

800991  
Seymour  
Group

The owners are at present tracing this fracture down to lower points, hoping to find mineralization below timber-line, which would enable work to be carried on in winter. The lowest open-cut, at 4,450 feet elevation, just below timber-line, holds out some promise, but so far mineralization is more prevalent at the higher points.

**Empire Group.** This group, owned by Donald C. Simpson, is situated about 6 miles from Smithers, on the eastern side of Hudson Bay mountain, in a basin at the head of the South fork of Simpson creek. An excellent trail leads to the property from Smithers. There are said to be four veins on the property. Of these, time permitted of the inspection of workings on one only. This vein, striking nearly east and west (mag.) and dipping at about 60° southerly, is opened up by a drift-tunnel 40 feet in length. A width of 1 foot of fairly solid galena, zinc-blende, and pyrite was exposed. It is known that the ore assays about 1 oz. of silver to the unit of lead. The country-rock is mainly volcanic breccia. The property appears to be well worth further development.

**Schufer Group.**—An option was taken towards the close of the year on this property by the British Canadian Silver Corporation. The latter intends starting development in the spring.

**Canadian Citizen.** This property, owned by T. Costello, is situated on the wagon-road to the Duthie Mines from Smithers and is distant only 2 miles from the latter place. An open-cut and small winze at an elevation of 1,975 feet expose a vein 4 feet 6 inches in width, striking N. 70° W. (mag.) and dipping 80° southerly, in andesite country-rock; the latter is mineralized beyond the vein-walls. Mineralization consists of bornite, azurite, and malachite. A sample taken across 4 feet 6 inches assayed: Gold, trace; silver, 4 oz. to the ton; copper, 3 per cent. The copper mineralization is promising and it is unfortunate that silver values are not higher.

*See also C 187, 1927; for Ag-Pb-Zn sample Driftwood Creek.*

Substantial aid was given by the Department of Mines towards the improvement of the Driftwood Creek trail, which leads into the Babine mountains, from the end of the motor-road from Smithers, which latter terminates some 10 miles from Smithers.

**Silver King Group.** This group, consisting of twelve claims, adjoins on the east the property of the Babine Bonanza Mining and Milling Company. It is situated in the basin at the head of Driftwood creek. The present working-tunnel is situated virtually on the floor of the basin, the elevation of which is 4,800 feet. A force of four men has been constantly employed all the year in running a crosscut tunnel, the objective of which was the penetration of a vein on which a drift had been previously run a length of 100 feet at a point 35 feet vertically above the crosscut. Mineralization in the drift consisted of galena, zinc-blende, grey copper, and some native silver. The strike of the vein is N. 55° E. (mag.) and the dip northerly. Silver values are high.

Towards the end of the year P. J. Higgins, who is in charge of operations, reported an important strike in the crosscut. At a point 252 feet from the portal the crosscut intercepted the main vein, it is reported, which proved to be 4½ feet in width, with a pay-streak 18 inches in width of high-grade galena, showing a little zinc-blende and a considerable amount of native silver. The indications are that this ore extends eastwards. At a distance of 200 feet the crosscut passed through a south vein 1 foot in width, also showing good ore. The strike of this south vein indicates that it will intersect the main vein about 30 feet east of the point at which the main vein was struck. The drift is being continued east from the end of the crosscut and preparations are being made to get out a shipment this winter. Prospects for this property appear to be distinctly hopeful and operations are being conducted in a thoroughly miner-like manner. The property is fairly well situated, being about 19 miles from Smithers.

**Hyland Group.** This group, owned by Martin Cain and T. King, was under bond to Messrs. Gale and Milligan, of Smithers, during the summer, but it is understood that they discontinued work after crosscutting from a tunnel, previously run approximately parallel to the strike of the vein. Inspection was made prior to the operations mentioned and was rendered somewhat difficult owing to snow. The vein outcrops in the immediate vicinity of the contact of slates and rhyolite. Mineralization, consisting of galena, zinc-blende, grey copper, azurite, and malachite, with high values in silver, appeared to be good and was exposed by various open-cuts. The strike of the vein is N. 35° E. (mag.). The elevation of the exposures is 5,000 feet. The property is situated at the head of Cronin creek.

*also  
American  
Citizen  
L7238  
2 eigs*

*Bellevue  
Bourne  
SEYMOUR GROUP*

*C.G.  
7/71*

There is much evidence of oxidation on this level, and the presence of native silver and native copper in the mineralization at various points is evidently due to the circulation of supergene solutions.

