

MAIN PRODUCT: COPPER PRINC. PROD.: (MAJOR COMMODITY IN AN UNEXPL. DEPOS.)		PROV. OR TERR.: BRITISH COLUMBIA PROV. OU TERR.:	N.T.S. AREA: Prop./Prop. 92L/07 S.N.R.C : Depos./Gite 92L/07	REF.: CU 002 RÉF.:	MINSYS NO: 507335- 0 NO MINSYS:
NAME OF DEPOSIT: ZIP, NOM DU GITE : B, C, E		SMITH COPPER,		Age of Host Rocks/Âge des roches hôtes: UPPER TRIASSIC	
Object located: Symbol of Map 1029A Objet localisé: Facteur d'incertitude: 1500 (meters/mètres)		Latitude/Latitude: 50°21'50 Longitude/Longitude: 126°54'40		Geological province/Province géologique: CORDILLERAN OREGEN	
UTM zone/Région UTM: 9 UTM North./UTM Nord: 5580958 UTM East./UTM Est: 648570 Mining division/Division minière: NANAIMO		HISTORY OF EXPLORATION AND DEVELOPMENT HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR		Work on deposit : GEOCHEMICAL, DRILLING Travail sur le gite:	
OWNER OR OPERATOR / PROPRIÉTAIRE OU EXPLOITANT Name: WEST-MAR RES L Nom :		Type: OWNER Type:		Workings Type : STRIP Type d'exploit.: SMALL Workings Size : Dimension de l'exploit.:	
Year of information : 1986 Année de l'information:		The principal showings are in the south side of Storey (Smith) creek about one mile east of Nimpkish Lake. Five groups of claims, the Smith Copper, Vernon, Bonanza, Hector, and Wolf were staked in 1929 by Messrs. Smith & Storey and optioned the following spring to the Consolidated Mining & Smelting Co. of Canada Ltd. After completing considerable stripping along the granodiorite-volcanic outcrop, the option was dropped. Subsequent further exploration by the owners led to the discovery of the lead-zinc mineralization along the limestone-volcanic contact. The mineralization was traced for about 170 feet by open cuts and stripping.			
DESCRIPTION OF DEPOSIT / DESCRIPTION DU GISEMENT		The showings were held as the Dutch group of 8 claims in 1948; trenching at that time reportedly traced a vein, averaging 4 feet in width, over a length of 350 feet along a limestone-granodiorite contact.			
Type/Type	Host Rocks/Roches hôtes				
<p>The formation consists of Karmutsen andesitic and basaltic flows overlain by Quatsino limestone. These are intruded by medium grained rock varying in composition from quartz diorite to granodiorite. The intrusive contact is exceedingly tortuous. The volcanic and sedimentary rocks are cut by numerous dykes varying in composition from diabase and andesite to feldspar porphyries.</p> <p>There are two principal types of mineralization on the property: (1) that which occurs in the limestone or underlying volcanic rocks at or very close to the contact of the quartz diorite, and (2) certain lead-zinc-copper replacement bodies in the limestone.</p> <p>The first mentioned are typical contact metamorphic deposits. The country rock has been largely converted to a mixture of silicates including garnet, epidote, pyroxene, actinolite and chlorite. The metallic minerals, including</p>					
Discovery : Year 1929 Découverte: Année	Uncertainty: CIRCA Incertitude:	Method : CONVENTIONAL Méthode:			
Associated minerals or products and status/Minéraux ou produits associés et statut					
PB 2 ZN 2 AG 2					
Source/Source: / / -REGULAR Printed/imprimée le: 16 May/Mai 1991		© Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa, Canada © Secteur de la politique minière, Énergie, Mines et Ressources, Ottawa, Canada			

HISTORY OF PRODUCTION / HISTORIQUE DE LA PRODUCTION

First Year : Last year :  
 Première année: Dernière année:

-----

MAP REFERENCES / RÉFÉRENCES CARTOGRAPHIQUES

Map 1029 A, Nimpkish, Vancouver Island, B.C., (Geol.), Sc. 1": 1 mile -  
 accomp. Mem. 272.

