

NAME OF PROPERTY RED ROSE

OBJECT LOCATED - Workings on Tungsten vein.

UNCERTAINTY IN METRES 300. Lat. 55°08'20" Long. 127°26'00"

Mining Division Omineca District Cassiar

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

The country rocks comprise a hornfelsic aureole of altered siltstones and argillites of the Upper Jurassic Hazelton group, at the contact with porphyritic granodiorite of the Upper Cretaceous Rocher Deboule stock. The Hazelton rocks are cut by diorite dykes and associated porphyritic diorite, and by feldspar porphyry and felsite dykes. The stock has thermally metamorphosed all older rocks. The felsite dykes and the vein are younger than the granodiorite and are unaffected.

The Red Rose shear is a small fault that strikes N30 to 40°W and dips 60 to 65°SW. It is well defined in the diorite dyke on the top of the ridge, but in the hornfels and porphyries it ramifies into a group of small tight fractures. The shear cannot be traced continuously to the south slope showings but it seems reasonably certain that the same zone is represented, if not the same actual shear.

At the south slope showing the vein varies in width from 2½ to 12 feet. The main adit exposed a vein width of 4½ feet with a paystreak 30 inches wide on the footwall. A sample across see Card 2

Associated minerals or products - Copper, gold, silver, molybdenum, uranium.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at elevations of 5,000 to 6,000 feet on the ridge between Red Rose and Armagosa Creeks, on the west side of the Rocher Déboulé Range, 7 miles south-southeast of South Hazelton.

Showings containing encouraging assays in gold, silver and copper were discovered on the south side of the ridge by C. Peterson and C. Ek in 1912. The showings were staked as the Red Rose group, comprising the Red Rose, Yellowhammer, Prosperity, Juniper, and Summit claims. In the fall of 1914 the property was acquired under option by a syndicate headed by T.J. Vaughan-Rhys and some activity continued until the fall of 1916. Development work was done in 4 adits totalling over 800 feet of drifts & crosscuts between elevations of 5,150 and 5,696 feet, including a lower crosscut which was driven 450 feet without reaching the vein.

In about 1923 tungsten-bearing minerals were discovered in a quartz vein on the ridge some 700 feet above the uppermost gold-silver workings. The property was under option in 1923 to W.S. Sargent, of Hazelton, however, no further activity was reported until 1939 when The Consolidated Mining and Smelting Company of Canada, Limited acquired an option to purchase the property from Mrs. B. Sargent of New Hazelton. The property comprised 15 claims, the Tungsten 1-8, Wolframite Fr., Scheelite, Gordie, Dee, Jay, Tat and Eta Frs.

(Crown-grant lots 3041-3045, 6250-6259). The company carried out diamond drilling in 1940 and underground development began in the 300 level adit in June 1941. A 25 ton-per-day mill was installed, and connected to the mine by 1 mile of aerial tramway. Milling operations were carried out from early in 1942 until October 1943 when the mine closed.

Western Uranium Cobalt Mines Limited leased the property from Consolidated Mining & Smelting in 1951; the company name was changed in 1952 to Western Tungsten Copper Mines Limited. Milling began in December 1951 and continued until December 15, 1954 when the mine closed. Mill capacity was increased to 100 TPD in 1952 and to 140 TPD in 1953.

Development work on the Tungsten showings to December 1954 totalled approximately 12,000 feet of crosscuts, drifts, subdrifts & raises on 12 levels and sublevels from 4 adits, the 800 (elevation 5,659'), 600 (5,920'), 300 (6,135'), and 200 (6,237'), and an inclined shaft from 600 to 1100 levels. Reserves at time of closing were not known in detail.

The 1100 level was not mined. The vein on the 1000 level
Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

HISTORY OF PRODUCTION

From 1942 to the end of 1954, 114,175 tons of ore were milled. From this ore 563 ounces of gold, 823 ounces of silver, 59,708 pounds of copper, and 2,210,500 pounds of tungsten trioxide (WO₃) were recovered.

MAP REFERENCES

Geological Map of the Rocher Deboule Range, Sc. 1":1 mile - accomp. Bulletin No. 43, British Columbia Dept. of Mines, 1960.

