PRODUCT SILVER PRODUIT

British Columbia

N.T.S. AREA 103 P/13 RÉGION DU S.N.R.C.

REF. AG 7 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ       LUCKY SEVEN, BLACK BEAR, GIPSY (GYPSY), LITTLE JOE         OBJECT LOCATED - adit. OBJET LOCALISÉ       OBJECT LOCATED - adit.         UNCERTAINTY 200 m FACTEUR D'INCERTITUDE       Lat. 55°58'20"       Long. 129°54'50"         Mining Division Division minière       Skeena District       District Cassiar       Cassiar         County Comté       Township or Parish Canton ou paroisse       Cassiar         Lot       Concession ou rang       Sec         Sec       Tp. Sect.       R.					
OBJET LOCALISÉ         UNCERTAINTY       200 m       Lat.       55°58°20"       Long.       129°54°50"         FACTEUR D'INCERTITUDE       Lat.       District       Long.       129°54°50"         Mining Division       Skeena       District       Cassiar         Division minière       County       Township or Parish       Cassiar         County       Township or Parish       Canton ou paroisse       Lot         Lot       Concession or Range       Concession ou rang       Sec       Tp.         Sec       Tp.       R.	-			•	Y (GYPSY),
FACTEUR D'INCERTITUDE       Lat.       Long.         Mining Division       Skeena       District       Cassiar         Division minière       District       Cassiar         County       Township or Parish       Conté       Canton ou paroisse         Lot       Concession or Range       Lot       Concession ou rang         Sec       Tp.       R.		t.			
ComtéCanton ou paroisseLotConcession or RangeLotConcession ou rangSecTp.R.	FACTEUR D'INCERTITUDE Mining Division Ske	Lat.	District	Long.	°54 <b>'50''</b>
Lot Concession ou rang Sec Tp. R.					

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

## DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The country rock is argillite of the Hazelton group cut by several, narrow, lamprophyre dykes. The argillites are sheared locally and the strikes of the shearing, veins, and dykes, are all roughly parallel. Two major faults about 1,000 feet apart which strike north and dip west constitute what is known as the "Portland Canal Fissure Zone". The mineralization on the Lucky Seven and Little Joe claims, which lie in the southern part of the fissure zone, occurs in a quartz vein which dips 25° west and has been traced on the surface for about 2,000 feet. Two ore bodies were mined. One was 160 feet long and 2 to 10 feet thick and extended more than 240 feet down the dip. The other was 120 feet long, and also 2 to 10 feet thick. It extended more than 150 feet down dip.

In the Portland Canal Tunnel, some 630 feet below the surface of the Mosquito claim, a large brecciated zone 50 to 60 feet wide was cut, this probably being the footwall of the fissure zone. This lead is supposed to correspond with the No. 3 or "Green" vein of the Dunwell property. In this brecci ated zone are visible 4 or 5 stringers of ore ranging from 2 to put up 30 feet. The lead contained a small band of sulphide 12 inches in width, with a larger stringer of about 24 inches. see Card 2 ....

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

The main workings are on the Lucky Seven and Little Joe claims at the 2,400 foot elevation on the south side of Glacier Creek, 4 miles northeast of Stewart. This 8 claim group adjoins the Glacier Creek property on the south, with the exception of two claims, the Sadie which extends across Glacier Creek to join the Glacier Creek property on the east. and the Barney which adjoins the Sadie on the north. A group of 9 claims adjoining the Lucky Seven group on the west was held by Portland Canal Tunnels Limited.

The Lucky Seven and Little Joe claims were located in 1905 by J. Griffin and J. McGrath. The Gipsy claim, adjoining the Little Joe on the north. was owned by Messrs. Beaton and Dinsdale. Exploration work was begun in open cuts, adits, and a shaft. The Portland Canal Mining and Development Company, Limited, formed in May 1907, acquired the 3 claims and continued the underground exploration work. Additional staking was done to bring the property to 12 claims and fractions, including the Lucky Seven, Little Joe, Gipsy. Herbert, Mosquito, Richard II, Sadie, Barney, and Extension.

