

PRODUCT ZINC  
PRODUIT

PROVINCE OR PROVINCE OU  
TERRITORY TERRITOIRE

British Columbia

N.T.S. AREA 82 M/8  
RÉGION DU S.N.R.C.

REF. ZN 1  
RÉF.

NAME OF PROPERTY J & L (VIEW FRACTION) (98)  
NOM DE LA PROPRIÉTÉ

OBJECT LOCATED - 2770 adit - from descriptive data.  
OBJET LOCALISÉ

UNCERTAINTY 300 m  
FACTEUR D'INCERTITUDE

Lat. 51°17'05"  
Lat.

Long. 118°07'50"  
Long.

Mining Division Revelstoke  
Division minière

District  
District

Kootenay

County  
Comté

Township or Parish  
Canton ou paroisse

Lot  
Lot

Concession or Range  
Concession ou rang

Sec  
Sect.

Tp.  
Ct.

R.  
R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

Map 12-1964 indicates the area is underlain by Cambrian and Later sediments of the Badshot Formation and Lardeau Group. The mineralization occurs along a well-defined shear zone "main vein" at or near the contact between a quartz-sericite schist hangingwall and limestone footwall. The contact, which strikes northwest and dips 30 to 55°NE, has been traced at intervals by open-cuts and trenches for more than 5,000 feet. The mineralized zone is not continuous although locally it is 6 to 8 feet wide. It has formed partly by filling of the shear zone and partly by replacement of the foot-wall limestone. Sulphides occur as lenses and bunches, here and there 3 feet wide but rarely more than 12 to 16 inches. They include an exceedingly fine-grained mixture of sphalerite, galena, arsenopyrite, pyrite, chalcopyrite, and minute amounts of grey copper. Gold values are chiefly associated with the arsenopyrite and pyrite, and silver values with the galena. The vein matter has been extensively altered and decomposed by oxidation to depths of as much as 125'. The vein as exposed by 500' of drift on the 2770 level consists mainly of disseminations and irregular lenses of

see Card 2 ....

Associated minerals or products - Lead, gold, silver.  
Minéraux ou produits associés

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

The property is located at elevations of 2,700 to 4,000' on the south side of McKimmon Creek (East Fork of Carnes Creek) about ½ mile above its junction with the main creek and some 20 miles north-northeast of Revelstoke.

The showings were reportedly staked in 1896 and subsequently held by Roseberry Consolidated Mines; there is no record of this company as a Canadian incorporation. In 1905 the property comprised the J & L and Eli claims owned by L.T. George and J.P. Kelly, the Badger owned by J.P. Kelly, and the Annie M and adjacent 98 group of 4 claims owned by Elijah McBean, of Revelstoke. By 1922 the workings included a 217 foot long adit (J & M adit) at an elevation of 3,475 feet, a 135 foot inclined shaft (Annie M) at an elevation of 3,825 feet and 90 feet of crosscut, 80 feet of drift, and a 125 foot winze (Ninety Eight shaft) at an elevation of 4,075 feet.

The Porcupine Goldfields Development & Finance Company, Limited optioned the property from McBean in about 1923. The lower drift adit was extended 70' and another adit halfway between it and the creek was driven through 70' of drift and entered solid rock but did not reach the vein; samples of the complex ore were shipped to Mines Branch, Ottawa for testing. These tests indicated poor recoveries and the option was given up in 1926. The property was subsequently sold by the McBean Estate to Regina interests who incorporated Piedmont Mines Limited in May 1927 and J and L Mining Company Limited in January 1929; no work was reported by either company and the claims lapsed in 1930.

The ground was restaked in 1934 by T.E. Arnold, of Bryn Mawr Pennsylvania, as the Goat Fraction, Goat Nos. 2-6 Fractions, View Fraction, View No. 2 Fraction, and Creek Fraction; the claims were Crown-granted (Lots 14821-14829 respectively) to Wilma J. Arnold in 1941. The Mining Corporation of Canada, Limited, held an option on the property during the period 1941-1944 but no work other than bulk sampling was reported.

Raindor Gold Mines Limited was incorporated by Mr. Arnold and associates in June 1945. Quebec Gold Mining Corporation and Noranda Mines Limited acquired an interest in the company through financing of development and metallurgical testing. During 1946 the J & L adit was extended and fresh material acquired for test purposes; work was discontinued in 1947.

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa  
Secteur de la politique minière, ministère de l'Énergie, des Mines et des Ressources, Ottawa

509841

see Card 2 ....

Wheeler, J.O.; Big Bend Map-Area, British Columbia; Paper 64-32, p. 30, Geol. Surv. of Canada, 1965.

Gunning, H.C.; Geology and Mineral Deposits of Big Bend Map-Area, British Columbia; Summary Report 1928, Part A, pp. 165-171, Geol. Surv. of Canada.

Reports of Minister of Mines, British Columbia: 1905, p. 150; 1912, p. 144; 1915, p. 117; 1916, p. 193; 1922, p. 215+; 1923, p. 232; 1925, p. 258; 1926, p. 269; 1927, p. 290; 1946, p. 174; 1965, p. 204; 1966, p. 227+++.

++Hurst, M.E.; Arsenic-Bearing Deposits in Canada; Economic Geology, Series No. 4, pp. 77-80, Geol. Surv. of Canada, 1927.

Galloway, John D.; Lode Gold Deposits of British Columbia; Bulletin No. 1, 1932, p. 119, British Columbia Dept. of Mines.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy, 1926, Rept. 688, pp. 13-15 (No. 243).

