

NAME Lynn Creek

SUBJECT - Memo, J. P. Galloway, 1914

9255W003-02
PROPERTY FILE
008273

92-160
920-19
Lynn Cree Zinc Mines, Memo on, by J.D. Galloway

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See also Deputy Minister of Mines
Memo 85.

Ore Bodies, Development, etc.,

This property has at present developed a small body of low grade zinc ore but with further work it seems quite possible that a large tonnage may be shown up.

Two main ore zones known as the East and West orebodies are partially developed while there are two or three other smaller fractions carrying minerals.

The east orebody is the most important one and in Zinc canyon is exposed for a distance of 200 feet on the surface.

A crosscut tunnel strikes the ore 12 feet from the mouth and continuing shows the ore to be 15 feet wide. A drift along the strike of the ore has also been driven for a distance of 25 feet.

Taking this work in conjunction with an open cut 150 feet south which shows 8 feet of ore the superintendent estimates a block of ore 100 x 20 x 50 or about 10,000 tons but this ore is by no means "ore in sight" i.e. its existence is as yet not proved.

The average grade ~~fst~~ of the ore as determined from samples taken by the writer is Silver, - trace ; Zinc, 9%
Lead, - nil;

Five Hundred feet north ~~of~~ and 275 feet higher than Pearson tunnel has been driven 130 feet on what is supposed to be an extension of the East orebody but the ore is not continuous as a line of bluffs between the two points does not show any sign of ore.

Jan 23rd. 1914

LYNN CREEK ZINC MINES.

LOCATION. The property woned by this Company consists of the following claims; Kemptville, Extension, Eveining Star, Russel, Jersey, The Cascades, Fleming, Pretty Bess, and Lucky Star, containing 400 acres more or less.

It is situated on the west Fork of Lynn creek about 12 miles from North Vancouver.

Acess to the property is had by the Lynn valley car line of the B.C. Electric Railway to a point 3 miles miles from the water front then by a waggon road and logging road for three miles further and then another six miles by a very indifferant pack trail .

At present it costs five cents a pound to pack in supplies from the end of the car line to the mine.

The proposed waggon road would be somewhere about ten miles long and would go up Lynn creek to the west fork crossing the main creek above the branch, then continuing up the branch to a point in the valley thereof immediately below and from $\frac{1}{2}$ to 1 mile from the mine workings which are on a steep hillside.

A very fair grade for this road can be obtained without great expense but a considerable portion of it would need to be covered with corduroy as the ground is swampy.

Mr. H. Emmens, engineer-in-charge at the mine states that a government engineer, name unknown, estimated the cost of this road to be about \$12,000.

The face of this tunnel is not in ore but the superintendent considers that the orebody can be picked up by crosscutting to the east. Very little ore is in evidence along the tunnel but from the rock extracted in working, twenty tons of first class and twenty five tones of second class ore have been saved while it is possibly true that a little more went over the waste heap.

An average sample of the first class ore assayed;

Zinc 18.4 % Lead 35.0% Silver 1.4 Oz.

An average sample of the second class ore assayed;

Zinc 10.3 % Lead 14.4% Silver 2.8 oz.

Another supposed extension of the east orebody occurs on the Evening Star claim at an elevation of 3448 feet.

This showing has been opened up by several cuts for a total distance of perhaps 350 feet which show from 2 to 14 feet of ore.

The average of samples taken here give ; Zinc 11%, Silver trace; Lead nil; It is hardly possible to estimate tonnage here but it seems reasonable that development work would show a good deal of ore.

The west orebody shows up in Zinc canyon paralleling and 150 feet west of the east ore body. It is extremely irregular and one tunnel intended to strike it encountered instead a small body of pyrrhotite, which does not carry values. No estimate of tonnage can be made on it. The greatest width seen was three feet which however was nearly solid zincblende. A few feet north this bunch fades away.

Memo on Lynn Creek Zinc Mines

Two cross fractions are somewhat mineralized and a small showing of ore occurs in Fleming canyon but these at least with development are of slight value.

Three diamond drill holes have been put down, all in the same vertical plane, No.1 horizontal, No.2 187 feet deep at an angle of 32° , No. 3 205 feet deep at an angle of $53^{\circ}25^{\prime}$

The holes were started at a point a little west of the strike of the west ore body and were intended to cut the junction of the cross fissure with the west body.

In No. 3 hole ~~along~~ only zinc-bearing material was encountered from 125 feet to 160 feet. The superintendent says that this 35 feet of ore averaged 10% zinc and .5 ounces of silver.

(The ore-bodies are of contact metamorphic origin being developed in limestone and quartzites adjacent to the contact of a large body of granite. The usual lime-silicate minerals are well developed together with zinc blende galena, pyrrhotite, iron pyrites and even traces of chalcopyrite.

The ore is mainly developed along two well pronounced fracture planes but is quite irregular in distribution both as to width and also along the strike of the fracture. For this reason it is impossible to do any more than guess at the extent of ore bodies until extensive development has been done.

The Company proposes when sufficient ore shall have been developed to put up a mill in the valley of the west fork to which point the proposed wagon road would come and tram the ore down from the ~~mountain~~ mine workings. Sufficient water power is available to run a fair sized mill.

One favourable feature about this property is that the zinc generally occurs clean in the gangue without other interfering sulphides. This should make it possible to effect a high extraction of the values by means of straight water concentration and a high grade zinc concentrate .

From assays of samples taken by the writer it would appear as if the average value of the ore was somewhere about 10% zinc with other values negligible.

With the present facilities for marketing zinc in British Columbia it will require very close figuring to show a profit for this property even granting adequate transportation large tonnage and milling facilities.