The present operator put a raise up through the point shown on the plan from this level to the upper adit. The distance on the up from level to level proved to be 46 feet, and it is understood that continuous mineral was not encountered. From this working, and the parallel shear-zone mentioned on the lower level, resulted the ore shipped this year to the sampling plant at Prince Rupert, of which particulars have been previously given.

Assays of samples taken in underground workings are given on the accompanying plan.

Refer to Annual Reports, Minister of Mines, British Columbia, 1919 to 1931, inclusive; and Geological Survey, Canada, Summary Report, 1924, Part A.

*Hudson Bay*  
**Snowshoe Group.**

This group consists of eight mineral claims owned by G. Raymond and P. Berg, of Smithers, and is at present under option to R. C. Mutch, A. Sjolín, and H. Stork, of Smithers. It is situated on the eastern slopes of Hudson Bay Mountain, about three-quarters of a mile south of Simpson Creek, and is distant about 5½ miles from Smithers. It is reached by a motor-road from Smithers, 1 mile in length, leading to A. Zobnic's ranch, situated on the west side of the Canadian National Railway, at the base of Hudson Bay Mountain. From the ranch the Empire pack-trail is followed for about 4 miles to a branch trail about half a mile in length, which leads to the cabin on the property at the northern end of the exposures, at 4,485 feet elevation.

*Upper shewing - 5 feet*  
*Topog*  
*Midnight*  
*Zobnic*

The mineral-showings are on a well-timbered gentle slope which steepens sharply immediately above and below them. At the southern extremity of the showings an unnamed creek flowing north-easterly parallel to Simpson Creek has incised a rocky gorge, and the topography becomes rugged. In the vicinity of the gorge the formation is well exposed, and also outcrops at several points north of this, but is mainly obscured by a shallow mantle of glacial debris and vegetation in the region of the more northerly mineral exposures.

The formation consists of coarse textured andesitic flow-rocks, dark green in colour, which strike from north to north 16 degrees west and dip east or north east at steep angles. In the vicinity of the mineral-showings the formation is hydrothermally altered and bleached.

Narrow stringers of mineral of an observed maximum width of 6 inches occur in three shear-zones, of which two may be one and the same, of north-westerly strike and south-westerly dip. Mineralization consists of galena, sphalerite, tetrahedrite, arsenopyrite, pyrite, and quartz, but all these minerals are not present in each exposure. One shear-zone has been exposed for a distance of 370 feet along its strike and may continue much farther, possibly coinciding with a shear-zone exposed at a point 300 feet distant. The formation in the vicinity of the shear-zones is at most points hydrothermally altered and bleached and more or less pyritized. At some points the zone of silicification extends over a width of several feet, and the (tendency) to form replacement ore-bodies is marked. Although the stringers of mineral are narrow, the walls are free, and the mode of occurrence lends itself to selective mining methods. The product obtainable by such methods followed by hand-sorting is illustrated by a grab sample of a pile of about 3 tons of ore obtained by the optionees, which assayed: Gold, 0.16 oz. per ton; silver, 173.7 oz. per ton; copper, 0.1 per cent.; lead, 21 per cent.; zinc, 8.9 per cent. But little evidence has been obtained to date as to the continuity of the mineralization, as development to that end has only just been commenced.

*no marked evidence of replacement potential.*  
*note re. Feb/67 report*

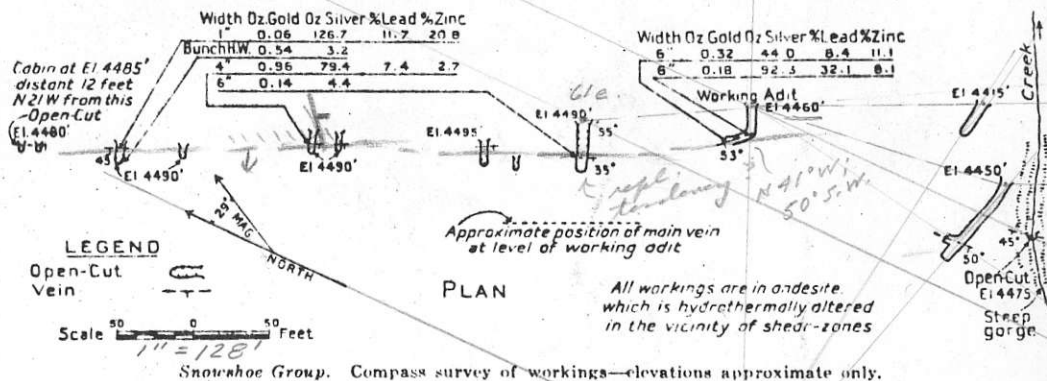
The property was discovered in 1928 by the present owners, who subsequently carried out the development described herein.