Map 4-1974, Alert Bay-Cape Scott, (Geol.), Sc. 1: 250,000 - accomp. Paper  
 74-8.

#Sheet 92 L (MI), Revised Mineral Inventory Map, Sc. 1: 250,000, British  
 Columbia Dept. of Mines.

Mineral Claims on Nimpkish Lake, Sc. 1": 1 3/4 miles, Report of Minister of  
 Mines, British Columbia, 1929, p. 382.

\*Map 92 L/7, Nimpkish, (Topo.), Sc. 1: 50,000.

REMARKS / REMARQUES

Last rev./Dernières m-à-j:  
 By/Par:

/ /

/ /

05/13/1991  
 YJL

05/14/1991  
 YJL

REFERENCES / BIBLIOGRAPHIE

Gunning, H.C.; Geology & Mineral Deposits of Quartsino-Nimpkish Area,  
 Vancouver Island, B.C.; Summary Report 1929, Pt. A, p. 130, Geol. Surv. of  
 Canada.

+Gunning, H.C.; Preliminary Report on the Nimpkish Lake Quadrangle, Vancouver  
 Island, B.C.; Summary Report 1931, Pt. A, pp. 30-32, Geol. Surv. of Canada.

Reports of Minister of Mines; British Columbia: 1921, p. 348; 1929, p. 382;  
 1930, p. 299; 1931, p. 172; 1966, p. 248.

Hoadley, J.W.; Geology & Mineral Deposits of the Zeballos-Nimpkish Area,  
 Vancouver Island, B.C.; Memoir 272, pp. 73-75, Geol. Surv. of Canada, 1953.

Northern Miner, December 16, 1948, p. 10.

Mineral Policy Sector; Corporation Files: "Boundary Exploration Limited";  
 "Pan Acheron Resources Ltd."; "Mar-Gold Resources Ltd." "Imperial Metals  
 Corporation"; "Hercules Ventures Inc."; "Kerrisdale Resources Ltd."

Muller, Northcote, and Carlisle; Geology and Mineral Deposits of Alert-Cape  
 Scott Map-Area; Paper 74-8, pp. 59, 60, 61, Geol. Surv. of Canada.

Geology, Exploration and Mining; British Columbia Dept. of Mines: 1971, p.  
 319; 1973, p. 259.

Exploration in British Columbia; BCDM: 1981, p. 264; 1982, p. 229.

Mineral Exploration Review, BCDM: 1985, p. 59.

George Cross News Letters: 1985, Nos. 57, 101, 160.

PROVINCIAL LINK: BCI 92L-37,208

MAIN PRODUCT: COPPER PRINC. PROD.: (MAJOR COMMODITY IN AN UNEXPL. DEPOS.)	PROV. OR TERR.: BRITISH COLUMBIA PROV. OU TERR.: BRITISH COLUMBIA	N.T.S. AREA: Prop./Prop. 92L/07 S.N.R.C : Depos./Gite 92L/07	REF.: CU 002 RÉF.: CU 002	MINSYS NO: 507335- 0 NO MINSYS: 507335- 0
NAME OF DEPOSIT: ZIP, SMITH COPPER, NOM DU GÎTE : B, C, E				
DESCRIPTION OF DEPOSIT (continued) / DESCRIPTION DU GISEMENT (suite)  pyrrhotite, chalcopyrite, magnetite, pyrite and zinc blende, are irregularly distributed in this altered zone. The second type of mineralization follows the contact of the Quatsino limestone with underlying volcanic rocks which, where exposed, approach basalt in composition. The mineralization consists of galena, sphalerite, pyrrhotite, chalcopyrite, and pyrite with a gangue of epidote, pyroxene, garnet, calcite, quartz and chlorite.				
HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR (suite)  up. The company name (Mar-Gold) was changed in 1984 to West-Mar Resources Ltd. In 1985 Kerrisdale Resources Ltd. optioned the property and carried out a geophysical survey and diamond drilling in 4 holes. Reserves are reported as 92,744 tons at 64.68 g/t Ag, 1.69% Cu, 3.7% Pb, 12.5% Zn (Northern Miner, 10/06/85, p. B 27). In 1988, Hercules Ventures Inc. optioned the property and in 1989 diamond drilled 5 holes for 1,757 feet.				

