

Captain Reddington, in charge of these properties, informed me on the 13th of April, 1906, that since last November, two car loads of ore had been sent to New York, one consisting of 28 tons of rich material, which sold for \$68,000. The second car carried about 30 tons, but he had not, at that date, received the return for it. These shipments, together with some ore on hand at the mine will, it is said, make a total yield, so far, of about \$200,000.

On lot J.B. 6, immediately adjoining, to the south, the property last described, seven silver-bearing veins have been discovered, all of which run nearly east and west. On vein No. 1, where the initial discovery was made at the time the claim was staked, a shaft has been sunk to a depth of 100 feet at a point 200 feet southeast of the 70 feet shaft above described on J.B. 7. From the bottom of this shaft a drift has been run 60 feet east and 40 feet west following the vein. The latter consists of a group of stringers, all much broken up and mixed with the wall-rock. Sometimes there is a streak of vein-matter on one or both sides of this group. Native silver, in the form of bright leaves, occurs in the rock among the stringers, but most of the metal is found in the walls adjoining them. Open cuts have been made on the other six small veins and native silver has been found in all of them in the form of large disseminated grains, which sometimes occur in considerable bunches. The largest of these open cuts is 50 feet south of the above shaft and is 70 feet long by 30 feet deep. The country-rock at the openings on both J.B. 7 and J.B. 6 consists of a blue-gray, soft, fine-grained or amorphous tufa, which, towards the surface, holds rounded and angular fragments of volcanic ash-rock and of gray granite.

Among other openings visited in this part of the district, were the Timiskaming and Hudson Bay and the McKinley and Darragh mines. The last named has been already mentioned as the site of the first discovery of silver in the district. Only a small amount of work had been done on this property, but an opening which had been made on a vein at the water's edge in the southern angle of the lake, showed a promising amount of native silver, together with some smaltite.

At the Timiskaming and Hudson Bay Company's mine the silver-bearing vein which was worked runs northeasterly and is four inches wide, with silver also in the walls. I was informed that here a stope, only 30 feet long and 25 feet high, had yielded two car loads of ore, which sold in New York for \$32,500 and \$7,000 respectively.

The Jacob's mine, already mentioned, lying to the southeast of Petersons Lake, affords one of the best examples of a silver bearing vein cutting the dark greenish-gray crystalline diabase of the district. The vein, which is of calcite, runs north and may be seen along the west side of an adit which has been driven 120 feet on its course into the side

of a hill. At first the vein is only two or three inches wide, but in advancing into the adit it is seen to increase to four and eight inches, and in one part, where it is split up and brecciated, it has a width of ten inches and holds bunches of native silver. In another part also the vein was observed to be rich in the metal. Higher up the hill, an open cut has been made along the same vein with a depth of 25 feet, for a distance of 70 feet, from which it is continued on the adjoining White-Hargraves property. Smaltite and a mineral like niccolite also occur along this vein.

The captain in charge informed me that 23 tons of ore, containing about 3,000 ounces of silver to the ton, besides a little cobalt, nickel and arsenic, had been shipped from the mine during the present spring; also that last year two car loads of ore had been sent from this vein and three from another one, which had been previously opened on the property.

Mr. Henry Richardson, manager of the McLeod and Glendenning (or Hanson) mine, informed me that two calcite veins occur on that property, 300 feet apart, both running northeast and southwest. The one to the northwest is in diabase and is rich in silver, with smaltite; while the other is in slaty agglomerate and carries no silver. The widest part of the productive vein is four inches. The mine consists of an open cut 60 feet long. Ten tons of ore have been shipped.

Mr. Richardson also informed me that the Violet mine, on the lot adjoining the Hanson to the north, is entirely in diabase. Some of the rock is here rather coarsely crystalline, while some of it is fine-grained and as darkly colored as that of the Jacobs mine. The Violet mine has a shaft 90 feet deep and a cross-cut level has been staked to the southward. A little silver ore has been taken out of an open cut. Both the Hanson and the Violet mines show a good deal of smaltite.

The Drummond mine is at the east end of Kerr Lake. Here two smaltite veins occur about 8 feet apart. Between these, horizontal streaks of silver are found in the agglomerate which constitutes the country rock. There is an open cut about 20 feet deep and a shaft is being sunk.

The northern angle of the Lumsden and Booth, or Gillies, timber berth protrudes from the south into the centre of the silver district. This has not been disposed of by Government for mining purposes and it has not been referred to in the above descriptions of silver-bearing properties, although some rich veins are known to occur in it.

The number of veins or vertical zones of fracture carrying silver, which have been already found in so limited an area as the Cobalt silver district, must be considered large, and the question is asked—what are the prospects for further discoveries within the district in the future? Where so many discoveries have been made, while so large a propor-