

Reforencos: Annual Reports of the Minister of Mines, B.C.: 1918, p.51; 1928, p. 75.

The A claim is situated on the southwest slope of Thornhill mountain about 6 miles southeast of Terrace. It is reached by way of a pack-horse trail which leads from the Lakelse Lake road to the forestry lookout cabin on top of the mountain. There is a cabin on the claim at an elevation of 3,000 feet, reached by a short branch to the south from the main trail. The principal showing is on a small stream 200 feet above the cabin. Grey, coarse-grained granodiorite intruded by an irregular dyke of quartz orthoclase porphyry is exposed in the stream bed. These rocks are cut by roughly parallel quartz diorite dykes, the largest of which is 15 feet wide and strikes north 35 degrees west. The quartz orthoclase porphyry has been offset by a vertical fault running in a northeasterly direction along the stream course, but neither the quarti diorite dykes nor the veins that cut them are faulted.

On the south side of the stream a flat-lying quartz vein intersects the three rock types. It has an avorage width of 12 inches and a length of 65 feet. A second flat-lying quartz vein 14 inchos wide and 40 feet long is exposed on the north side of the stream. This one thickens and plunges steeply downwards at the $V$-shaped junction of a quartz diorite dyle with quartz orthoolase porphyry.

Near the stream a tunnel has been driven for 26 feot southeast on the more southerly vein. At the face of the tunnol the vein is in two parts, the lower consisting of 12 inches of quartz and the upper of 3 inches of quartz. The intervening quartz orthoclase porphyry is bleached and altered. A channel somple taken by the writer across 20 inches of voin material,

20 feet from the mouth of tho tunnel and on the south side, assayod, only a trace in gold. Fifty foet south on the face of a rock bluff of quartz diorite, another tunnol 12 feet long has boen driven north along the vein. An 8-inch channol somple taken across the voin in this tunnel; 6 foet from the ontrance and on the oast wall. across tho vein assayed 0.005 ounce in gold a ton. A third samplo, taken across the vein midway between the two tumnels whore it was 20 inches wide and enclosed in granodiorite assayed only a trace of gold. A sample taken over a width of 11 inches from the vein on the north side of the creok also gave negative results.

In this vein on the south side of the stream, A. Oleson and W. Dahl discovered rich specimens of native gold in 1918. The gold occurred in that part of the vein onolosed in the 15-foot wide quartz diorite dyke. The resident ongineer, GoA. Clothier, desoribed the showing that year as follows:
"The overlying diorits has been stripped off for about 8 feet square, from which area of vein two or three small pockets of free gold yielded $\$ 300$ by mortaring and panning. The gold appears to assemble at points in the vein where small stringers of quartz join it from the country rock. One patoh of gold left in place showed about 6 inches of iron oxide full of free gold. Associated with the free gold are sulphidos of silver, mainly stophanite. I am reliably informod that the ownors in further opening up this vein took out $\$ 4,000$ in free gold in two weeks during the past summer".

The part of the vein described above has since boon mined away and its southeastern continuation is largely conocaled by laxge blocks of rock which have fallen from the overhanging cliff. The information suggests that other pockots of free gold might be found by driving along the vein in a southeast direotion within the quarte diorito dyke.

References: Annual Roports of tho Ministor of Mines, B.C.: 1924, p.49: 1925, p.71; 1928, p.75.
Geol. Surv., Canada, Sum. Rept. 1926, pt. A, p. 41.
B claim, formerly known as the Beaver; lies half a, mile east of the main trail to tho Forest Lookout at an elevation of approximately 3,000 feet on the southwest slope of Thornhill mountain. The position is roughly 6 miles southeast of Terrace. A quartz vein in granodiorite outcrops along the bod of a small mountain stream at an elevation of 3,025 feet. Its strike is north 50 degrees east and the dip rangos from 30 to 40 dogrees to the southeast. It may be followod down the east bank of the stream for a distance of 200 feot. The vein width ranges from 2 to 6 foot and the average is about $2 \frac{1}{2}$ foot.

A channel sample was taken across 18 inches of unmineralized quartz at the upper showing and assayed only a trase in gold and silver. A second channel sample collected across a 2 -foot vein width, 75 feet south, assayed as follows: gold, 0.10 ounce a ton; silver 1.73 ounce a ton; lead, 0.67 per cent. In this vicinity the vein is well mineralized with pyrite, sphalerite, and galena.

At an elevation of 2,900 feet a 70 -foot tunnel was driven east from the stream bed to intersect the vein continuation. Iwentytwo feet from the portal entrance a shear zone striking north 70 degrees east and dipping 30 degrees south was met in the roof of the tunnel, but instead of following this the crosscut was driven more northerly. The shear zone in the roof may be the same in which the vein is enclosed on the surface a short distance to the north.

Seventy-five feet to the south a second adit was dritren to intersect the vein. At 60 feet, an 8 -inch shear zone was intersected and drifted on for 15 feot. The shear zone strikes north 35 degrees east and dips 40 degrees southeast. It is bounded on the oast by diorito and contains vory littlo quartz.

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About 125 foet below the lower tunnel and on the strike Of the surface trace of the voin a strong quartz voin is exposed in a trench. A channel samplo collectod hero across 18 inches of the white quartz showed no trace of oither gold or silvor.