PRODUCT PRODUIT	COPPER	PROVINCE OR TERRITORY	PROVINCE OU TERRITOIRE	British Columbia	N.T.S. AREA 92 L/7 RÉGION DU S.N.R.C.	REF. CU 2 RÉF.
--------------------	--------	--------------------------	---------------------------	------------------	--	-------------------

NAME OF PROPERTY  
NOM DE LA PROPRIÉTÉ

ZIP (SMITH COPPER) (B, C, E)

OBJECT LOCATED - Symbol on Map 1029 A.  
OBJET LOCALISÉ

UNCERTAINTY 1,500 m  
FACTEUR D'INCERTITUDE

Lat. 50°21'50"  
Lat.

Long. 126°54'40"  
Long.

Mining Division Nanaimo  
Division minière

District  
District

Rupert

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

The formation consists of Karmutsen andesitic and basaltic flows overlain by Quatsino limestone. These are intruded by medium grained rock varying in composition from quartz diorite to granodiorite. The intrusive contact is exceedingly tortuous. The volcanic and sedimentary rocks are cut by numerous dykes varying in composition from diabase and andesite to feldspar porphyries.

There are two principal types of mineralization on the property: (1) that which occurs in the limestone or underlying volcanic rocks at or very close to the contact of the quartz diorite, and (2) certain lead-zinc-copper replacement bodies in the limestone.

The first mentioned are typical contact metamorphic deposits. The country rock has been largely converted to a mixture of silicates including garnet, epidote, pyroxene, actinolite and chlorite. The metallic minerals, including pyrrhotite, chalcopyrite, magnetite, pyrite, and zinc blende, are irregularly distributed in this altered zone.

The second type of mineralization follows the contact of the Quatsino limestone with underlying volcanic rocks which,

p.t.o. ....

Associated minerals or products  
Minéraux ou produits associés

-Zinc, lead, silver, iron.

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

The principal showings are on the south side of Storey (Smith) creek about one mile east of Nimpkish Lake. Five groups of claims, the Smith Copper, Vernon, Bonanza, Hector, and Wolf were staked in 1929 by Messrs. Smith & Storey and optioned the following spring to the Consolidated Mining & Smelting Co. of Canada Ltd. After completing considerable stripping along the granodiorite-volcanic outcrop, the option was dropped. Subsequent further exploration by the owners led to the discovery of the lead-zinc mineralization along the limestone-volcanic contact. The mineralization was traced for about 170 feet by open cuts and stripping.

The showings were held as the Dutch group of 8 claims in 1948; trenching at that time reportedly traced a vein, averaging 4 feet in width, over a length of 350 feet along a limestone-granodiorite contact.

Cominco Ltd. is reported to have carried out geological and geochemical surveys over the property (Zip group of 8 claims) in 1966. On the basis of work to that date a potential of 1,000,000 tons was estimated, with a grade, including dilution, of 1.0 ounce silver per ton, 0.9% copper, 3.4% lead, and 7.8% zinc (NM 10/10/68).

Boundary Exploration Limited in April 1968 acquired an option to purchase the Zip group from Cominco Ltd. Work by Boundary included a geochemical soil survey, trenching, sampling, and diamond drilling in 8 holes totalling 750 feet. Under the terms of the agreement Boundary acquired a 100% interest subject to a royalty of 5 per cent of smelter returns.

In 1970 Acheron Mines Ltd. acquired the property as the B, C, and E group of 40 claims which included B 1 to 9, C 1, 3, 5, 7, 9, 11 to 14, and E 1 to 22. Work done included reconnaissance geological mapping and soil and silt sampling with a more detailed sampling in 1971. In 1973 the Company collected 101 samples in a geochemical survey and conducted a magnetometer survey over 9.5 line-miles. The claims were allowed to lapse in about 1975.

