

862011
Harner Group,
Marmot River,
BC

Stewart, B. C.

December 10th, 1926.

Dome Mines, Limited,
South Porcupine, Ontario.

Sirs::

I have written today to Dr. Hanson of the Geological Survey Branch in Ottawa, asking him to send you a report on the Harner Group at the head of Magee's pass on the south fork of the Marmot River.

Hoping you will comply with my wishes,

I remain,

Yours truly,

W. R. Harner

Report on ^aHorner Group of Mineral Claims

Not to be used for publicity

By *George Haven*
Location *Geological Survey Ottawa*
Dec. 2, 1926

The ^aHorner group is located in McGee pass, the divide between Marmot river flowing into Portland Canal near Stewart and the Kshwan river flowing into Hastings Arm. The elevation of the pass is 4700 feet and the property lies about 200 feet higher. The distance from the wharf at the mouth of Marmot river is approximately 8 miles. A wagon road was under construction during the past summer for $2\frac{1}{2}$ miles of this distance. The remaining $5\frac{1}{2}$ miles is covered by pack trail. During the past summer the glacier on the south fork of Marmot river was used as a highway for travel for a mile of the distance.

Climate

The annual snowfall at Stewart is about 18 feet. At higher altitudes snowfall is heavier, and snow 30 feet thick lying on the hillsides is not uncommon. The ^aHorner group appears to be free from snowslides, but as it was late in the season when I visited the property, I could not be certain on this point. The snow disappears in July and begins to accumulate again in October. Summer is pleasant and temperatures in the winter are not extreme.

Timber - water power.

Timber is not present on the property but can be obtained $1\frac{1}{2}$ miles away. It might be advisable to use fuel oil or coal for fuel. No suitable site for the development of water power exists near the property except on the creek ~~leading~~ ^{leading} ~~bedding~~ in McGee pass which would furnish a small supply of power during the summer. Power could perhaps be developed best by ~~using~~ ^{using} internal combustion engines burning fuel oil.

Geology

The Bitter Creek formation, the oldest rocks in the area, consists of sedimentary rocks, mostly argillites. It contains a number of mineral deposits among which is the ^gHorner group. Overlying the sediments is a series of tuffs, breccias, and lava flows known as the Bear River formation. These rocks have been intruded by the Coast Range batholith, the eastern contact of which has here a northwesterly trend and passes within half a mile of the showings on the ^aHorner group. A stock of augite porphyrite also intrudes the sedimentary and volcanic rocks on the property and was intruded prior to the formation of the mineralized veins.

The Mineral Deposits

Practically all of the mineral deposits on the south fork of Marmot river lie in close proximity to the batholithic contact and the batholith probably furnished the metals which now make up the mineral deposits. The stock of augite ~~diabase~~^{porphyrite}, although ~~formed~~^{formed} before the mineral deposits, has influenced the vein formation. It was noted that strong veins in the argillaceous rocks terminated within short distances on penetrating the augite porphyrite. Fractures were not formed with equal facility in the two types of rocks.

Two veins are exposed on the group. The veins are roughly parallel a few hundred feet apart, strike east-southeast and dip about 50 degrees into the hillside on which they occur. The strike of the veins makes the outcrop incline gently up-hill so that points on one vein 500 feet apart would differ in elevation by about 175 feet. The strike and dip of the veins is practically the same as that of the enclosing rock. Both veins consist of quartz containing pyrite, arsenopyrite, galena, sphalerite, free gold, and perhaps grey copper and silver minerals. The outcrop is oxidized and free

gold can be panned from the rust of both veins but seems more plentiful in the lower vein. This gold is probably secondary being freed from the sulphides by oxidation.

The upper vein has been very well traced by 8 open cuts proving a length of 500 feet. The lower vein has been traced for about the same distance by means of 5 open cuts. East of the most easterly open cuts both veins enter a stock of augite porphyrite and do not appear to continue much farther. As the first work was done on the veins last summer, the surface has not yet been thoroughly prospected and a little further exploration may prove much greater lengths. A tunnel has been started at the lowest open cut on the upper vein. The upper vein, where exposed, in open cuts, varies in width from 4 to 9 feet. It is a strong vein and is reported to contain shipping ore. The lower vein varies from 4 to 10 feet in width and is in most places 4 feet wide. It is reported by the owners to contain good values in gold. The most important metals commercially in the veins are gold and silver.

Recommendation.

The veins should be sampled to prove whether the vein matter is of shipping or of milling grade. They should be traced by open cuts to determine their extent. If the veins have shipping ore on the surface, drift, tunnels can be driven to prove the depth of shipping ore and to serve as haulage ways for stoped ground. I believe the ore can be taken to the wharf on Portland Canal in a small way at low costs compared with pack horse transport. Ore toboggans or sleighs could be let down by gravity on the snow to Marmot river. From this point to the wharf, a distance of $5\frac{1}{2}$ or 6 miles, the grades are no greater than on good mountain wagon roads free from switchbacks. If sampling should prove shipping or milling ore I think the property would be attractive to mining companies and certainly would warrant extensive underground development under company management.

March 12, 1927.

W. R. Harner, Esquire,
Box 28,
STEWART, B.C.

Dear Sir:-

Your favor of February 28th, addressed to the Company, attention of Mr. V. A. James, is duly to hand.

We beg to advise that Mr. James is at present in British Columbia, but is out of touch with his mail and will likely not be back to the track before June, after which, date, possibly he will visit the Coast.

Wishing you the best of luck with your Development Work, I am

Yours very truly,

HP DeF/RCM.

Vice-President &
General Manager.