

PRODUCT SILVER
PRODUIT

PROVINCE OR PROVINCE OU
TERRITORY TERRITOIRE

British Columbia

N.T.S. AREA 93 L/15
RÉGION DU S.N.R.C.

REF. AG 1
RÉF.

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

CRONIN (BABINE BONANZA)

OBJECT LOCATED - Bonanza claim (Lot 1860 A).
OBJET LOCALISÉ

UNCERTAINTY 300 m
FACTEUR D'INCERTITUDE

Lat. 54°55'30"
Lat.

Long. 126°48'50"
Long.

Mining Division Omineca
Division minière

District
District

Coast, Range 5

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

Mineralization occurs as vein fillings in a fine-grained porphyritic intrusive sill (rhyolite ?) of Tertiary age, near and at the contact of a fine-grained argillaceous sediment of the Jurassic Hazelton Group. The mineralized veins are the result of two rather sinuous faults which strike northeasterly and dip moderately northwestward. The quartz veins as exposed in the workings generally range in width from .3 to 1 metre. Mineralization occurs as pods within the main fault plane, up to 40 metres long by 6 metres wide. There is a distinct zoning of minerals within the pods: galena, boulangerite, and tetrahedrite concentrated near the fault plane, and sphalerite spread out into the altered and brecciated wallrock. Pyrite and chalcopyrite occur erratically throughout the vein system.

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

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

The property is located between elevations of 4,000 and 6,000 feet on the east side of Mount Cronin, about 20 miles northeast of Smithers.

The showings were reported staked by M.J. Brewer in 1906 and acquired by James Cronin in 1909. Mr. Cronin retained a controlling interest in Babine Bonanza Mining and Milling Company, Limited, which was incorporated in September 1909 with head office in Spokane. The underground workings totalled about 400 feet when work ceased in 1910. Six claims, the Homestake, Bonanza, Eureka, Lucky Strike, Babine Chief, and Buckley Pioneer (Lots 1859-1864 respectively) were Crown-granted to the company in 1911. The mine reopened in 1914 and development work was carried on each summer until 1923. The workings at that time comprised about three-quarters of a mile of drifts, crosscuts, and raises, in 5 adit levels over a vertical distance of about 450 feet. A shipment of 79 tons of hand sorted ore was made in 1917.

The property was optioned and reopened in 1928 by Vancouver interests who in 1929 incorporated Babine Bonanza Metals, Limited. The company name was changed to Babine Metals Limited in 1930 and to Mid-Continent Goldfields Limited in 1931. Further work was done in drifts, crosscuts, and raises. A shipment of 30 tons of hand sorted ore was made in 1929. The mine closed in 1931.

Cronin Babine Mines Limited, incorporated in 1948, optioned the property and during the year carried out diamond drilling totalling 1,269 feet in 5 surface holes and 1,335 feet in 11 underground holes. Nothing further was reported until 1951 when the workings were reopened and mill construction began. The 40 ton-per-day mill operated from July to November 1952 when work ceased due to low metal prices. The company name was changed in 1956 to New Cronin Babine Mines Limited. Work resumed during the year and the mill operated part time until October 1957 when the mine closed.

Lessee Paul Kindrat carried out small scale mining and milling operations each summer, beginning in 1962. In 1966 Kindrat Mines Ltd. was incorporated to continue the operation. The option held by New Cronin to purchase 8 Crown-granted claims from Babine Bonanza Mining and Milling was acquired by

see Card 2

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

During the period 1917-1974, 26,958 tons of ore were shipped or milled at this property. From this ore 296 ounces of gold, 271,633 ounces of silver, 22,914 pounds of copper, 3,105,740 pounds of lead, 3,479,454 pounds of zinc, and 41,316 pounds of cadmium were recovered.

REFERENCES/BIBLIOGRAPHIE

Black, J.M.; Cronin Babine Mines, Limited; Report of Minister of Mines, British Columbia.

Reports of Minister of Mines, British Columbia:
 1910, p. 86; 1911, pp. 108, 287, 288; 1914, pp. 229-233; 1916, pp. 128-130; 1917, pp. 108-111; 1918, p. 121; 1919, p. 103; 1920, pp. 87-89; 1921, p. 101; 1923, p. 111; 1924, p. 97; 1928, p. 167; 1929, p. 168; 1930, p. 141; 1931, p. 73; 1948, p. 85; 1949, pp. 94-98⁺; 1950, p. 101; 1951, p. 112; 1952, p. 94; 1956, p. 27; 1957, p. 12; 1962, p. 16; 1963, p. 26; 1964, p. 52; 1965, p. 73; 1966, p. 82; 1967, p. 89.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 100; 1970, p. 164; 1971, p. 178; 1972, p. 420; 1973, p. 347; 1974, p. 263; 1975, pp. E 144, G 67⁺⁺; 1978, p. E 221⁺⁺⁺.

