brown limey argillite. The HB orebodies occur within a hundred metres or so to the west of the thrust fault. It is thought that the mineralization is related to the intrusion of granitic stocks of the Middle to Late Jurassic Nelson Intrusions with the nearest outcrop about 1 kilometre away from the mine. The only intrusives present in the mine are post-ore diabase dykes up to 3 metres thick.



[The HB Mine Concentrator.](#)

In the vicinity of the HB mine, the beds are folded into a broad synclinorium, and the limestone layers in the mine are on the west limb of this structure. There is evidence of much isoclinal folding within the trough of the synclinorium, with axial planes steeply inclined to the east and folds plunging 20 degrees to the south. There may be similar folding along the west limb within the mine area, but the portions of the folded beds

HB Mine

revealed by the mine workings indicate that here the limestone has only formed thickened wrinkles. Within these wrinkles the beds are highly distorted by complex folding. In the central portion of the structures there is cleavage banding which strikes north and dips steeply. The primary folding is disturbed by major cross folding in at least two places, one at the north end of the mine, the other just south of the main orebodies. The cross folds plunge steeply to the north and resemble "S" type drag folds.

The principal ore zones consist of three steeply dipping, parallel zones lying approximately side by side and extending as pencil-like shoots for about 900 metres along the gentle south plunge of the controlling structures. The largest and most easterly ore zone has a maximum height of about 140 metres and a maximum width of 30 metres. Within these zones are steeply dipping discontinuous ore stringers with a lead to zinc ratio of 1:5.



[HB Mine 1956.](#)

In addition to the steep stringer lodes there is a second type consisting of flat lying, slightly brecciated zones with a lead to zinc ratio of about 1:2.5. These zones plunge at 20 degrees to the south, in general agreement with the plunge of the other orebodies. There are several separate ore zones of the flat lying variety. The layers of ore range from a few metres to 12 metres in thickness but are generally from 3 to 5 metres thick. The sulphide mineralization within these layers is fairly regular and resembles bedding.

There is evidence to indicate ore deposition was controlled by shear zones within the folded limestone; the best ore concentrations occurring at the junctions between steeply

HB Mine

dipping shears (the pencil-like ore bodies) and flat lying shears (the flat-lying brecciated orebodies).

The mineralogy of the ore is relatively simple with pyrite, sphalerite and galena in order of abundance and minor pyrrhotite found locally. The northern portion of these bodies is exposed at surface, near the original HB claim, and are oxidized to a depth of about 100 metres at that point. Where the ore is protected by enclosing dolomite relatively little oxidation has occurred. Other secondary minerals include calamine, smithsonite, anglesite, and the rare zinc phosphate, spencerite.

Wallrock alteration is typical of lead-zinc deposits in the area. The ore zones are enveloped by a broad zone of dolomitization which is bordered along its contact with the limestone by a narrow zone in which limestone is replaced by fine-grained silica. Talc and tremolite alteration, thought to be pre-ore, is concentrated near the silica-rich zone resulting from the silicification of dolomite. An appreciable amount of talc is found locally within the ore zone.

A smaller zone, located to the southwest of the main HB mine, is known as the Garnet orebody (082FSW249). The Garnet zone was mined from the surface from a small open pit, whereas the main mine is entirely underground.

This property is offered for sale by way of cash or working option to purchase.

Preference given to companies willing to fund further exploration.

For more information, please contact:

Micheal Langille (250) 353-1723 riverroseresourcesltd@gmail.com

River Rose Resources Ltd



MINERAL EXPLORATION AND DEVELOPMENT

View other available properties at: <http://www.riverroseresources.com>