

NAME OF PROPERTY DUNCAN Nos. 1 and 2 ZONES  
(J.G.) (GLACIER)

OBJECT LOCATED

UNCERTAINTY 300 metres. Duncan No. 1 Zone 50°17'27" Lat. 116°54'40" Long.  
Duncan No. 2 Zone 50°17'47" Lat. 116°54'55" Long.  
Mining Division Slocan District Kootenay

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

Cominco Ltd.

DESCRIPTION OF DEPOSIT

Map 235 A indicates the rocks in this vicinity include the Lardeau Series and the Badshot Formation, of Late Precambrian age. The mineralized zones are in dolomite and siliceous dolomite of the Badshot Formation. The general lithological succession of the Badshot on the Duncan anticline consists of a lower and an upper dolomite separated by a thin layer of crystalline limestone. The uppermost part of the upper dolomite is siliceous. Mineralized zones are found in both the lower and the upper dolomites and along the contact between the upper dolomite and the siliceous dolomite.

Eight mineralized zones have been found on the Duncan property. One important zone and some scattered mineralization are found in the lower dolomite, and the remainder of the mineralized zones are in the upper dolomite, particularly along the contact between the dolomite and the siliceous dolomite. The formations on the Duncan property are on the eastern limb of the Duncan anticline. Two important westerly dipping strike faults and several smaller ones are recognized in the zone 5-8 workings see Card 2 ....

Associated minerals or products of value - Zinc.

HISTORY OF EXPLORATION AND DEVELOPMENT

The Duncan No. 1 zone is located at about the 2,600 foot elevation on the north side of Glacier Creek, on the east side of Duncan Lake, 3 miles northeast of the Duncan Dam. The Duncan No. 2 zone is located at about 3,600 feet elevation near the crest of the ridge between Glacier Creek and Duncan Lake.

The No. 1 zone was originally staked in 1893 as the Glacier claim but there is no report of work at that time. In 1926 the Glacier and Summit claims were owned by W.L. Smith of Lardeau and extended from the creek to the summit of the ridge. Work to that date was reported to comprise open cuts and a short adit. The Consolidated Mining and Smelting Company of Canada Limited optioned the property late in 1927. Work by the company in 1928 included stripping, and 1,108 feet of diamond drilling in 7 holes. The option was subsequently given up.

Joe Gallo and associates of Howser acquired some 49 recorded claims under the name J.G. group in about 1950. These claims extended north from Glacier Creek to the peninsula in Duncan Lake (see also 82 K/7, Pb 1 and Pb 3). Lardeau Lead and Zinc Mines Ltd. optioned the property in 1951 and carried out diamond drilling in 7 holes on the Glacier Creek showing. In 1952 an adit was driven at the 2,515 foot elevation for a distance of 650 feet in a N15°E direction, essentially along the strike of the No. 1 zone. Three short crosscuts were driven to the east across the zone, the underground work totalling over 1,000 feet. In September 1952 Berens River Mines Limited purchased a share interest in Lardeau Lead and Zinc and took over management of the operation. Underground diamond drilling was done in 24 holes totalling 3,880 feet. Very little work was done in 1953 and the option was allowed to lapse.

The Bunker Hill Company, of Kellog, Idaho, optioned the property from Mr. Gallo late in 1955. Bulldozer stripping and diamond drilling during 1956 was mainly confined to the north end of the J.G. property on the peninsula in Duncan Lake.

The Consolidated Mining and Smelting Company of Canada Limited in 1957 optioned the J.G. group from Joe Gallo and associates. The property, extending from Glacier Creek to the north end of the peninsula in Duncan Lake subsequently see Card 2 ....

