

Nov. 12, 1974

001172

Dentonia Mine, Jewel Lake Area (82E/2E)

B.N. Church & J. Winsby

Renewal of mining activity near Jewel Lake in the Greenwood area is the direct result of recent spectacular increases in the price of gold and silver, a good local market for flux grade silica, and the success of Colt Resources Ltd. in gaining control of key crown granted claims in vicinity of the old Dentonia mine.

Production, averaging about 50 tons per day, began in March from an extension of the Dentonia quartz vein about 600 feet south of the Jewel shaft on the 250-foot level below Colt's new Denero Grande shaft. Currently this ranks as the largest lode gold-silver operation in the province. Previous work, intermittent in the years from 1900 to 1948, produced about 135,000 tons of ore averaging 0.30 ounces per ton gold and 1.7 ounces per ton silver. Most of this ore was derived from the Jewel and Enterprise zones with important subsidiary tonnage from the Anchor and Rowe zones.

Investigation of the property was completed in the latter part of June; the new underground workings were surveyed and geologized together with detailed surface mapping of the Dentonia mine area and reconnaissance of the surrounding region to the north and east, (see Figure \_\_\_\_\_).

Briefly, the geology of the area consists of highly metamorphosed volcanic and sedimentary rocks, mostly gneisses and schists, intruded by a large granodiorite body.

The Dentonia quartz vein is exposed over a length of approximately 6,000 feet being traceable from a point 1,500 feet north of the Ethiopia adit and south a distance of about 4,500 feet to the Colt workings. It strikes across the fabric of the country rocks dipping variably 30 to 60 degrees easterly.

8255055

Shearing has generally obscured many primary structures, however, the vein does appear to be largely the result of fissure filling with only local evidence of wall rock silicification, or replacement.

Splays and screens of country rock and post vein dykes cause considerable dilution in some zones, nevertheless, the average silica content of the ore, maintained during present mining, averages 85 per cent.

Sulphides are not especially abundant occurring mainly as grey streaks of fine disseminated grains or pockets and lenses of coarser admixtures composed mostly of pyrite with some galena and chalcopyrite. The presence of sphalerite, tellurides, and native gold has also been reported.

Control of the ore zones has been attributed to deflections in the overall vein attitude, the enriched thickened segments of the vein bearing more to the northeast and inclined more gently than normal. This generalization appears to be true for the main zone, the Jewel ore body, which is an enlarged part of the vein roughly coinciding with the intersection of the vein and the north boundary of the granodiorite intrusion. The nature of the Colt ore body, which is located several hundred feet south of the Jewel area, is still unknown because of the preliminary state of mine development.

The age of the Dentonia vein is bracketed by the granodiorite, which locally hosts the vein, and cross cutting young dykes. The dykes are correlated with petrographically similar Tertiary lavas at the summit of Pelly Mountain and ~~similar~~ volcanic rocks occurring to the <sup>southwest</sup> west near Midway, dated by Mathews (1963), 49 ± 2 m.y. A sample of the granodiorite, taken from a point near the Denora Grande shaft on the 250-foot level of the Colt workings, was recently dated by Geochron Laboratories giving 125 ± 5 m.y.

Potassium (β)	$\bar{X} = 4.188$
Ar <sup>40</sup> ppm	0.3864
Ar <sup>40</sup> / total Ar	0.632
Ar <sup>40</sup> / K <sup>40</sup>	0.007564
Apparent age	125 ± 5 m.y.
K <sup>40</sup> / K constant	1.22 x 10 <sup>-4</sup> g./g.

