British Columbia

82 F/3 N.T.S. AREA RÉGION DU S.N.R.C.

REF. ZN 7 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

JACK POT (JACKPOT)

OBJECT LOCATED - East Zone. OBJET LOCALISÉ

UNCERTAINTY 300 m FACTEUR D'INCERTITUDE

Mining Division Nelson

Division minière

Lot Lot Sec Sect.

County

Comté

Tp.

Lat. 49°14'30"

District

Long. 117°08'45" Long.

Kootenav

Township or Parish Canton ou paroisse Concession or Range

Concession ou rang R. R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

New Jersey Zinc Exploration Company (Canada) Ltd.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

Lower Cambrian rocks on the property include the Quartzite Range Formation (Nevada Member), overlying phyllites and argillites (Truman Member) of the Reno Formation, which are in turn overlain by limestone and dolomite (Reeves Member) of the Liab Formation. The Jack Pot property lies immediately north of Lower Cretaceous (?) Nelson plutonic rocks of the Hidden Creek stock. Bodies of diorite and granite related to the stock occur near the top of Jack Pot Hill. Most of the diorite is in two bodies - one south of the Main zone and one west of the Lerwick zone. Granite is more widespread than diorite, but most bodies of granite are small. They form dykes, sills, and irregularly shaped masses, a high proportion of which are in the quartzitic rocks or have been mapped with the "mixed rock types." Near the East zone, granite is found only in small dykes in the underground workings.

Only the structure near the East zone on the Jack Pot property is understood. The Jack Pot anticline, which dominates the structure of the Porcupine Creek area, is west of the East zone and north of the Main and West zones. The anticline is flanked on the east by an isoclinal syncline, the Jack Pot

see Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT

HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR The property is located between elevations of 3,200 and 5,800 feet on the south side of Porcupine Creek, 6 miles northeast of Salmo.

On the lower end of Active Creek the Eldorado claim (Lot 5198) and Carmencita claim (Lot 5201) were Crown-granted to R.C. Pollett in 1902-03. The adjacent Chihuahua claim (Lot 5199) was Crown-granted to G.W. McBride in 1904. An adit was driven in the west bank of Active creek, on the Eldorado claim, in 1900.

At higher elevations, about $\frac{3}{4}$ mile to the southwest on Jack Pot hill, the Santiago claim (Lot 5381) was Crown-granted to F.D. Le Mieux in 1902. The adjacent Big H, Highland Chief, Snowflake, Lerwick and Hercules claims (Lots 5619-5623 respectively) were Crown-granted to The British Lion Mining and Milling Company, Limited Liability in 1902-03. Exploration was done in open cuts, a 180 foot adit on the Big 4 claim, and a shaft on the Lerwick claim. The mineralization proved to be mainly zinc, which was of little interest at that time. The Crown-grants were subsequently cancelled.

The Jack Pot (Jackpot) group of 11 claims was staked in July 1948 by E.P. Haukedahl and E.H. and S.W. Barclay, of Ymir. The claims covered the ground between the two groups of Crowngrants, as well as some of the cancelled Crown-grants. The West zone showings were probably a re-staking of the Highland Chief claim. The Lerwick zone was restaked as the Ink Spot claim, and the East zone was staked as the Two Spot claim.

Late in 1948 New Jersey Zinc Explorations Limited optioned the claims. A road was built to the showings in 1949 and geological and geophysical surveys, trenching and bulldozer stripping were carried out. Diamond drilling on the Main zone, originally held as the Big 4 claim, was done in 21 holes totalling 6,819 feet. Diamond drilling on the East zone, began in 1950 and continued into 1951. An adit at the 4,378' elevation (4400 adit) on the west side of Spot Creek, a tributary of Active Creek, was driven southwesterly for 1,000 feet to the East zone in 1951 and underground diamond drilling was in progress at year end. In 1952 assessment work was done in one diamond drill hole totalling 888 feet. During 1953-54 the 4400 adit was extended to a total length of 3,030 feet. A second adit (4100 adit), 295' in elevation below the 4400 adit, was

see Card 2

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

- Map 1145 A, Salmo, (Geol.), Sc. 1":1 mile, Geol. Surv. of Canada, 1965.
- 'Surface Geology, Jack Pot Group, Sc. 1":400' accomp. Bulletin 41, B.C. Dept. of Mines.
- Geological Map of the Salmo Lead-Zinc Area, Sc. 1":2,000' accomp. Bulletin 41.
- Jack Pot mine (West Zone), (Geol.), Sc. 1":120', Fig. 3 accomp. Bulletin 29, Geol. Surv. of Canada.
- Map 82 F/3 E, Salmo, (Topo.), Sc. 1:50,000.
- Mineral Reference Map No. 4, Nelson & Trail Creek, (Crowngrants), Sc. 1":1 mile, Dept. of Lands, British Columbia, 1929.

