

## NAME OF PROPERTY

JEWEL (DENTONIA)

LOCATION - Jewel shaft.

Uncertainty - 150 metres.

Lot. 49°09'40" Long. 118°36'50"

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 property is situated on the contact between highly altered quartzites and greenstones of the Anarchist group (Permian ?) and granodiorite of the Nelson Intrusives. The greenstones, occurring chiefly in one broad band, are intruded along a northwesterly-trending line by the granodiorite.

The Jewel vein cuts granodiorite in the south, quartzites in the north, and the intervening band of greenstones in the middle. Underground it strikes about north 20 degrees east on the average, and dips 30 to 60 degrees south-eastward. It has been traced on the surface for more than a mile and has been developed underground for a length of about 2,400 feet and to a maximum depth of 500 feet. The vein was about 3 feet wide in many mined sections. One stope had a maximum width of 16 feet, but 9-foot widths of quartz found in other parts of the vein were barren. On the average the vein was a little stronger in the granodiorite than in the greenstone. The ore appears to occur in shoots which pitch directly down the dip of the vein and tend to occur in its flatter sections. The shoots vary in size but are of the order of 200

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

## HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located  $\frac{1}{2}$  mile east of the south end of Jewel Lake, some 5 miles north-northeast of Greenwood.

The Jewel (Lot 850) and Denero Grande (Lot 851) claims were staked in 1895 and optioned to Leslie Hill on behalf of The Prospecting Syndicate of British Columbia, Limited Liability. Exploration and development work began in shaft sinking and lateral development. The claims were Crown-granted in 1898 to the company and Mary McArthur. Adjacent claims to the north along the strike of the vein were reported held by The Greenwood Mines, Limited (Enterprise & Anchor claims), and Canadian Gold Fields, Limited (Ethiopia claim).

The Jewel Development Syndicate, Limited, was organized in England in 1898 to acquire the property; the Syndicate was re-organized the following year under the name Jewel Gold Mines, Limited. Exploration and development work continued into 1902. The workings at that time comprised two shafts, the Main and Rowe's, 340 and 160 feet deep, respectively, and some 3,700 feet of drifts, crosscuts, and raises on 4 main levels. Ore was shipped to Rossland and Phoenix. Other workings included some 300 feet of crosscut and drifts in an adit on the Ethiopia claim.

No further activity was reported until the Jewel Syndicate, Limited, acquired the property in about 1907. A 15 stamp mill and cyanide plant was built and milling began in August 1910, and although modifications were made, the plant failed to operate satisfactorily; the mill operated a total of 26 months and processed some 31,000 tons of ore.

Jewel-Denero Mines, Limited, was organized in Edinburg, Scotland, in 1913 to acquire the Jewel claim and a half interest in the Denero Grande claim, the other half interest being owned by C.J. McArthur, of Greenwood. Further alterations to the mill resulted in a satisfactory recovery. Operations continued until August 1915. During this period the main shaft was sunk to 540 feet and 2 new levels established. Practically no work was done on the Denero Grande as the other  $\frac{1}{2}$  interest couldn't be obtained on terms satisfactory to the company. Lessees carried out intermittent mining operations on the Jewel, Enterprise, Anchor, and Ethiopia claims, during the 1920's.

In 1930 a Calgary syndicate optioned 24 claims and fractions for Dentonia Mines Limited. Development work began in 1933 and a 100 ton per day mill was put into operation in 1934. see Card 2 ....

## HISTORY OF PRODUCTION

Production for the period 1900-1948, recorded under the names "Jewel-Denero" and "Dentonia", totals 133,094 tons. From this ore 38,391 ounces of gold, 225,598 ounces of silver, 44,856 pounds of lead, and 1,054 pounds of zinc were recovered.

In 1974, 726 tons of ore were shipped from this property. From this ore 223 ounces of gold, 1,437 ounces of silver, 4,450 pounds of lead, and 1,584 pounds of zinc were recovered.

During 1975, 1,859 tonnes of ore were shipped. From this ore 17.698 KG of gold, 108.643 KG of silver, 4,912 KG of lead, and 2,122 KG of zinc were recovered.

## 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.

#Geology of the Denero Grande, Jewel mine, Jewel Lake area, Sc. 1":600 ft. (approx.), Fig. 6, Geology, Exploration and Mining, 1974, p. 40, British Columbia Dept. of Mines.

Map 8497 G, Greenwood, (Aeromag.), Sc. 1":1 mile.