#Geology in the Vicinity of the Red Rose Mine, Sc. 1":500 ft., Report of Minister of Mines, British Columbia, 1954, p. 92.

Geology of Part of Rocher Déboulé Mountains, Sc. 1":1 mile, Report of Minister of Mines, British Columbia, 1954, p. 89.

Map 5245 G, Skeena Crossing, (Aeromag.), Sc. 1":1 mile.

*Map 93 M/4, Skeena Crossing, (Topo.), Sc. 1:50,000.

REMARKS

REFERENCES

Reports of Minister of Mines, British Columbia: 1914, p. 190; 1915, p. 96; 1916, pp. 89, 113; 1923, p. 106; 1926, p. 126; 1941, p. 80; 1942, p. 78; 1943, p. 78; 1951, p. 111; 1952, p. 92; 1953, p. 93; 1954, pp. 86-95⁺.

Hurst, M.E.; Tungsten Deposits Near Hazelton, British Columbia; Summary Report 1924, Pt. A, p. 44, Geol. Surv. of Canada.

Davis, A.W.; Red Rose Mine; Structural Geology of Canadian Ore Deposits, Canadian Institute of Mining and Metallurgy, Jubilee Volume, 1948.

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Comp./Rev. By	DMacR						
Date	12-79						

PRODUCT

TUNGSTEN

PROVINCE OR
TERRITORY British Columbia

N.T.S. AREA 93 M/4

- Card 2 -
REF. W 1

NAME OF PROPERTY

RED ROSE

DESCRIPTION OF DEPOSIT (continued)

this assayed: Au 0.84 oz/ton, Ag 3.2 ozs/ton, Cu 3.9%. Across the remaining 2 feet of siliceous gangue the values were: Au 0.02 oz/ton, Ag 1.4 ozs/ton, Cu 2.1%.

The diorite dykes comprise 3 subparallel major diorite bodies. The tungsten showing is almost entirely within one of these dykes, which is an elongated tongue-shaped pluton rising to the east. It is 300 to 400 feet wide, at least 450 feet thick, and about 2,500 feet long on the surface. At the ridge (Tungsten) showing the vein occupies the full width of the shear (4-8 feet) for 200 to 400 feet along strike and at least 1,100 feet down dip. Where the shear strikes N35 to 40°W in the diorite it is vein filled, but where it strikes more northerly it is tight and contains no vein.

The vein is of mining width and grade only within the mine diorite. The width may vary in a short distance, as from 9 feet to nothing within 40 feet on the 900 level. The vein is massive and unshered and contains many small drusy cavities largely filled by euhedral quartz. The vein is formed largely of quartz with lesser amounts of feldspar, biotite, hornblende, ankerite, tourmaline, apatite, scheelite, ferberite, chalcopyrite, molybdenite, and uraninite. In detail the quantity of scheelite and ferberite varies widely, but in general it is fairly uniform. Scheelite is the main ore mineral, and on the average constitutes about $1\frac{1}{2}$ to 2 per cent of the vein.

The magnetic rejects of the mill are distinctly radioactive, owing to a small content of uraninite. The biggest concentrations of radioactive material, however, are erratically distributed with molybdenite in the wallrocks. These were noticed particularly on the 600 level. The Red Rose vein becomes richer in chalcopyrite with depth and on the lower levels contains some 2 per cent copper in that mineral. The chalcopyrite occurs particularly in the hangingwall shear in some fairly extensive lenses.

The vein contains two separate orebodies which are parallel and rake steeply to the northwest. Between these the shear has a more northerly strike and contains no vein filling. The length of barren shear is least on the 700 sublevel. The vein of the northwest orebody is as wide, long, and well mineralized on the 1100 level as anywhere in the mine, but the southeast orebody becomes thin and discontinuous below the 800 level.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

was about half mined and on the 800 and 900 levels about three-quarters mined. Above this there can be very little left. There is probably about 15,000 tons of ore of average grade above the 1100 level (BCDM Bull 43, p 59, 1960). Grades are estimated at 1.5% WO₃ and 0.3% Cu.

Farwest Tungsten Copper Mines Limited was incorporated in August 1955 to acquire all the assets of Western Tungsten. All the machinery and equipment on the property was subsequently sold.