REMARKS/REMARQUES

Comp./Rev. By Comp. /rév. par Date Date Date Date

REFERENCES/BIBLIOGRAPHIE

- Reports of Minister of Mines, British Columbia: 1900, p. 846; 1902, pp. 297-301; 1903, pp. 243, 244; 1904, p. 296; 1934, p. E 9; 1948, p. 132; 1949, p. 165; 1950, p. 122⁺; 1951, p. 136; 1952, p. 145; 1953, p. 115; 1954, p. 125.
- Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1966, p. 212; 1968, p. 244; 1973, p. 58; 1974, p. 68; 1975, p. E 31; 1976, p. E 34; 1977, p. E 43.
- Little, H.W.; Salmo Map-Area, British Columbia; Paper 50-19, p. 40, Geol. Surv. of Canada.
- ++Green, L.H.; Wall-Rock Alteration at Certain Lead-Zinc Replacement Deposits in Limestone, Salmo Map-Area, British Columbia; Bulletin 29, p. 9, Geol. Surv. of Canada, 1954.
- +++Fyles, J.T. and Hewlett, C.G.; Stratigraphy and Structure of the Salmo Lead-Zinc Area; Bulletin 41, pp. 121-126, British Columbia Dept. of Mines, 1959.
 - Mineral Policy Sector; Corporation Files: "Tri Basin Resources Ltd"; "New Jersey Zinc Exploration Company (Canada) Ltd".
 - Exploration in British Columbia; British Columbia Dept. of Mines: 1982, pp. 45, 46; 1983, p. 52.
 - George Cross News Letters: 27/09/83.

BCI 82 F/SW - 12, 13, 255, 256

82 F/3

PROVINCE OR PROVINCE OU **TERRITOIRE**

British Columbia N.T.S. AREA RÉGION DUS NR.C. REF ZN 7 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

PRODUCT

PRODUIT

JACK POT (JACKPOT)

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

syncline, which contains the East zone mineralization. The Reeves limestone occupies the core of the Jack Pot syncline. and the Truman member is repeated on the limbs. The axial plane strikes about north 20 degrees east and in general dips steeply eastward, but between elevations of about 4,000 and 4.400 feet it dips westward. The axis is essentially horizontal. To the west the syncline is truncated by a bedding fault separating the Reeves limestone and Truman member from quartzites of the Reno formation and Navada member. South of Porcupine Creek above elevations of about 5.000 feet the structure is very complex, the rocks are partly granitized, and stratigraphic correlation has not been possible. The Jack Pot syncline and anticline cannot be recognized above elevations of about 5,000 feet. On top of the ridge the rocks in general dip gently south.

Mineralized zones on the Jack Pot claims, called the East, Lerwick, Main, and West zones, consist of disseminated sphalerite, galena, and iron sulphides in dolomite. The East zone is exposed between elevations of 4,300 and 5,100 feet on the steep slope west of Spot Creek. The Lerwick zone is exposed about 2,000 feet to the southwest between elevations of 5,600 and 5,800 feet on the same slope. The Main zone is on the steep north facing slope of the hill about 1,500 feet northwest of the Lerwick. The West zone is 1,000 feet southwest of the Main zone. These four zones of sulphide mineralization contain predominantly sphalerite with pyrite and very minor galena. Mineralization is restricted to zones of dolomite in Reeves limestone, although locally sulphide minerals occur in calcite within the dolomite zones.

The East zone occurs in dolomite at the core of the Jack Pot syncline. The greater part of the Reeves member in the Jack Pot syncline is dolomite, but bands or zones of limestone occur within the dolomite. Sulphides are widely distributed through the dolomite and have not been found in the limestone. The best mineralization occurs at an elevation of about 4,400 feet, where the dip of the axial plane of the Jack Pot syncline changes from east to west. The zone comprises bands containing disseminated sphalerite alternating with barren

HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

driven as two headings, one north for 865 feet and the other south for 2.735 feet. Diamond drilling in 4 holes totalling 1,297 feet was done from the adits in 1954. The 4400 adit encountered zinc-lead mineralization at intervals but the 4100 adit did not encounter the mineralized zone.

New Jersey Zinc Explorations Limited surrendered its charter in 1954 and the property was transferred to New Jersey Zinc Exploration Company (Canada) Ltd. Further diamond drilling during 1966-68 was done in 4 holes totalling 1.758 feet on the Ink Spot and Spot No. 3 Fr. claims.

Cominco Ltd. optioned the property in 1973 and during 73-74 carried out surface and underground geological mapping. and 2.100 feet of surface diamond drilling in 6 holes on the Two Spot claim. During 1975-77 Cominco carried out 4.178 m of surface and underground diamond drilling in 83 holes on the Two Spot and Canadian Girl claims. Reserves were reported at about 3,000,000 tons of 5% combined zinc-lead mineralization (Northern Miner 05/03/81).

Tri Basin Resources Ltd in 1981 optioned a 50% joint venture interest in 6 Crown-grants and 27 recorded claims (132 units) and began a program of geophysics and diamond drilling. Work in 1982 on the Jackpot, and on the Hunter V-Double Standard property (82 F/3, AG 1) adjoining to the west. included geochemical soil, biogeochemical, induced potential and magnetometer surveys and 1336.7 m of diamond drilling in 12 holes. Work in 1983 included 1733 m of diamond drilling in 23 holes in the vicinity of the Hunter V-Double Standard. By the end of 1983 Tri Basin had earned its 50% joint venture interest with New Jersey Zinc (a wholly owned subsidiary of Gulf and Western Industries Inc). Based on work to date the mineralization is reported as:

drill indicated - 1,039,750 tons at 4.68% combined PB-ZN.

drill inferred and speculated - 3,228,000 tons, no grade stated.

(Tri Basin Resources Ltd Filing Statement 148/84). A further regional potential of approximately 2,225,000 tons is reported by New Jersey Zinc.