

## **Exploration Work on the Lucky Ben**

Groundhog Mining & Milling Company our contractor is on location and will continue work to open and explore the existing tunnel. The Contractor has already begun work to continue opening the historic tunnel by slabbing and clearing debris for the purpose of accessing previously mined stopes. This seasons operational plan for the Lucky Ben was developed from data obtained during last season's work including the diamond drill program that proved the down-dip extension of the vein exposed along the Lucky Ben Adit by J.A Czizek during work in the early 1900's. J.A Czizek was considered the most scientific miner of his era.

Highlights from the 2021 diamond drill program included a leading assay result of 23.58 g/t and the average assay result for the 6 holes drilled was 8 g/t as reported by the Company Geologist, Richard Morris. Dan Hally, Vice President of Operations used the following comparison to explain the significance of these assay results, "the World Gold Council defines a high-quality underground mine as having a gold ore density between 8 and 10 g/t and we are pleased with the results of our first diamond drill program".

The exploration program has been designed to confirm the information uncovered during an exhaustive review of historical records that provided a wealth of information regarding past production work completed on the Lucky Ben. News articles from the historic Warren Times reported in 1868 the Lucky Ben produced ore containing 5 to 18 ounces per ton. Historical exploration records from Goldstone Corporation which completed exploration work on the Lucky Ben during the period from 1983 to 1987 state sampling of vein material in the trenches and portal dumps gave assay values ranging from 0.2 to 10.4 ounces per ton silver and 0.1 to 13.05 ounces per ton gold. This converts to a range of 5.66 g/t to 294.83 g/t of silver and 2.84 g/t to 369.96 g/t of gold. During October of 1983, backhoe trenching confirmed the extension of the vein east of the portal and exposed several former producing stopes that had carried through to the surface. Further sampling of the Lucy Ben gold-rich quartz vein system that was completed near the portal of the 6570-level adit revealed a 1.5-foot-wide quartz vein grading at 2.12 o/t gold or 60.10 g/t gold. The vein within quartz monzonite which is strongly altered for 2 to 3 feet on either side of the vein where it assays 0.056 o/t gold. These values would therefore produce a weighted average grade of 0.57 o/t or 16.16 g/t over a mined width of 6 feet.

Our contractor purchased narrow bucket muckers which will allow exploration of the existing tunnel to be completed with significantly less effort and expense with a reduction in the width of the tunnel being rehabilitated. We plan to construct and secure the new adit and then complete drift work directly on the vein structure we identified through our diamond drilling program completed last year. Our contractor is preparing their mobile assay lab to be moved on location so we can complete daily testing for each round we shoot to determine gold values. We have identified the area for our contractor to locate their portable mill. Our contractor is in the process of finalizing the permit applications for the use of this equipment. We will have the ability to process development rock in bulk samples to better determine values of this and other ore bodies as they are identified.

Extensive work was done to remove the blockage in the main tunnel that is located approximately 50 feet into the main tunnel just past the first raise that enters a large stope. While the work was not successful in removing the blockage, it did clear enough material for us to be able to locate exposed



sections of the vein that were previously mined. Samples were also taken from the exposed vein located in the first main stope that was worked just above the first raise. Work was halted after reaching a point in the tunnel that was too narrow for the small track mounted front-end loader to pass. Future work to widen the area by approximately 1 foot will allow for access to the blockage with the front-end loader. The following information includes the assay results and pictures of the work as well as the exposed vein in this area.



A major undertaking for the company last year was the core drilling project conducted by our contractor, Groundhog Mining and Milling Corporation at the Lucky Ben Mine. We set a goal of drilling six holes under the previously mined stope located approximately 50 feet from the Adit. As part of this effort, we completed over 125 feet of new tunnel to connect with the old tunnel and constructed an underground drill pad as well as underground storage areas. The purpose of the core drilling project was to determine if the vein structure that was originally mined in the stope continued downward and if gold and silver are present in the vein. This stope was mine in approximately 1903 and reaches the surface. The core size we used was AQ which has an outside diameter of 48 mm and an inside diameter of 27 mm. The information available on the vein structures in the Warren Mining District, specifically the Little Giant indicate these are narrow vein structures containing high grade ore in pockets. We developed a plan of exploration that includes core drilling under known mined areas to determine if they

continue downward and then complete additional sampling by drifting directly on the vein if the initial core drilling results justify the additional sampling. This approach has been recommended on other properties like the Lucky Ben in the Warren District because of the difficult nature in accurately determining the values of ore bodies located in the narrow veins.

The assay results from the six holes we drilled this season. We did intercept the vein in all six holes drilled beneath the previously mined stope. While the results are mixed which is typical of narrow vein structures, we did get gold and silver results in all six holes drilled. The purpose of this program was to test for the down-dip extension of the vein exposed along the Lucky Ben Adit by the Czizek's during their work in the early 1900's. Six holes were drilled in various directions and at angles designed to intersect the vein below the elevation of the Lucky Ben Adit. The program was successful as every hole intersected the vein. Two of the holes returned assays between 1/2 and one ounce/ton gold and one of these samples contained visible gold. The assay results are as follows:





Hole#	Au Oz/ton	Ag Oz/ton
#1	.010	.62
#2	.016	5.45
#3	.012	1.60
#4	.004	.12
#5	.671	1.10
#6	.832	2.28

Sean-Rae Zalewski, CEO, continues to cultivate collaborative relationships to further the success of our operations near Warren, Idaho at the Lucky Ben project. He recognizes the benefits of working with business partners is having like-minded people you can brainstorm with to generate innovative ideas and overcome challenges. His engagement with Liberty Refiners to complete testing at the Lucky Ben project for Rare Earth Metals and other valuable minerals has resulted in encouraging results for Rare Earth Metals, Gold and Silver. Testing methods included Fire Assay, Direct Coupled Plasma and X-ray fluorescence. Liberty Refiners reported results of 4.6 oz/ton to 8.1 oz/ton for gold and 4.6 oz/ton to 11.3 oz/ton for silver. Manganese is present our XRF showed 3%, 5% and 23%. Manganese is now a strategic metal for battery production in the US and may well add value to the ore. 5. Rare earths were detected with our XRF elements included were, Hf Hafnium, Rb Rubidium, Sr Strontium, V Vanadium, Y Yttrium. The values were small but detectable and warrant further investigation.