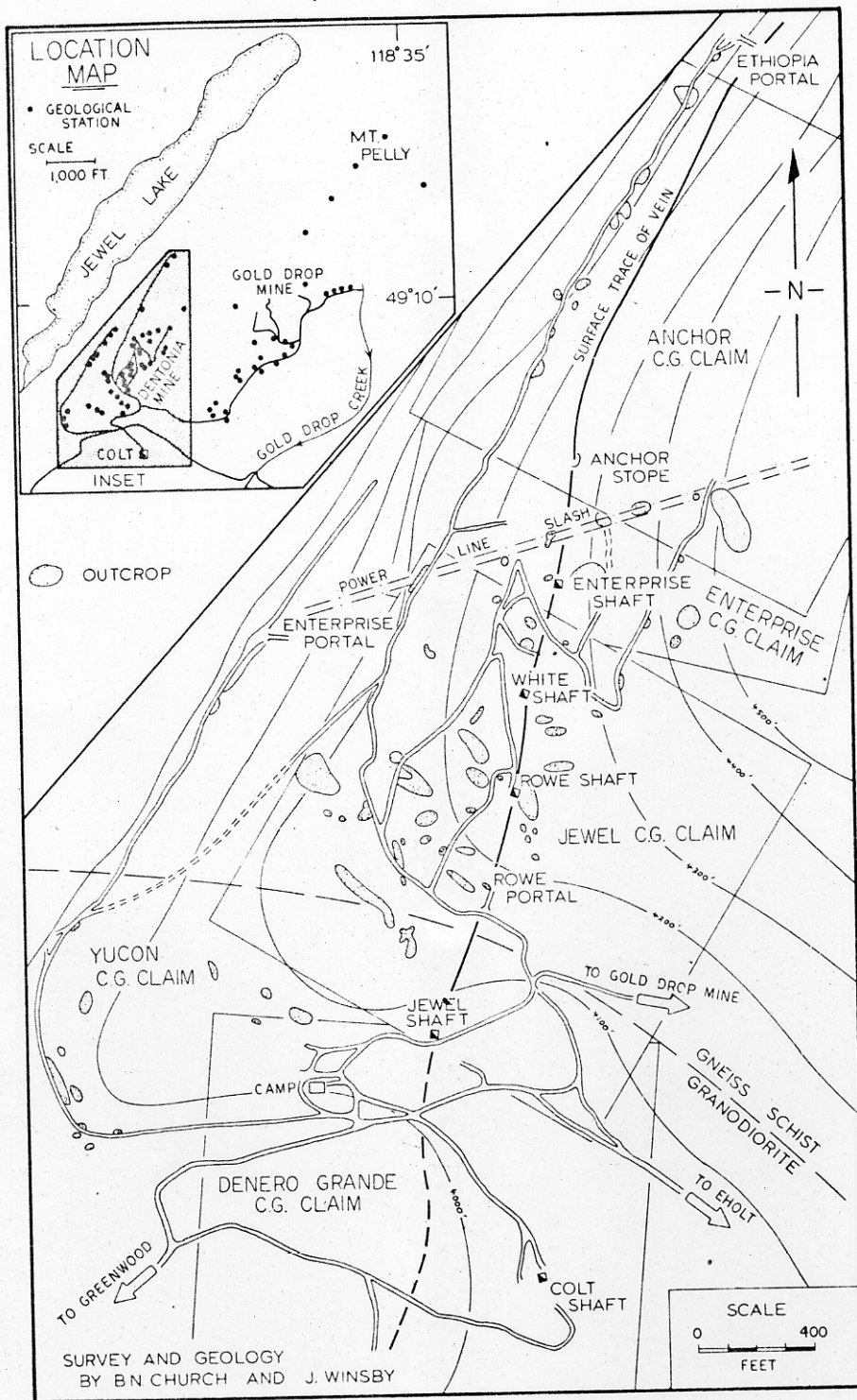


FIGURE . PLAN SHOWING THE SURFACE WORKINGS AND GEOLOGY OF THE DENTONIA MINE AREA

COLT RESOURCES LTD.