Leach, W.W.; Skeena River District; Summary Report 1910, p. 96, Geol. Surv. of Canada.

Hanson, G.; Driftwood Creek Map-Area, Babine Mountains, B.C.; Summary Report 1924, Pt. A, pp. 30-32.

Mineral Policy Sector; Corporation Files: "Babine Bonanza Mining and Milling Company, Limited"; "Sproatt Silver Mines Ltd."; "Mid-Continent Goldfields Limited"; "Hallmark Resources Ltd."

Mineral Policy Sector; M.C. File: 167-Z1-2-9.

Lang, A.H.; Houston Map-Area; Paper 40-18, Geol. Surv. of Canada, 1940.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1950, Investigation No. MD-2581.

George Cross News Letters: 1982, No. 112; 1983, No. 139; 1985, Nos. 43, 55, 80, 89, 118; 1986, No. 139.

Geology in British Columbia, BCDM: 1977-81, p. 130.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 671 A, Houston, (Geol.), Sc. 1":4 miles, Geol. Surv. of Canada.

Plan of Geology, Workings, Drill Holes, Sc. 1":250 ft. (approx.), Fig. 4, Report of Minister of Mines, British Columbia, 1949.

Map 5318 G, Driftwood Creek, (Aeromag.), Sc. 1":1 mile.

#Map 93 L/15, Driftwood Creek, (Topo.), Sc. 1:50,000.

Cronin Mine (Geol. & Workings), Sc. 1":1 kilometre, Fig. G. 32, Geology, Exploration, and Mining, British Columbia Dept. of Mines, 1975, p. G 68.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR					
Date Date	09-81	08-86					

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NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

CRONIN (BABINE BONANZA)

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

Kindrat Mines Ltd. in August 1969; the company also acquired a lease on the mill. Babine Bonanza Mining and Milling Company, Limited, was dissolved in 1972. New Cronin Babine Mines Limited underwent a name change in 1973 to Sproatt Silver Mines Ltd.

H.J. Wilson and associates, by an April 1972 option agreement, acquired all the shares of Kindrat Mines from Paul and Alice Kindrat, of Smithers. Kindrat Mines at that time owned a 19/20 interest in 8 Crown grants (Lots 7417, 7418, 1859A-1864A); the remaining 1/20 interest was held by Sproatt Silver. Wilson and associates in August 1972 incorporated Hallmark Resources Ltd. to acquire Kindrat Mines and in addition 26 located claims in the View, Del, etc. groups.

Reserves as of November 6, 1972 were estimated by J.A. Mitchell as 46,752 tons indicated, and 130,000 tons inferred. This material is subject to dilution of up to 20%. The average grade expected is about .01 oz/t gold, 12.5 oz/t silver, 7.11% lead, 8.12% zinc, 0.1% cadmium (Hallmark Resources Statement of Material Facts, May 6, 1974).

Exploration and development work during 1972-73 included some 245 feet of drifting and raising, geological mapping, and a geochemical soil survey. Development work to 1973 totals about 3,800 feet of drifts and crosscuts and 1,200 feet of raises in adits at elevations of 4,775, 4,975, 5,000, and 5,175 feet. During 1974 drifting (about 160 ft.) and stope preparation were carried out on No. 2 vein. The mill operated during 1974 from July 10 to September 12.

Hallmark Resources in 1974 acquired an option to purchase from Sproatt Silver its 1/20 interest in the property. Congdon and Carey Ltd., of Denver, optioned the property in 1975 and carried out 1,530 metres of diamond drilling in 10 holes before dropping the option. Hallmark during 1977-78 carried out drifting and raising on #1 level and sampling. This work indicated an additional reserve of more than 20,000 tons grading 12.5 ozs/t Ag, 7% Pb, 8% Zn (Northern Miner, Dec. 29, 1977). In the period 1979-85 Hallmark negotiated with a number of interests and Companies for financing of a joint venture to achieve production, but without success.

Barnes Resources Ltd in July 1986 was granted an option to earn a 50% interest in the property.