

PRODUCT	SILVER	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA 103 P/13	REF. AG 21
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NAME OF PROPERTY		PROSPERITY, PORTER-IDAHO		HISTORY OF EXPLORATION AND DEVELOPMENT	
OBJECT LOCATED -		Stoped area, Prosperity claim (Lot 1858).		<p>Both the Prosperity and Porter Idaho mines are on the southeast slope of Mount Rainey above Kate Ryan Creek, $3\frac{1}{2}$ miles southeast of Stewart. The Porter-Idaho claim group is located at about the 5,000 foot elevation; the Prosperity group adjoins to the northwest at about the 6,000 foot elevation. The Silverado property (103 P/13, AG 20) lies about 1 mile to the northwest, on the west side of the mountain.</p> <p>The 8-claim Idaho group, including the Gem of the Mountain, Lucille, Never Sweat, Prickley Heat, Nettie L., Sunday, Slide, and Perserverance claims, was staked in 1920 by Clay Porter, G. Mehlfeld, J. McCallum, and Lee Levine. Intermittent exploration and development work was begun at that time. In 1923 the owners formed the Porter-Idaho Syndicate to acquire the property. The Porter-Idaho Mining Company, Limited, was formed in January 1925 to take over the holdings of the syndicate. The claims (Lots 4728-4738) were Crown-granted to the company in 1928.</p> <p>In 1926 one of the Porter-Idaho veins was traced uphill into adjacent ground, which was staked as the Prosperity claim. A total of 7 claims were staked by owners F.R. and L.E. Jancouski, Eli Watland, G.D. Davis, and Geo. Mehlfeld. The Premier Gold Mining Company, Limited optioned a 76% interest in the Prosperity group in 1926 and began a program of exploration and development work. The original owners in November 1928 formed Prosperity Mine Syndicate, Limited to hold the minority interest in the property.</p> <p>Premier Gold Mining Company, Limited optioned a 41% interest in the Porter-Idaho property in April 1928 and assumed management of the operation. An impressive aerial tram-line was built from the mouth of the Marmot River to the mine at 5,000 feet elevation for a total length of 5 miles. By 1930 the mines were in full production and extensive exploration and development continued until April 11, 1931 when operations ceased. The underground workings at that time consisted of over 20,000 feet of crosscuts, drifts, and raises, in some 20 adits; most of this work was done by Premier. In 1938 and 1939, siliceous ore stored at the Marmot dock was shipped to the Tacoma smelter at a small profit. Premier abandoned the Porter-Idaho group in 1941 and the Porter Idaho Mining Company, Limited charter was surrendered in May of that year. In 1942 Premier abandoned</p> <p style="text-align: right;">see Card 2</p>	
UNCERTAINTY IN METRES	300.	Lat.	55°54'25"	Long.	129°56'00"
Mining Division	Skeena	District	Cassiar		
County		Township or Parish			
Lot		Concession or Range			
Sec		Tp.		R.	
OWNER OR OPERATOR					
DESCRIPTION OF DEPOSIT					
<p>The vein systems of the Prosperity and Porter Idaho mines lie within layered buff, green, and red Mid Jurassic Hazelton volcanic epiclastics, crystal tuffs, and intercalated thinly laminated siltstones and greywackes. In the vicinity of the workings these rocks have been cut by members of a northwesterly trending hornblende diorite (lamprophyre) dyke swarm crossing Mount Rainey. The volcanic rocks strike northeast along the hillside and dip at moderate angles northwestward into the mountain. A fault, known locally as the Big Rig fault, striking east and dipping 75 to 80°N, occurs on the lower part of the Porter-Idaho group.</p> <p>Veins first developed on the Porter Idaho claims were easterly to northeasterly trending, but had little continuity. Five parallel, narrow shear zones north of the Big Rig fault are occupied by ore-bearing veins. The main vein on the Prosperity group has been traced for about 400 feet on each side of the Prosperity Porter-Idaho boundary. The veins, with minor exceptions, are narrow, sinuous quartz fissure veins in shear</p> <p style="text-align: right;">see Card 2</p>					
Associated minerals or products		- Gold, copper, lead, zinc.			

HISTORY OF PRODUCTION

From 1924 to 1950, a total of 29,952 tons of ore were shipped from this property. From this ore 847 ounces of gold, 2,338,192 ounces of silver, 57,679 pounds of copper, 3,016,623 pounds of lead, and 19,284 pounds of zinc were recovered. Production figures were listed under Prosperity, Porter-Idaho, and Big Four.

MAP REFERENCES

- Map 1385 A, Skeena River, (Geol.), Sc. 1:1,000,000, Geol. Surv. of Canada, 1979.
- Geological Map of the Stewart Area, Sc. 1": $\frac{1}{2}$ mile, Fig. 3, Sheet A - accomp. Bulletin No. 58, B.C. Dept. of Mines.
- Stewart Area, Crown Grant claim map, Fig. 15 A - accomp. Bulletin No. 58.
- #Prosperity-Porter Idaho Mines (claims & workings), Sc. 1":200 ft., Fig. 36 - accomp. Bulletin No. 58.
- Map 215 A, Stewart Sheet, (Geol.), Sc. 1":1 mile - accomp. Memoir 159, Geol. Surv. of Canada.
- *Map 103 P/13, Stewart, (Topo.), Sc. 1:50,000.