## REMARKS

## REFERENCES

Hedley, M.S., and Watson K. DeP.; Lode Gold Deposits, Central Southern British Columbia; Bulletin No. 20, Part 3, p. 11, British Columbia Dept. of Mines, 1945.

Warren, H.V., and Cummings, J.M.; Geology and Mineralogy of the Dentonia Mine, July 1936 (Publication not known - see Dentonia Mines Limited file).

Reports of Minister of Mines, British Columbia: 1896, p. 578; 1897, p. 589; 1898, pp. 1124, 1195; 1899, p. 764; 1900, pp. 878, 991; 1901, p. 1056; 1902, p. 179; 1909, p. 131; 1910, p. 120; 1913, pp. 146-149; 1914, p. 334; 1915, p. 201; 1921, p. 184; 1922, p. 176; 1926, p. 215; 1928, p. 250; 1930, p. 222; 1931, p. 125; 1932, p. 130; 1933, p. 158; 1934, p. D-5; 1935, p. D-10; 1936, p. D-56; 1937, p. D-32; 1938, p. D-37; 1939, p. 77; 1940, p. 63; 1941, p. 61; 1942, p. 26; 1943, p. 63; 1945, p. 95; 1946, p. 135; 1947, p. 155; 1948, p. 127.

Mineral Policy Sector; Corporation Files: "Dentonia Mines Limited"; "Colt Resources Ltd."; "Dentonia Resources Ltd."

Brock, R.W.; Preliminary Report on Boundary Creek District, British Columbia; Annual Report, Vol. XV, pt. A, 1902-3, p. 127, Geol. Surv. of Canada.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1933, Rept. 743, pp. 101-106 (No. 497); 1935, Rept. 763, p. 226.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1973, p. 41; 1974, pp. 39-51<sup>+</sup>.

Stewart, George O.; The Jewel Mine; Western Miner, Vol. 48, No. 9, September 1975, pp. 39-42.

BCI - 82 E/SE - 55

JULY 1973  
 JAN 1976  
 SEPT 1978  
 DMacR-FEB 1982

PRODUCT

GOLD

PROVINCE OR  
TERRITORY

British Columbia

N.T.S. AREA 82 E/2

Card 2 -  
REF. AU 2

NAME OF PROPERTY

JEWEL (DENTONIA)

## DESCRIPTION OF DEPOSIT (continued)

feet long, 150 feet deep, and 3 to 4 feet wide. The vein filling is quartz with minor amounts of carbonate, sericitic and chloritic material. The mineralization consists of pyrite, chalcopyrite, galena, tetrahedrite, and native gold. The gold appears to be related to a late period of mineralization, occurring as veinlets in pyrite, usually in close proximity to galena or chalcopyrite.

A large part of the ore from the Jewel vein came from a section within greenstones where a great width of quartz may have been related both to a bend to the northeast and to a split in the vein structure.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Mining operations were suspended in November 1936 but the mill continued to operate into 1937, treating the tailings dump. Lessees carried out intermittent mining operations until June 1945 when the company resumed work on the property. Diamond drilling and development work were begun and a 50 ton per day flotation mill was put into operation in October 1947. Operations were suspended in March 1948 as the grade of ore proved to be uneconomic; the company was declared bankrupt.

Colt Resources Ltd. in April 1973 optioned the property from W.E. McArthur and Henry Fritz of Greenwood. Surface diamond drilling totalling 3,000 feet in 11 holes indicated the Dentonia vein extended at least 1,000 feet south from the old workings. A new shaft was sunk to 290 feet on the Denero Grande claim. Development work included 309 feet of crosscutting, 372 feet of drifting, 385 feet of subdrifting, 669 feet of raising, mainly on the 195 and 250 levels. Underground diamond drilling totalled 544 feet in 6 holes. Production was mainly from a stope located northeast of the crosscut between the 195 and 250 levels. Direct ore shipments to the Trail smelter commenced in March 1974.

Reserves were reported as semi-proven, 100,000 tons averaging 0.32 oz gold and 2.0 ozs silver per ton, and probable 100,000 tons of the same grade (Northern Miner, May 29, 1975, p. 3).

Ore shipments were suspended in December 1975. A small amount of percussion drilling was done in 1977 to confirm the extension of the main vein to the southeast. The company name was changed in 1978 to TransColt Resources Corporation; the April 1973 option agreement was abandoned as of June 30, 1978.

Dentonia Resources Ltd. purchased the property from W.E. McArthur by an agreement dated August 9, 1979. Reserves were reported as non-existent. Work during 1980-81 included 1,295' of diamond drilling in 8 holes, deepening the Denero Grande shaft to 510' and drifting from the 475' level.