Location/Identification

MINFILE Number: 092L 020
National Mineral Inventory Number: 092L2 Au28
Name(s): **KING MIDAS NO. 1 VEIN**
MARKS, EHATSET, BIG BEN (L.1676), YAUCO

Status: Past Producer
Mining Method Underground
Regions: British Columbia, Vancouver Island
BCGS Map: 092L007
NTS Map: 092L02W
Latitude: 50 03 34 N
Longitude: 126 47 34 W
Elevation: 183 metres
Location Accuracy: Within 500M

Mining Division: Alberni
Electoral District: North Island
Forest District: Campbell River Forest District

UTM Zone: 09 (NAD 83)
Northing: 5547574
Easting: 657983

Comments: The adit, on the west bank of Zeballos River, is located 1.3 kilo- metre north of Nomash River Fork, 9.5 kilometres north of Zeballos and 140 metres south of Fault Creek (Bulletin 27, Figure 2).

Mineral Occurrence

Commodities: Gold, Silver, Copper, Zinc, Lead

Minerals
Significant: Sphalerite, Chalcopyrite, Galena, Gold
Significant Comments: Gold associated with sphalerite; silver mineralogy not known.
Associated: Quartz
Alteration Type: Silicific'n
Mineralization Age: Unknown

Deposit
Character: Vein
Classification: Mesothermal, Epithermal, Epigenetic
Type: I06: Cu+/-Ag quartz veins
Shape: Tabular
Dimension: 80x0x0 metres **Strike/Dip:** 354/90
Comments: Vein strike is 354 degrees, dip vertical or steeply east.

Host Rock

Dominant Host Rock: Volcanic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Vancouver	Karmutsen	------
Upper Triassic	Vancouver	Quatsino	------
Eocene	------	------	Catface Intrusions

Isotopic Age	Dating Method	Material Dated
230 Ma	Fossil	Gymnotropite ammonites
225 Ma	Fossil	Juvarite ammonites
38 +/- 14 Ma	Potassium/Argon	Biotite

Lithology: Siliceous Andesite, Limestone, Porphyry Dike

Comments: Karmutsen ammonites-Hisnit Island; Quatsino ammonites-Alice Lake; Catface biotite-Zeballos (Geological Survey of Canada Paper 74-8).

Geological Setting

Tectonic Belt: Insular
Physiographic Area: Vancouver Island Ranges
Terrane: Wrangell, Plutonic Rocks

Metamorphic Type: Contact

Grade: Hornfels

Inventory

Ore Zone: VEIN

Category: Assay/analysis

Year: 1932

Report On: N

NI 43-101: N

Sample Type: Grab

Commodity	Grade
Silver	28.1100 grams per tonne
Gold	97.3800 grams per tonne

Comments: Sample consisting of 50 per cent quartz.

Reference: Geological Survey of Canada Summary Report 1932, A11, pages 39-42.

Summary Production

		Metric	Imperial
Mined:		1 tonnes	1 tons
Milled:		0 tonnes	0 tons
Recovery	Gold	156 grams	5 ounces
	Silver	31 grams	1 ounces
	Copper	10 kilograms	22 pounds

Capsule Geology

The King Midas No. 1 vein occurrence lies in the Zeballos gold camp, an area underlain by Lower Jurassic Bonanza Group basaltic to rhyolitic volcanic rocks. Conformably underlying the Bonanza rocks are limestones and limy clastics of the Quatsino and Parson Bay formations, and the tholeiitic basalts of the Karmutsen Formation, all belonging to the Upper Triassic Vancouver Group. Dioritic to granodioritic Jurassic plutons of the Zeballos intrusion phase of the Island Intrusions have intruded all older rocks. The Eocene Zeballos stock, a quartz diorite phase of the Catface Intrusions, is spatially related to gold-quartz veining in the area. Bedded rocks are pre- dominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis.

The King Midas No. 1 vein, 140 metres south of Fault Creek, 3.0 metres above the Zeballos River level, lies near the faulted contact between Quatsino limestone on the east bank of Zeballos River and Karmutsen andesites on the west. Feldspar porphyry dykes, possibly related to the South Zeballos Pluton phase of the Eocene Catface Intrusions, cut volcanics and sediments.

The Number 1 vein is hosted by silicified andesite and has been traced for 80 metres. It strikes 354 degrees and dips vertically, and consists of lenses of quartz following a somewhat wider shear zone. Locally, the vein splays into several parallel stringers 30 to 40 centimetres apart, with andesite host rock flooded with thin quartz veinlets and impregnated with sulphides.

A sample collected by Gunning (Geological Survey of Canada Summary Report 1932, Part A, II, pages 39-42) carrying about 50 per cent quartz, sphalerite, arsenopyrite, pyrite and some chalcopyrite, galena and pyrrhotite, assayed 97.38 grams per tonne gold, and 28.11 grams per tonne silver. The gold was found to be associated with sphalerite and chalcopyrite and is also present as free gold. In 1940, one tonne of high grade ore produced 156 grams of gold, 31 grams of silver and 10 kilograms of copper.

A parallel vein was located 244 metres up Fault Creek (Bulletin 27, page 116); no details are available.

Bibliography

EMPR AR 1929-376; 1932-205; 1933-253; 1934-F6; 1938-F53,F56; 1940- 27; 1954-65
EMPR BULL 20-V, p. 16; *27, p. 115
EMPR FIELDWORK 1982, p. 290; 1983, p. 219
EMPR PF (Starr, C.C. (1938): Report on the King Midas Mine, 10 p; North Half of Claims Showing Locations of Veins and Contacts, 1938; Sketch of King Midas Workings on North Fork of Zeballos River, 1938; Letter from Charles Starr to King Midas Mining Co. Ltd., 1938; Stevenson, J.S. (1938): Lode Gold Deposits of the Zeballos Area)
EMR MP CORPFILE (King Midas Mining Co. Ltd.)

GSC EC GEOL 1-1947
GSC MAP 4-1974; 255A; 1028A; 1552A
GSC MEM 204, p. 17; 272, pp. 47,59
GSC OF 9; 170; 463
GSC P 38-5; *40-12, pp. 30-32; 69-1A; 70-1A; 72-44; 74-8; 79-30
GSC SUM RPT 1929A; *1932AII, pp. 38-42
CIM Trans. Vol. 42, 1939, pp. 225-237; 1948, pp. 78-85; 72, pp. 116-125
GCNL #146, 1983; #5, 1984
N MINER Apr. 1938, pp. 39-45
Carson, D.J.T., (1968): Metallogenic Study of Vancouver Island with emphasis on the Relationship of Plutonic Rocks to Mineral Deposits, Ph.D. Thesis, Carleton University, Ottawa

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	1989/02/27	**Revised By:**	Wim S. Vanderpoll(WV)	**Field Check:**	N