One shear-zone, strike north 26 degrees west, dip 35 to 45 degrees south-westerly, is exposed by eight open-cuts, all between elevations of 4,480 and 4,490 feet, for a distance of 370 feet along its strike. Many of the open-cuts had caved at the time of examination, and mineral is not exposed in some, but the hanging-wall of the shear-zone is exposed by all save one, which is off the strike. Most open-cuts show alteration and silicification of the formation, with manganese-staining, and a certain amount of pyritization. This tendency to form replacement ore-bodies is most strongly in evidence at the southerly open-cut at 4,490 feet elevation. This open-cut is 25 feet in length, followed by an adit 8 feet long. It exposes a

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zone of shearing striking north 26 degrees west and dipping 35 degrees south-westerly, and a small branch shear-zone, strike north 79 degrees east, dip 55 degrees south-easterly. In the main shear-zone is a width of 6 inches of quartz and arsenopyrite. On the foot-wall the formation is intensely silicified over a width of several feet, and there is a considerable amount of manganese-staining. There is every indication that this shear-zone continues strongly south-east of this point.



Distant 129 feet south-easterly from the last-mentioned exposure, at 4,460 feet elevation, an adit penetrates a shear-zone strike north 41 degrees west, dip 50 degrees south-westerly at 22 feet, and follows it north-westerly for 9 feet. The total exposed length of the shear-zone at this point is 14 feet, and a stringer of mineral 6 inches in width consisting of galena, sphalerite, arsenopyrite, pyrite, and quartz is continuous for this distance. It is stated that mineralization was strongest at the point of intersection and seemed likely to increase in width in a downward direction, and a shallow winze, filled with water at the time of examination, was sunk in the north-west drift. It is, however, the intention of the optionees to continue the north-west drift in the hope that it will yield mineral that can be hand-sorted to shipping grade. Further, this shear-zone seems likely to intersect that first described in a region where there is strong evidence of a tendency to form a replacement ore-body. From this working the optionees obtained, in addition to the 3 tons of ore previously mentioned, about 1 ton of roughly-sorted mineral, a grab sample of which assayed: Gold, 0.10 oz. per ton; silver, 48.5 oz. per ton; lead, 9.3 per cent.; zinc, 17.3 per cent.

Distant about 280 feet in a southerly direction from the most southerly open-cut on the shear-zone first described, an adit is driven a distance of 66 feet in an almost due west direction. This adit is immediately adjacent to and on the north side of the gorge previously mentioned, and at 53 feet from the portal penetrates a shear-zone, strike north 11 degrees west, dip 50 to 55 degrees south-westerly, showing no material amount of mineral. This adit is at 4,450 feet elevation, and the shear-zone it penetrates is presumably the same as that exposed by an open-cut in the gorge, 40 feet distant from the portal at 4,475 feet elevation. This shear-zone is possibly the continuation of the first one described.

Distant 55 feet in a direction north 46 degrees east from the portal of the adit last described, another adit, at 4,415 feet elevation, preceded by an open-cut 13 feet in length, is driven a distance of 12 feet on a bearing north 71 degrees west. Nothing noteworthy is disclosed and its objective is not apparent.

Assays of samples taken from surface showings and underground workings are given on the accompanying plan.

Refer to Annual Reports, Minister of Mines, British Columbia, 1928 and 1929; also to Bull. No. 3, 1932, "Lode-Gold Developments in British Columbia during 1932."

**Glac. Gulch Group.** This group consists of thirteen claims owned by S. F. Campbell, Grover Loveless, and Wesley Banta, of Smithers. These claims embrace areas on both sides of Glacier Gulch, on the eastern slopes of Hudson Bay Mountain, but the showings described herein are those situated on the north side of the gulch, and are quite distinct from the auriferous tetradymite mineralization on the south side, on which effort has hitherto been mainly concentrated.