

Property File
082FNW054

002153

Silverton, B. C.
September 8, 1949.

Mr. R. Crowe-Swords,
423 Hamilton St.,
Vancouver, B. C.

Re: Richmond Eureka Mine,
Sandon, B. C.

Dear Sir:-

According to your instructions I made a brief examination of the Richmond Eureka Mine property, Sandon, B. C., yesterday. I took four samples which have not yet been assayed.

My interim report follows:-

The property is situated on the steep western slope of the ridge on the east side of Sandon Creek at elevations between 4800 and 5700 feet. (Elevations by aneroid barometer).

The No. 5 tunnel was formerly connected with the railway at Sandon by a 4000 feet aerial tram which is now down and apparently beyond repair. The property is reached by a good trail from Sandon to within about 500 feet of the edge of the property, from this point the trail is very brushy and poor.

Production is reported as slightly over 15,000 tons of good lead ore carrying from 40 to 100 Oz. of silver.

The vein has been developed by eight tunnels, numerous open cuts and a shallow shaft. Also, the King tunnel, starting on the Slocan King claim of the Silversmith Mines Ltd., at 4525 feet elevation, has been driven along the vein into the Eureka ground.

The only tunnels I entered were Nos. 1 and 2, elevations 5450 and 5360 respectively. All other tunnels are caved at the portals, but it is possible that Nos 3 and 5 could be entered, at least for a short distance, by crawling through holes over the timbers.

The lowest surface exposure of the vein is at No. 5 tunnel, elevation 4925, where it is eight to ten feet wide. Here it consists of iron-stained quartz and argillite with a little spathic iron and a little sphalerite. The strike is N 70° E. and the dip 48° southerly. A similar, though slightly narrower, outcrop occurs at the portal of No. 4 tunnel, where it has been stoped up from below.

There is also a small showing of outcrop at No. 3 tunnel portal which appears to be offset some 50 feet to the right from the outcrop at No. 4 tunnel.

At No. 2 $\frac{1}{2}$ tunnel there is no evidence of the vein

Tunnel 2 $\frac{1}{2}$ B, about 30 feet long, followed a narrow vein or shear striking N 60° E and dipping 55° southerly which shows a weak gouge, a trace of quartz and pyrite, and does not look like the main vein.

Tunnel No. 2, several hundred feet long, follows a shear three to six feet wide, striking N 35° to 40° E. and dipping 35° to 45° easterly. The shear filling is argillite, quartz, calcite, spathic iron and gouge. No ore was noted but there are occasional specks of galena and sphalerite.

Tunnel No. 1, the highest at elevation 5450, starts on the main vein outcrop about six feet wide, but instead of following what appears to be the main vein, follows a shear or vein running N 60° E for about 40 feet where it is faulted and apparently not picked up again; it shows only traces of zinc. A raise connects Nos 2 and 1 tunnels reaching the latter close to the portal. The outcrop appears to strike about N 20° E and dip 50° easterly. It consists of heavily iron-stained quartz, calcite and argillite with seams and spots of sphalerite which the tunnel appears to crosscut diagonally.

Between this tunnel and the next exposure of the vein, at elevation 5725, there are several open cuts none of which appear to show anything but country rock. It is possible that some open cuts showing the vein could have been missed in the thick brush. The open cut at 5725 shows a 6 inch seam along the hanging wall of the vein containing some galena and sphalerite, followed to the foot wall by argillite breccia cemented by quartz, calcite and spathic iron and containing irregular seams of sphalerite. It strikes N 70° (?) E and dips 55° southerly. About 50 feet east of this open cut there is a 15 foot shaft on the hanging wall part of the vein. It shows strong shearing in the hanging wall argillite underneath which is a ten inch band of decomposed rock and gouge carrying galena and sphalerite which appears to be the continuation of the ore in the adjoining open cut.

This shaft is on the apex of a minor ridge; from the tunnels to the southwest the vein cuts diagonally up a steep westerly slope, while to the north east of the shaft the vein crops nearly horizontally along a steep north slope. East of the shaft a series of open cuts indicate that the vein narrows and finally disappears in a distance of perhaps 500 feet. None of these cuts show anything worth sampling.

Four samples were taken, as follows:-

- #4018 No. 1 tunnel. A few pieces of galena on the dump; very little galena found.
- #4019 No. 1 tunnel. Chips from sphalerite (say 10 tons) on the dump, probably from near-outcrop ore.
- #4020 Shaft. Sample cut from hanging wall streak showing galena and sphalerite. 10 inches wide.
- #4021 Open cut 50 feet southwest of shaft, at elevation 5725. Sample cut from hanging wall streak 6 inches wide and showing galena and sphalerite. Some low grade zinc ore in the foot of this was not sampled.

There are many coarse fragments of zinc ore scattered over most of the surface of the tunnel dumps, but it is very doubtful if they are rich enough to ship without crushing and concentrating. The gathering and transportation of this zinc would be rather expensive. It was not sampled for lack of time; it is said to be quite variable in silver content.

There is not very much of the vein that can now be seen on account of caving in the tunnels. Open cuts are now rather badly sloughed, but many of them apparently never showed much of value, and were probably not on the vein.

Trails on the property are badly grown over with alders, etc., and are also steep. It would be very expensive to get ore off the hill under present conditions, and it would be necessary to develop considerable ore before the construction of a road or tramway would be justified. Winter work would be dangerous as most of the ground is swept by snowslides. There is no camp on the property and no water. Water might be brought from Sandon creek by gravity through a considerable length of pipe, or pumped from the creek.

From the data available the property has only a prospective value, and that appears to be rather small.

Yours truly,

Chas. C. Starr