Location/Identification

MINFILE Number: 092L 030
National Mineral Inventory Number: 092L2 Au5
Name(s): **LUCKY STRIKE**
FREE GOLD, VANCOUVER GIRL
Status: Showing
Mining Division: Alberni
Electoral District: North Island
Regions: British Columbia, Vancouver Island
Forest District: Campbell River Forest District
BCGS Map: 092L006
NTS Map: 092L02W
UTM Zone: 09 (NAD 83)
Latitude: 50 03 39 N
Northing: 5547617
Longitude: 126 50 45 W
Easting: 654182
Elevation: 1189 metres
Location Accuracy: Within 500M
Comments: Location is the Freegold vein 100 metres east of 1231 peak between west branch of Lime Creek and Kaouk River, 3.5 kilometres northwest of Zeballos River, 8.5 kilometres north of Zeballos.

Mineral Occurrence

Commodities: Gold, Copper

Minerals
Significant: Pyrite, Chalcopyrite, Gold
Associated: Quartz
Alteration: Limonite
Alteration Type: Oxidation
Mineralization Age: Unknown

Deposit
Character: Vein, Breccia
Classification: Epigenetic, Epithermal
Type: I06: Cu+/-Ag quartz veins
Shape: Tabular
Modifier: Sheared
Dimension: 300x0x0 metres
Strike/Dip: 043/90
Comments: A 043 degree striking vein has been explored over 300 metres.

Host Rock

Dominant Host Rock: Plutonic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Vancouver	Quatsino	------
Upper Jurassic	------	------	Island Plutonic Suite

Isotopic Age	Dating Method	Material Dated
225 Ma	Fossil	Juvarite ammonites
148 +/- 8 Ma	Potassium/Argon	Phlogopite

Lithology: Granodiorite, Siliceous Diorite, Diorite Granodiorite Breccia, Mafic Dike, Limestone, Feldspar Porphyry Dike
Comments: Quatsino ammonites from Alice Lake; phlogopite from Zeballos intrusion (Geological Survey of Canada Paper 74-8).

Geological Setting

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

Inventory

Ore Zone: SAMPLE
Category: Assay/analysis

Year: 1938
Report On: N
NI 43-101: N

Sample Type: Grab

Commodity	Grade
Gold	7.8000 grams per tonne

Comments: Average of 3 samples over 20 centimetres.
Reference: Property File - Jobin, F. 1938 page 1.

Capsule Geology

The Lucky Strike occurrence lies north of the Zeballos gold camp, in an area underlain by Lower Jurassic Bonanza Group basaltic to rhyolitic volcanic rocks and Upper Triassic Vancouver Group Quatsino Formation limestone. Dioritic to granodioritic Jurassic plutons of the Zeballos intrusion phase of the Island Plutonic Suite have intruded all older rocks.

The Lucky Strike occurrence consists of two shear veins hosted by Late Jurassic granodiorite near the contact with Quatsino lime- stone: 1) The Vancouver Girl shear, also referred to as Lucky Strike shear, strikes 030 degrees and dips 80 degrees south. The average width is 25 centimetres. The zone consists of locally silicified sheared diorite. Minerals include pyrite, chalcopyrite and free gold and three samples over 20 centimetres each averaged 7.8 grams per tonne gold (Property File - Jobin, F., 1938, page 1). Bulletin 27, page 131, states that the zone follows a 60 centi- metre wide feldspar porphyry dyke that traces a zone of diorite- granodiorite breccia on a 047 degree strike and an average width of less than 15 centimetres. 2) The Free Gold or Lucky Strike Vein is located 400 metres north of the Vancouver Girl and has been explored over 300 metres of its 043 degree strike. The vein is vertical and follows in places the wall of a mafic dyke. Width ranges from 4 to 15 centimetres. Vein material consists of locally oxidized quartz-pyrite-free gold. Assays between 2.7 and 113.8 grams per tonne gold are reported (Property File - Jobin, F., 1938, page 2).

Bibliography

EMPR BULL 20-V, p. 16; *27, p. 131
EMPR FIELDWORK 1982, p. 290; 1983, p. 219
EMPR PF (Jobin, F., 1938, Report on the Lucky Strike Group for Pioneer Gold Mines)
GSC EC GEOL 1-1947
GSC MAP 4-1974; 255A; 1028A; 1552A
GSC MEM 204; 272, p. 59
GSC OF 9; 170; 463
GSC P 38-5; 40-12; 69-1A; 70-1A; 72-44; 74-8; 79-30
GSC SUM RPT 1929A; 1932A
CIM Trans. Vol. 42, 1939, pp. 225-237; 1948, pp. 78-85; 72, pp. 116-125
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.
Stevenson, J.S.,1938, Lode Gold Deposits of the Zeballos Area

Date Coded: 1985/07/24 **Coded By:** BC Geological Survey (BCGS) **Field Check:** N
Date Revised: 1989/02/14 **Revised By:** Wim S. Vanderpoll(WV) **Field Check:** N