The property was acquired by the Portland Canal Mining Company, Limited, which was formed in October 1908. Development work was continued in 3 adits and interconnecting raises over a vertical distance of about 100 feet. To 1910 some 880 feet of drifting was reported on the three levels. The company built a 50 ton per day mill (later increased to 75 tons) and this operated for short periods in 1910 and 1911. The mill was apparently built in conjunction with the Glacier Creek Mining Company as it was located on the Riverside claim which was owned by that company. The Portland Canal Mining Company ceased operating in October 1911.

Portland Canal Tunnels, Limited, in 1913-14 drove a long crosscut adit from just above the mill on the Riverside claim. having leased the surface rights to the claim, and the buildings, plant and equipment of the Portland Canal Mining Company. The adit cut the No. 1 vein 600 feet down dip below the surface cuts on the Richard II claim, the nearest surface workings. The vein which is accompanied by a dyke, was drifted on south for 140 feet and a raise near the face, was ore to the face where it became very small. At 3,445 feet see Card 2 ....

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

HISTORY OF PRO	DUCTIC	N/HIST	ORIQUE	DE LA P	RODUCT	TION		REFERENCES/BIBLIOGRAPHIE			
In 1911 and at this propert ounces of silve	y. Fro	om this	ore 612	ounces	s of gol	ld, 25,8	369	Hanson, George; Portland Canal Area, B.C.; Memoir 175, p. 136, Geol. Surv. of Canada, 1935.			
								Robertson, Wm. Fleet; Preliminary Report Portland Canal Mining Division; Report of Minister of Mines, B.C., 1910, pp. 71-75.			
								Reports of Minister of Mines, British Columbia: 1905, p. 80; 1906, p. 64; 1907, p. 73; 1908, p. 55; 1909, pp. 59-61; 1911, p. 74; 1913, p. 91; 1914, pp. 159, 160; 1924, p. 61; 1935, p. B-4; 1955, p. 17; 1963, p. 11; 1967, p. 36; 1968, p. 53.			
								Mineral Sector; Corporation Files: "Portland Canal Mining Company, Limited"; "Portal Mining Company, Limited"; "Cassiar Consolidated Mines Limited"; "Starbird Mines Ltd."; "Silver Princess Resources Inc.".			
								McConnell, R.G.; Portions of Portland Canal and Skeena Mining Divisions, Skeena District, British Columbia; Memoir 32, pp. 31-36, Geol. Surv. of Canada, 1913.			
<ul> <li>MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES</li> <li>Map 215 A, Stewart Sheet, (Geol.), Sc. 1":1 mile - accomp. Memoir 159.</li> <li>Geological Map of the Stewart Area, Sc. 1":<sup>1</sup>/<sub>2</sub> mile, Fig. 3, Sheet A - accomp. Bulletin No. 58.</li> </ul>						- accor	Geology, Exploration and Mining; British Columbia Depart- ment of Mines: 1969, p. 57; 1971, p. 126; 1972, p. 509; 1973, p. 490.				
						e, Fig.	3,	Grove, Edward W.; Geology and Mineral Deposits of the Stewart Area; Bulletin No. 58, p. 147, British Columbia Department of Mines, 1971.			
Stewart Area, Bulletin	Crown- No. 58	grant c	laim map	p, Fig.		accomp	•	Hainsworth, W.G.; Report on 1973 operations on the claims of Starbird Mines Ltd in Starbird Mines Statement of Material Facts, Dec. 3, 1973.			
#Map 193 A, Ste	ewart SI	heet, ('	Fopo.),	Sc. 1:	50,000.						
Map 103 P/13,	Stewar	t, (Top	o.), Sc.	. 1:50,0	000.						
REMARKS/REMA	ROUES										
Comp./Rev. By			DMacR	DMacR	DMacR						
Comp. /rév. par Date Date	11-67	10-71	11-74	09-76	11 <b>-</b> 80			BCI 103 0-P-67, 68			