HISTORY OF PRODUCTION

REFERENCES

- +Fyles, James T.; Geology of the Duncan Lake Area, Lardeau District British Columbia; Bulletin No. 49, pp. 71-75, British Columbia Dept. of Mines, 1964.
- Reports of Minister of Mines, British Columbia: 1893, p. 1046; 1926, p. 267; 1927, p. 283; 1928, p. 310; 1951, p. 180; 1952, p. 192 ++ ; 1953, p. 146; 1955, p. 68; 1956, p. 106; 1957, p. 60; 1959, p. 71.
- Mineral Policy Sector; Corporation Files: "Berens River Mines Limited".
- Gunning, H.C.; Lardeau Map-Area, B.C.; Memoir 161, p. 95, Geol. Surv. of Canada, 1930.

MAP REFERENCES

- Geological Map of the Duncan Lake Area, Sc. 1":1 mile, Fig. 3 - accomp. Bulletin 49, British Columbia Dept. of Mines.
- Map 235 A, Lardeau Area, (Geol.), Sc. 1":4 miles - accomp. Memoir 161.
- #Map 82 K/SE (MI), Lardeau, (Mineral Inventory), Sc. 1":2 miles, B.C. Dept. of Mines.
- \*Map 82 K/7 W, Duncan Lake, (Topo.), Sc. 1:50,000.
- Map 1326 A, Lardeau (East Half), (Geol.), Sc. 1:250,000 - accomp. Memoir 369, Geol. Surv. of Canada, 1973.

REMARKS

Comp./Rev. By	DMacR						
Date	12-77						

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## DESCRIPTION OF DEPOSIT (continued)

Probably others are present on the property but have not been found even by close mapping.

Mineralized zones of the Duncan type consist of pyrite, sphalerite, galena, and minor pyrrhotite disseminated in dolomite and siliceous dolomite. They are lenticular zones with gradational but in general well-defined margins. The attitude of the zones is essentially parallel to that of the enclosing formations, and consequently the strike is about north 20 degrees west and the dip in general is steeply to the east.

The proportion of individual sulphides in the deposits varies widely. In general, pyrite is the most abundant sulphide, and sphalerite is more abundant than galena. Pyrrhotite in minor amounts is present in one zone in the Duncan mine, and minute amounts of chalcopyrite, marcasite, ruby silver, and meneghinite are reported by Muraro (1962, p. 77). The sulphides in general are very fine grained. They form disseminated grains, lenticular clusters, or fairly massive layers in dolomite.

No. 1 zone is in grey massive, banded, or flecked dolomite, probably in the lower part of the upper dolomite of the Badshot Formation. The sulphides are fine- to medium-grained pyrite, sphalerite, and galena in bands, lenses, and locally irregular veins of white crystalline calcite. Much of the calcite is like that found in the other zones, though it is somewhat coarser grained and some is clearly in veins in which coarse sphalerite, cubes of pyrite, and crystals of quartz appear to have been deposited along the walls of cavities. The adit follows a fairly persistent zone of mineralization up to 10 feet wide and, judging from surface exposures, more than 100 feet high. It dips steeply to the east and probably plunges at low angles to the north, and is known to be at least 300 feet long. Scattered mineralization over widths of several tens of feet has been found to the east and north of this persistent zone, but as yet a continuous mineralized zone has not been defined. "The adit exposed a mineralized zone 240 feet long averaging 2.46% lead and 6.36% zinc across 3.7 feet" (Berens River Mines, 1952 Annual Report).

No. 2 zone, exposed in trenches and small bluffs near the crest of the ridge between Glacier Creek and Duncan Lake, consists of fine-grained galena, sphalerite, and pyrite in thin

see reverse Card 2 ....

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

became known as the Duncan property. Geological mapping was begun in 1957. Surface diamond drilling totalling 2,728 feet was done in 1959 in 4 holes near the crest of the ridge and on the northwest slope. The company name was changed in 1966 to Cominco Ltd.

DESCRIPTION OF DEPOSIT (continued)

tightly folded layers of crystalline limestone in the lower part of the upper dolomite. The sulphides are in lenticular masses along the crests and troughs of small folds which plunge about north 20 degrees west at 10 to 15 degrees. Trenching has exposed several mineralized zones a few feet in diameter extending several tens of feet along the plunge. Drilling has indicated that the zones have small cross-sectional dimensions, and no significant mineralization has been found below the outcrop.