Mineral Policy Sector; Corporation Files: "Consolidated Raindor Mines Limited"; "Weststairs Mines Limited"; "Quebec Gold Mining Corporation"; "Pan American Energy Corporation"; "BP Canada Inc".

Allen, Alfred R.; Report on Raindor Gold Mines Limited - in company Prospectus, October 8, 1960.

George Cross News Letter: Feb. 17/83, p. 2; 18/01/84; 10/09/84; 27/11/84; 21/02/85; 30/07/85; 1986, No. 13; 1988, No. 51.

Geological Fieldwork; British Columbia Dept. of Mines: 1984, p. 101.

Exploration in B.C.; BCDM: 1982, p. 118; 1983, p. 162; 1986, p. C 121.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 12-1964, Big Bend, (Geol.), Sc. 1":4 miles - accomp. Paper 64-32.

Map 237 A, Big Bend Area, (Geol.), Sc. 1":4 miles - accomp. Summary Report 1928.

Map 82 M/8, Downie Creek, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR	DMacR	DMacR	DMacR		
Date Date	09-81	06-83	05-85	02-87	05-88		

PRODUCT PRODUIT	ZINC	PROVINCE OR TERRITORY	PROVINCE OU TERRITOIRE	British Columbia	N.T.S. AREA RÉGION DU S.N.R.C.	82 M/8	REF. ZN 1 RÉF.
--------------------	------	--------------------------	---------------------------	------------------	-----------------------------------	--------	-------------------

NAME OF PROPERTY  
NOM DE LA PROPRIÉTÉ

J & L (VIEW FRACTION) (98)

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

massive fine grained sulphides in sericite schist. In the inner part of the adit quartz containing medium to coarse-grained sphalerite, galena, and pyrite make up most of the vein; the vein has an average width of about 4 feet.

The "middle vein", located about 100' southwest of the main vein, where exposed along 100' of drift in the 2770 adit is from 2 to 4' wide. It consists mainly of quartz, arsenopyrite, and pyrite with disseminated sulphides in both walls for 1 to 2' from the vein; it is reported to carry 0.1 to 0.2 oz/ton in gold.

More recent work, as reported in Geological Fieldwork 1984, suggests the deposit is of stratabound exhalative origin. Host rocks are in the upper part of the Lower Cambrian Hamill Group.

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

A.R. Allen (24 July 1957) estimated that 6 mineralized zones along the vein total 1,699 tons per vertical foot with a mean average grade of 0.29 oz/t Au, 1.56 oz/t Ag. Zone 1 between the J & L adit and the surface should contain 37,100 tons. Surface sampling of oxidized material on zone 1 over a 360' length and 5.85' width averaged 0.519 oz/t Au, 1.03 oz/t Ag. Sampling underground in the J & L adit over a 300' length and 3' mining width in unleached material averaged 0.13 oz/t Au, 3.71 oz/t Ag, 5.03% Pb, 7.46% Zn (in Raindor Gold Mines Limited, Prospectus, October 8, 1960).

Weststairs Mines Limited optioned the 9 Crown-grants and 48 located claims from Raindor in 1965. An adit (2770 level) collared on the middle vein follows it for about 100' then crosscuts northeast for about 100' to intersect the main vein, which was followed for about 500' to the southeast; work in the adit totalled 892' of drifting and 600' of diamond drilling when work was suspended in August 1966. The company name (Raindor) was changed in April 1966 to Consolidated Raindor Mines Limited; the company was dissolved in 1976.

Pan American Energy Corporation leased the Crown-grants and adjacent claims from T.E. Arnold, of Oakhurst New Jersey by an agreement dated November 18, 1980. Pan American sub-leased the property to Selco Inc in December 1981; Selco assigned the sub-lease to its subsidiary Pinak Explorco Limited. Work in 1982 included an airborne electromagnetic survey and bulk sampling for metallurgical studies. Previous work indicated 200,000 tons at 0.23 oz/t Au, 3.26 oz/t Ag, 4.31% Pb, 5.86% Zn across an average 3.34' vein width (George Cross Newsletter, February 17, 1983). Work in the 2,700 level adit in 1983-84 included 2,210' of drifting, 1,152' of cross-cuts and some 8,000' of diamond drilling in 30 holes; also in 1983: geoph. and geochem. surveys.

Selco Inc. was purchased late in 1983 by BP Resources Canada Limited. BP Selco Inc. was incorporated in November 1983 as the new exploration division. The company name (BP Resources) was changed in April 1984 to BP Canada Inc. Pan American holds a 30% carried interest under the present agreement. The main zone has indicated reserves of 3,710,000 tons at 0.17 oz/t Au, 1.72 oz/t Ag, 2.15% Pb, 4.04% Zn, 4.86% arsenic (George Cross News Letter, July 30, 1985). Problems exist in the extractive metallurgy of the deposit.

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

The company name (Pan American) was changed in Sept. 84 to Pan American Minerals Corp. Work by BP in 1985 was limited to geological and geochemical surveys and metallurgical studies. In January 1986 BP gave notice of not financing further work.

In June 1986 Pan American reached an agreement with Noranda Exploration Company Limited for further development of the property. Work by Noranda in 1986 included underground mapping, bulk sampling and metallurgical tests; the company declined further involvement. Pan American in 1987 continued its objective of overcoming the high-arsenic metallurgical problem using the Cashman process, recently developed by the United States Geological Survey. Underground diamond drilling and bulk sampling in 1987-88.