					1	- Card 2	
PRODUCT PRODUIT	SILVER	PROVINCE OR TERRITORY	PROVINCE OU TERRITOIRE	British Columbia	N.T.S. AREA 103 P/13 RÉGION DU S.N.R.C.	REF. AG <i>RÉF,</i>	
NAME OF PROF NOM DE LA PR		N, BLACK BEAR, C LITTLE JOE	HPSY (GYPSY),	HISTORIQUE DE L'EXPLOR	N AND DEVELOPMENT (continued RATION ET DE LA MISE EN VALEM	UR	
DESCRIPTION On this large some low grad in the drift On the G elevation. width from a for about 20 wide and com pyrite, gale rite. On th east, two ou	OF DEPOSIT/DESCRIPTI er stringer a drift de ore was developed assayed: Gold, \$2 a ipsy claim a cross w The vein strikes N7/4 few inches to about 0 feet. In the main posed of quartz and na, sphalerite, arse e Black Bear claim, tcrops show a brecci	ION DU GISEMENT was run south f d. A sample acr a ton; silver, 2 vein outcrops at 4°E, dips 60° so t-42 inches, and calcite, minera enopyrite, and s which adjoins t iated vein of qu	for 213 feet and ross 2 or 3 feet 3.8 ounces a ton t the 1,825 foot outh, varies in d has been trace vein is 42 inches alized with some chalcopy- the Gipsy on the uartz and	This was drifted on so feet, following a shea extension of the vein Little Joe and Lucky S reported to have been Tunnels Limited in 191 company. The Sadie Fr. (L 4 417), Sadie (L 420), H Richard II (L 429) wer Mining Company, Limite surrondered in 1924	e crosscut the Mosquito shear bouth for 213 feet, and north ar that is apparently the dor on the O.K. Fraction claim. Seven claims (Lots 873-874) Crown-granted to Portland Ca L4. No further work was done 408), Barney Fr. (L 409), Her Barney (L 421), Mosquito (L re Crown-granted to the Port ed, in 1915; the company char The old workings on the Lit	for 165 wnward The were anal e by the rbert (L 428), and land Canal rter was	
	er 10 feet in width, t 50° south. Minera phalerite.			Lucky Seven claims were reopened in 1924 and sampling and surface prospecting was carried out at that time. The Black Bear claim (L 1553), lying east of and adjoin-			
				ing the Gipsy, was app	parently a restaking of the	Extension	
					the original company. The		
					ed to the Estate of D.A. Rob		
				1916. In 1924 the claim was owned by G. Matheson and Associates, of Stewart. The Gipsy claim was purchased for			
				taxes by L.S. Davidson, of Stewart, in about 1935.			
				The Portland Canal	1 Syndicate acquired some 45	reverted	
				Crown-granted claims on Glacier Creek in about 1954.			
					were claims of the former GL		
					Canal Tunnels, and Ben Bolt		
					Portal Mining Company Limite pany in turn optioned the cl		
					Mines Limited. In 1954-55 th		
				crosscut driven by Pon	rtland Canal Tunnels was reo	pened,	
					; no work was reported at the		
					e and Lucky Seven claims at		
					cluding the Lucky Seven, Lit		
					ere optioned by Starbird Min uly 1967. Granduc Mines, Li		
					tion during 1968 and reopene		
					00 feet. A.C.A. Howe Intern		
					n on the property in 1969 an		
				geological mapping.	Starbird Mines carried out a	geochemica	
					ttle Joe claim in 1971. Tre		
				diamond drilling in 7	holes totalling 646 feet, a	nd 1,616 fe	
	•			-			
	•			of diamond drilling in	n 15 holes on the southern e	xtension of	

HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR the vein structure was carried out in 1973. Based on this work, drill indicated reserves were placed at 12,300 tons averaging 0.065 ounce gold and 6.09 ounces silver per ton, 1.58% lead, and 1.87% zinc across an average width of 5.4 ft.

The company name (Cassiar Consolidated) was changed in 1976 to Pacific Cassiar Mines Ltd., and in 1978 to Pacific Cassiar Limited. The Black Bear and Tiger (Lots 1553-1554) were optioned from Pacific Cassiar in February 1979 by Silver Princess Resources Inc.