Mar-Gold Resources Ltd. in 1981 acquired the Joe 1-4 and Andy claims covering these showings; diamond drilling to the end of the year totalled about 2,700' in 9 holes. Based on

p.t.o. ....

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

this work the indicated reserves are approximately 80,000 tonnes at 1.69% Cu, 3.9% Pb, 12.5% Zn, 1.886 ozs/t Ag (Imperial Metals Corporation, 1982 AR).

Imperial Metals Corporation optioned the property in 1982 and carried out geophysical and geochemical surveys and 800' of diamond drilling in 4 holes. This work failed to extend the known mineralization and the option was given up.

The company name (Mar-Gold) was changed in 1984 to West-Mar Resources Ltd. In 1985 Kerrisdale Resources Ltd optioned the property and carried out a geophysical survey and diamond drilling in 4 holes ( ).

Reserves are reported as 92,744 tons at 64.68 g/t Ag, 1.69% Cu, 3.7% Pb, 12.5% Zn (Northern Miner, 20/06/85, p. B 27).

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 1029 A, Nimpkish, Vancouver Island, B.C., (Geol.), Sc. 1": 1 mile - accomp. Mem. 272.

Map 4-1974, Alert Bay-Cape Scott, (Geol.), Sc. 1:250,000 - accomp. Paper 74-8.

#Sheet 92 L (MI), Revised Mineral Inventory Map, Sc. 1:250,000, British Columbia Dept. of Mines.

Mineral Claims on Nimpkish Lake, Sc. 1":1¼ miles, Report of Minister of Mines, British Columbia, 1929, p. 382.

\*Map 92 L/7, Nimpkish, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

REFERENCES/BIBLIOGRAPHIE

Gunning, H.C.; Geology & Mineral Deposits of Quatsino-Nimpkish Area, Vancouver Island, B.C.; Summary Report 1929, Pt. A, p. 130, Geol. Surv. of Canada.

+Gunning, H.C.; Preliminary Report on the Nimpkish Lake Quadrangle, Vancouver Island, B.C.; Summary Report 1931, Pt. A, pp. 30-32, Geol. Surv. of Canada.

Reports of Minister of Mines; British Columbia: 1921, p. 348; 1929, p. 382; 1930, p. 299; 1931, p. 172; 1966, p. 248.

Hoadley, J.W.; Geology & Mineral Deposits of the Zeballos-Nimpkish Area, Vancouver Island, B.C.; Memoir 272, pp. 73-75, Geol. Surv. of Canada, 1953.

Northern Miner, December 16, 1948, p. 10.

Mineral Policy Sector; Corporation Files: "Boundary Exploration Limited"; "Pan Acheron Resources Ltd."; "Mar-Gold Resources Ltd."; "Imperial Metals Corporation".

Muller, Northcote, and Carlisle; Geology and Mineral Deposits of Alert-Cape Scott Map-Area; Paper 74-8, pp. 59, 60, 61, Geol. Surv. of Canada.

Geology, Exploration and Mining; British Columbia Dept. of Mines: 1971, p. 319; 1973, p. 259.

Exploration in British Columbia; BCDM: 1981, p. 264; 1982, p. 229.

Mineral Exploration Review, BCDM: 1985, p. 59.

George Cross News Letters: 1985, Nos. 57, 101, 160

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

where exposed, approach basalt in composition. The mineralization consists of galena, sphalerite, pyrrhotite, chalcopryrite, and pyrite with a gangue of epidote, pyroxene, garnet, calcite, quartz and chlorite.

DMacR

05-87

BCI 92 L - 37, 208

Comp./Rev. By Comp./rév. par		DMacR		DMacR	DMacR	DMacR	DMacR
Date Date	08-64	03-74	04-75	12-78	03-82	03-83	05-86