Location/Identification

MINFILE Number: 092F 069
National Mineral Inventory Number: 092F5 Au5
Name(s): **SHERWOOD**
PATULLO 1-2 (L.1830,1844), BLACK BEAR, HAMBER, PLUTO, HART, PM

Status: Past Producer
Mining Method Underground
Regions: British Columbia, Vancouver Island
BCGS Map: 092F043
NTS Map: 092F05E
Latitude: 49 27 52 N
Longitude: 125 31 22 W
Elevation: 1342 metres
Location Accuracy: Within 500M
Mining Division: Nanaimo
Electoral District: Alberni-Qualicum
Resource District: South Island Forest District
UTM Zone: 10 (NAD 83)
Northing: 5482147
Easting: 317209
Comments: Location of number 1 adit is on Lot 1830, 1 kilometres east of Drinkwater Creek and 0.5 kilometres west of Love Lake (from Gayer, 1944).

Mineral Occurrence

Commodities: Gold, Silver, Zinc, Lead, Copper

Minerals
Significant: Sphalerite, Galena, Covellite, Chalcopyrite
Significant Comments: Silver associated with galena; gold mineralization.
Associated: Quartz, Pyrrhotite, Marcasite
Alteration: Limonite, Malachite, Marcasite, Anglesite, Covellite, Clay
Alteration Type: Oxidation, Argillic
Mineralization Age: Unknown

Deposit
Character: Vein
Classification: Epigenetic, Hydrothermal, Epithermal
Type: I06: Cu+/-Ag quartz veins
Dimension: 1x0x0 metres **Strike/Dip:** 070/70N
Comments: Vein strikes 070 to 080 degrees and dips 65 to 72 degrees north.

Host Rock

Dominant Host Rock: Sedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Paleozoic	Sicker	Undefined Formation	------
Pennsylvan.-Permian	Buttle Lake	Azure Lake	------
Jurassic	------	------	Island Plutonic Suite

Isotopic Age	Dating Method	Material Dated
------	------	------
------	------	------
167 Ma	Potassium/Argon	Biotite

Lithology: Cherty Argillite, Cherty Tuff, Granodiorite, Andesite Dike, Basalt Dike, Quartz Diorite Dike, Clay Gouge
Comments: Intrusive age date from Kennedy Lake (Geological Survey of Canada Paper 72-44).

Geological Setting

Tectonic Belt: Insular
Physiographic Area: Vancouver Island Ranges
Terrane: Wrangell

Inventory

Ore Zone: SHERWOOD
Year: 1944
Category: Combined
Report On: Y
Quantity: 25,247 tonnes
NI 43-101: N

Commodity	Grade
Gold	17.1500 grams per tonne

Comments: Probable and possible ore.
Reference: Property File - McDougall, M.E., 1944.

Summary Production

		Metric	Imperial
Mined:		20 tonnes	22 tons
Milled:		0 tonnes	0 tons
Recovery	Silver	3,110 grams	100 ounces
	Gold	1,866 grams	60 ounces
	Lead	391 kilograms	862 pounds
	Copper	50 kilograms	110 pounds

Capsule Geology

The Sherwood occurrence, located at the southern end of the Buttle Lake uplift, is underlain by cherty argillite and tuff of the Paleozoic Sicker Group. The sediments and volcanics are overlain by limestone of the Permian to Pennsylvanian Azure Lake Formation, Buttle Lake Group. A large granodiorite stock of the Jurassic Island Plutonic Suite is located approximately 2 to 4 kilometres east. See H-W (092F 330) for a discussion of the recent stratagraphic and nomenclature revisions in the uplift.

Andesite and basalt dykes in the area are related to volcanic activity that postdates the limestone. Locally, the quartz diorite dykes and stocks are related to the Early to Middle Jurassic Island Plutonic Suite. Hybrid rocks are common, and there is evidence of granitization in the area southwest of Love Lake. A regional, northwest trending fault extends from Bedwell Lake through Love Lake, and is located 0.5 kilometres east of the occurrence.

The Sherwood vein occupies a 070 to 080 degree striking shear zone that dips 65 to 72 degrees north. Strong open fractures bisect the shear zone at 090 to 120 degrees. The shear zone is up to 2.0 metres wide and contains intensely altered gouge, and lenses of quartz that range up to 0.76 metres in width. Several parallel quartz veins are present, separated by wall rock or clay gouge. Abundant, narrow quartz veins branch off the main structure.

Primary vein material consists of quartz, sphalerite, galena, covellite, chalcopyrite and pyrrhotite. Much of the vein has been reduced to rusty, crumbly and often porous material. Studies indicate the primary sulphide mineralogy is altered to malachite, marcasite, anglesite, covellite, and possibly other secondary minerals. Silver values are associated primarily with galena. The gold mineralogy is not known.

The vein has been exposed at three levels over an area of 212 metres. Samples from the Number 1 level returned assays of up to 328.50 grams per tonne gold over 24.1 centimetres and up to 462.92 grams per tonne silver over 40.6 centimetres (Bulletin 13, pages 92-93).

In 1942, 20 tonnes of ore were shipped, producing 1866 grams of gold, 3110 grams of silver, and values in lead and copper. The property was operated by Cangold Mining and Exploration Company Limited in 1946. The deposit is reported to contain 450,000 tonnes of inferred ore (Times-Colonist, December 27 1987). No grades are reported. A more conservative estimate of 25,247 tonnes of probable and possible ore, grading 17.15 grams per tonne gold is given by McDougall (1944).

Bibliography

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Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	1989/08/10	**Revised By:**	Wim S. Vanderpoll (WV)	**Field Check:**	N