REMARKS

REFERENCES

Reports of Minister of Mines, British Columbia:

1921, p. 62; 1922, p. 67; 1923, p. 68;
1924, p. 58; 1925, p. 81; 1926, p. 87;
1927, p. 85; 1928, p. 94; 1929, p. 93;
1930, p. 102⁺; 1931, p. 41; 1946, p. 74;
1948, p. 70; 1950, p. 78; 1952, p. 77; 1963,
p. 11; 1964, p. 22; 1965, p. 50; 1966, p. 41;
1967, p. 35.

⁺⁺Hanson, G.; Bear River and Stewart Map Areas, Cassiar District, B.C.; Memoir 159, pp. 59-65, Geol. Surv. of Canada, 1929.

⁺⁺⁺Grove, Edward W.; Geology and Mineral Deposits of the Stewart Area, British Columbia; Bulletin No. 58, p. 148, British Columbia Dept. of Mines, 1971.

Mineral Policy Sector; Corporation Files: "Porter-Idaho Mining Company, Limited"; "Premier Gold Mining Company, Limited"; "Prosperity Mine Syndicate, Limited"; "Big Four Silver Mines, Ltd."; "Pacific Cassiar Limited"; "Teck Corporation".

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 58; 1970, p. 76; 1975, p. E 178.

Exploration in British Columbia; BCDM: 1980, p. 411; 1981, p. 208; 1982, p. 379.

Geological Fieldwork; BCDM: 1983, pp. 165-173.

George Cross News Letters: 1983, Nos. 236, 238; 1984, No. 63; 1985, No. 55.

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NAME OF PROPERTY PROSPERITY, PORTER-IDAHO

DESCRIPTION OF DEPOSIT (continued)

and breccia zones a few inches to several feet wide. They mainly trend northerly to northwesterly and dip moderately to steeply west. Production from the surface showings and stopes was generally confined to irregular swells or bulges found along the veins where sulphide mineralization was concentrated. In general the main shoots trend north to northwest and plunge northerly at 40 to 50 degrees. The primary vein minerals recognized are quartz, galena, sphalerite, tetrahedrite (freibergite), minor polybasite, and native silver. The veins have been irregularly fractured and oxide zones have been encountered erratically within the primary material to the maximum explored depth. In its extensive underground exploration work, Premier Gold Mining Co. found the orebodies to be small, irregular shaped, and scattered. The ore was found to occur in short shoots of 20 to 150 feet in length separated by barren stretches of considerable length.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

its interest in the Prosperity group to the minority owner Prosperity Mine Syndicate, Limited; the charter of the latter company was surrendered in 1948.

Arrow Silver Mines, Ltd., which was formed in January 1946 to acquire the Silverado and Silver Key groups, issued shares for the Porter-Idaho assets and acquired the Prosperity group from Prosperity Mine Syndicate, Limited. Later in 1946, upon completion of the consolidation, Arrow Silver changed its name to Big Four Silver Mines Ltd. Lessees sorted and shipped ore from the Prosperity dump in 1947. The company carried out some exploration work on the Tessaro vein at the east side of the Porter-Idaho group in 1948.

The Consolidated Mining and Smelting Company of Canada Limited acquired an option on the claims held by Big Four; these were transferred to a new company Cassiar Consolidated Mines, Limited which was incorporated in May 1951 under the terms of the option agreement. Some rehabilitation work and 253 feet of diamond drilling was done in 1952. Work in rehabilitating the I and O levels was carried on in 1963 and during the period 1965-1967 inclusive. Indicated reserves were reported in 1967 as 148,780.8 tonnes at 13.0 ozs/t silver (BCDM RI). Parts of the Porter-Idaho D and I levels were examined and sampled by consultants in 1969. During 1970, 50 feet of drifting was done and old raises in 3-E stope were sampled.

Seaforth Mines Ltd. held an option on the property in 1975. Work under the agreement included geological mapping and underground diamond drilling in 3 holes totalling 625 metres. The company name Cassiar Consolidated was changed in 1976 to Pacific Cassiar Mines Ltd. and in 1978 to Pacific Cassiar Limited.

During 1980 and 1981 an underground exploration was done, 61 short percussion holes drilled and more than 100 channel samples taken. The "D" vein was traced for a strike length of about 2,000 feet having an indicated average width of 15-20 feet over a vertical height of 1,400 feet. From this work there were blocked out about 400,000 tons grading 16.3 ozs Ag/ton in the "D" vein and in the Prosperity vein shoot about 200,000 tons grading 31.6 ozs Ag/ton. (NM April 1, 1982). Work in 1982-84 included rock and soil geochemical surveys, rehabilitation of 762 m of drift, percussion drilling

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

underground in 90 9-metre holes and diamond drilling in 4 holes (320 m). Probable reserves were reported as 911,000 tons at 19.5 oz/t Ag and about 5% Pb-Zn combined (George Cross News Letter, 19/03/85).

Teck Corporation optioned a 50% interest in the property late in 1984. Work in 1985 included 3 320m of underground drilling in 17 holes and 2 147 m of surface drilling in 16 holes.