082ESE055

CONCENTRATOR PLANT UNDER NEGOTIATION NOW - Work at the gold and silver mine of Colt Resources  
 BONANZA ORE SHOOTS ARE EXPLORATION TARGET Ltd., located near Greenwood, B.C., has been  
 continuing. The program has consisted of under-  
 ground development work on the 250 foot level and increasing ore stock-piled at the mine  
 site, highlighted by the installation of a new high speed hoist. Negotiations are being  
 held to purchase a concentrator with a capacity of up to 100 tons per day which, with  
 supportive equipment and installation charges, is estimated to cost \$300,000. J. Michael  
 Mackey, president of Colt, states in the report, that this capital cost would be rapidly  
 recaptured by increasing the net value of the ore by at least \$10.00 per ton. To date, the  
 gross value of the ore mined is \$80.00 per ton with a gold price of \$150 per ton. From the  
 ore shipped to Cominco's Trail Smelter, Colt has averaged \$50.00 net return on an average  
 grade of 0.357 oz. gold per ton and 2.25 oz. of silver per ton. Cominco presently pays  
 up to \$24.00 per ton for the silica content of the ore, these payments offset the treatment  
 and transportation charges. The installation of the mill would also result in recovery of  
 lead values. Mr. Mackey says mining costs cannot be definitely stated at this time as  
 considerable development and exploration work is continuing, however, they are expected  
 to be approximately \$25 per ton.

With the recent settlement of the labour dispute at Cominco shipments to the Trail  
 smelter, which have been halted since July 1, 1974, will resume and production will proceed  
 on a 5½ day, two 8 hour shifts schedule. The company has been successful in attracting  
 highly skilled miners, who on average have had 10 to 15 years' experience in vein mining.

Ore is presently being mined from four stopes opened in Block 1, containing ore reserves  
of 50,000 tons. The other four blocks outlined, show an additional 200,000 tons geologically  
inferred. These inferred ore reserves are above the 500 foot level. A systematic program of  
drifting and shaft sinking is planned to convert the inferred tonnage to the probable and  
 proven categories. Exploration and development work to date and geological theory, suggest  
 potential reserves below the 500 foot level which would dramatically increase ore reserves  
 and the life and profitability of the mine.

Colt is now proceeding from the initial exploration stages to a systematic production  
 stage, mining ore between the 250 foot level and surface. As soon as a satisfactory cash  
 flow has been established, ore development will proceed below the 250 foot level where diamond  
 drilling, carried out in 1973, indicated the continuation of the ore body.

The vein system has a history of Bonanza ore shoots with reported values in excess of  
 10 oz. of gold per ton and several hundred ounces of silver per ton occurring. Ore shoots  
 in the vein system appear to average 1,000 tons. With less than 300 feet of drifting completed  
 along the vein at the 250 foot level in Block 1, the re-occurrence of Bonanza ore shoots  
 is not only likely but statistically probable. Such shoots could contain ore valued at  
 millions of dollars, the president states.

CANADIAN JAVELIN LIMITED

TERMS OF EXPLOITATION CONTRACT - In a news release dated Oct. 31, 1974, Canadian Javelin  
 NOW UNDER NEGOTIATION WITH GOV'T. Limited confirmed recent statements by the head of the  
 Government of Panama that a special commission has been  
 appointed by the government of Panama for the purpose of negotiating the financial and  
 social terms of the contract for the exploitation of Javelin's copper discoveries located  
 at Cerro Colorado in the province of Chiriqui in the western part of the country. Javelin  
 has been negotiating the terms of the contract with this commission in both Canada and  
 Panama pursuant to guidelines furnished by the government.

In addition to meeting with Javelin, the Panamanian commission has visited mining,  
 smelting and copper refining installations in Canada. After this tour the group consisting  
 of Mr. Jaime Roquebert, mining engineer, co-ordinator of the government commission, Dr. Ruben  
 Dario Herrera, economist, member of the legislative committee, Dr. Fernando Amado, planning  
 board economist and Mr. Perez Molina, mining engineer and consultant to the commission  
 terminated their visit with several days of conferences with Javelin's consultants, Wright  
 Engineers Limited of Vancouver, B.C.

FOR THE RECORD

IBX Mines Limited (formerly TVS Industries Ltd.) reports that the operator of the Jenner-Atlee  
 project in the Atlee-Buffalo area