

NAME OF PROPERTY

NORTH STAR

Center of North Star claim
LOCATION (Lot 1165).

Uncertainty - 200 metres.

Lat. 49°10'05" Long. 118°36'

Mining Division Greenwood

District Similkameen

County

Township or Parish

Lot

Concession or Range

Sec.

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The mineral deposit is a north-south quartz vein dipping to the east and crosscutting a thick series of schistose quartzitic sediments. Syenite and andesite dykes of irregular shape cut both sediments and vein. The vein may be traced completely across the claim in a series of exposures of tight-walled rather barren quartz. As developed underground the vein is erratic; a maximum width of 4 feet is only attained locally, and some sections are less than 4 inches in width. Mineralization consists of pyrite, galena, chalcopyrite, sphalerite, and telluride in frequently crystalline quartz. Ore-shoots are not continuous and are localized principally at abrupt changes in attitude of the vein.

No. 1 adit is driven on the southern boundary of the North Star claim. On the surface, on the south, the vein outcrops as heavy barren quartz, and one caved shaft and some surface work do not clearly indicate the structure. In the second shaft 4 feet of white quartz is followed down at 42 degrees dip, and at 25 feet is 12 inches wide; rich pockets occur in this shaft. North, so far as shown, the vein is steeper and is comparatively straight.

Associated minerals or products of value - Silver, lead, zinc. ^{see Card 2}

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located about $\frac{1}{2}$ mile east of Jewel Lake, some 6 miles east-northeast of Greenwood.

The North Star and Cairngorm fractional claims were staked in 1895 and development work begun in shaft sinking. The claim were held under bond in 1897 by Leslie Hill and No. 2 shaft was reported sunk 20 feet. (At a later date (not known) a crosscut was driven 45 feet and a 125 foot drift on the vein). The Cairngorm Fraction (Lot 2853) was Crown-granted in 1907 to The Vancouver and Boundary Creek Developing and Mining Company, Limited.

No further activity was reported until 1931 when R.L. Clothier and associates leased the North Star, and the Gold Dr property adjoining to the south. The lease was given up in 1931 but W.E. McArthur, and others, continued to work the property.

Askalta Oil Company Limited acquired the 5 claim North Star group, and 6 other claims by option agreement, in 1934. Superior Gold Mines, Limited, was incorporated that same year by W.R. McArthur and associates to acquire the property from Askalta Oil. A total of 17 claims were involved, including the North Star, Cairngorm, Old Bird, Golden Eagle and Eastern Star Fractions. The adit was extended to 335 feet before work was suspended in October. Work was resumed in June 1935 and a 450 foot crosscut driven, and drifting on the vein. The company charter was surrendered in 1938.

Greenbridge Gold Mines Ltd. in 1936 purchased the 5 claim North Star group. Development work and mining operations continued into 1939. The workings in 1937 were reported to comprise an upper adit 600 feet long, and a lower (100 feet) crosscut adit 600 feet long with 600 feet of drift on the vein and a raise to the upper level.

HISTORY OF PRODUCTION

From 1919 to 1939, 6,812 tons of ore were shipped from this property. From this ore 762 ounces of gold, 15,281 ounces of silver, 20,183 pounds of lead, and 11,700 pounds of zinc were recovered.

REFERENCES

- Hedley, M.S.; Jewel Lake (Greenwood) Area; Report of Minister of Mines, British Columbia, 1936, p. D-25.
- Reports of Minister of Mines, British Columbia: 1896, p. 578; 1897, p. 590; 1907, p. 219; 1931, p. 125; 1932, p. 130; 1934, p. D-5; 1935, p. D-3; 1937, p. D-32; 1938, p. D-37; 1939, p. 77.
- Mineral Resources Branch; Corporation Files: "Askalta Oil Company Limited"; "Superior Gold Mines, Limited"; "Greenbridge Gold Mines Ltd."
- Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy, 1937, No. 785, p. 146.

MAP REFERENCES

- Map 6-1957, Kettle River, (Geol.), Sc. 1":4 miles.
- *Map 82 E/2, Greenwood, (Topo.), Sc. 1:50,000.
- Claim Map, Sc. 1":1,000 ft. - Report of Minister of Mines, British Columbia, 1933, p. 159.

REMARKS

JULY 1973

NAME OF PROPERTY

NORTH STAR

DESCRIPTION OF DEPOSIT (continued)

Mineralization as seen in surface strippings and at the collar of the northernmost shaft is scanty.

Underground the behaviour of the vein is different; it is a highly irregular structure, with commercial ore localized where the irregularities are most pronounced. Dykes are of two sorts; one, the most prominent, is a biotite syenite brownish in colour and sometimes porphyritic when of medium grain, but grey in colour when fine-grained. This latter phase of syenite is very similar in appearance to a medium and, locally, dark-grey andesitic dyke. The syenite is evidently quite irregular, as in the No.2 adit and north drift, where it occurs as a stock-like body. One sharp roll in the vein has been mined above No. 1 level, and between No. 1 and No. 2 on both sides of a post-mineral syenite dyke; in this section high-grade ore has been recovered. Another section has been stoped farther south above No. 1 level and is apparently worked out.