

PRODUCT PRODUIT	ZINC	PROVINCE OR TERRITORY	PROVINCE OU TERRITOIRE	British Columbia	N.T.S. AREA 104 K/12 RÉGION DU S.N.R.C.	REF. ZN 1 RÉF.
--------------------	------	--------------------------	---------------------------	------------------	--	-------------------

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

BIG BULL (MANVILLE)

OBJECT LOCATED
OBJET LOCALISÉ

UNCERTAINTY
FACTEUR D'INCERTITUDE

Lat. 58°40' Long. 133°32'20"

Mining Division
Division minière

Atlin

District
District

Cassiar

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

Volcanic rocks of the Stuhini group of Mesozoic age are cut by a sheared zone that strikes northwest and dips from vertical to 45 degrees southwest. Within the sheared zone, but much narrower than it, is an altered zone which ranges from very narrow up to 200 to 300 feet in width. Where intensely altered the rock is composed of quartz, light-coloured mica, pyrite, and possibly some talc. The ore shoots dipping steeply west, lie in a shallow zone which does not extend for more than 300 feet below the surface. Mineralization consists of pyrite, sphalerite, chalcopyrite, and galena in a gangue of quartz and unreplaced country rock.

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

This property is located at about the 700 foot elevation 3 miles north-northwest of Tulsequah; the Potlatch-Banker property adjoins on the southwest.

The showings were discovered in 1929 by a prospecting syndicate headed by Mr. V. Manville of Juneau, Alaska, and the Big Bull group of 18 claims and 2 fractions were located at this time. In September 1929 the Alaska Juneau Gold Mining Company in association with the Treadwell Yukon Mining Company optioned the property along with the adjoining Potlatch and Banker groups. The following year the company holdings were increased to 54 claims by the addition of the Walker and Moose groups adjoining to the northwest, and the Big Bull extension claim adjoining to the south. During 1929-30 exploration and development work by the company on the Big Bull claims consisted of 2,000 feet of drifting, 950 feet of cross-cuts, and 5,000 feet of diamond drilling. The company relinquished the option late in 1930.

The property lay idle for a number of years. Leta Explorations Limited apparently held the property in the 1940's but no work was reported at this time. The Consolidated Mining & Smelting Company of Canada Limited optioned the Big Bull and Big Bull Extension claims from the Manville syndicate in 1946 and located 6 other claims adjoining. Exploration and development work was carried on until 1951 when Tulsequah Mines Limited was formed to combine the Big Bull and Tulsequah Chief mines into one operation. The ore from both mines was treated at the Polaris-Taku concentrator.

The Big Bull mine was in production from 1951 until 1956 when operations ceased. The property was developed by an open pit, and underground on three levels from one adit.

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

From 1951 to 1957, inclusive, the combined production from the Tulsequah Chief and Big Bull properties totalled 1,029,089 tons of ore. From this ore 94,254 ounces of gold, 3,400,772 ounces of silver, 27,207,864 pounds of copper, 26,926,859 pounds of lead, 124,692,862 pounds of zinc, and 453,992 pounds of cadmium were recovered.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 931 A, Taku River, B.C., (Geol.), Sc. 1":2 miles - accomp. Mem. 248.

Map 1262 A, Tulsequah and Juneau, (Geol.), Sc. 1:250,000 - accomp. Memoir 362.

Map 104 K, Tulsequah, B.C., (Topo.), Sc. 1:250,000.

REMARKS/REMARQUES

REFERENCES/BIBLIOGRAPHIE

Kerr, G.A.; Taku River Map-Area, B.C.; Memoir 248, pp. 61-63, 70, Geol. Surv. of Canada, 1948.

Annual Reports, Dept. of Mines, BC: 1929, pp. 120, 139-142; 1930, p. 121; 1931, p. 62; 1947, pp. 68-70; 1948, p. 62; 1949, p. 73; 1950, p. 74; 1951, p. 74; 1952, p. 75; 1953, p. 181; 1954, p. 80; 1951, pp. 11-12; 1956, pp. 12-13.

Mandy, J.T.; Report on the Taku River Area, Atlin Mining Division; Bulletin No. 1, 1930, British Columbia Dept. of Mines.

Mineral Policy Sector; Corporation Files: "Treadwell Yukon Company Ltd."; "Consolidated Mining & Smelting Co. of Canada Ltd."; "Tulsequah Mines Ltd.".

Mines Branch, Ottawa; Investigation No. 1835; Flotation Tests on a Sample of Gold-Silver-Copper-Lead-Zinc Ore from the Big Bull Property on Taku River, B.C.; Report of the Ore Dressing & Metallurgical Laboratories, 1945.

Smith, Alexander; Tulsequah Area; Structural Geology of Canadian Ore Deposits, C.I.M.M., Jubilee Volume, pp. 112-121, 1948.

Irvine, W.T.; Tulsequah Chief and Big Bull Mines; Structural Geology of Canadian Ore Deposits, Volume 2, 1957, pp. 7-16.

The Operations and Plants of Cominco Ltd. by The Management and Staff; Canadian Mining Journal, Vol. 75, May 1954, pp. 184-187 (in Cominco file).

Souther, J.G.; Geology and Mineral Deposits of Tulsequah Map-Area; Memoir 362, p. 55, Geol. Surv. of Canada, 1971.

Comp./Rev. By Comp./rév. par							
Date Date	04-66	02-73	10-73				