Location/Identification

MINFILE Number: 082ESW012

Name(s): **DOLPHIN (L.978S)**
SPAR FRACTION, BLUEBIRD

Status: Past Producer
Mining Method Underground
Regions: British Columbia
BCGS Map: 082E021
NTS Map: 082E04W
Latitude: 49 14 54 N
Longitude: 119 48 40 W
Elevation: 545 metres
Location Accuracy: Within 1KM

Mining Division: Osoyoos
Electoral District: Boundary-Similkameen
Resource District: Okanagan Shuswap Natural Resource Distr

UTM Zone: 11 (NAD 83)
Northing: 5458866
Easting: 295424

Comments: The approximate location of the workings of the Dolphin occurrence (Minister of Mines Annual Report 1922, page 162).

Mineral Occurrence

Commodities: Copper, Silver, Gold, Lead, Molybdenum

Minerals
Significant: Chalcopyrite, Pyrite, Galena, Molybdenite
Associated: Quartz, Calcite
Alteration: Malachite
Alteration Type: Oxidation
Mineralization Age: Unknown

Deposit
Character: Vein, Disseminated
Classification: Hydrothermal, Epigenetic
Type: I06: Cu+/-Ag quartz veins, I01: Au-quartz veins

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Paleozoic-Mesozoic	Undefined Group	Shoemaker	------

Isotopic Age	Dating Method	Material Dated
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Lithology: Chert, Tuff, Argillite, Gossan

Comments: The Shoemaker Formation is of Carboniferous to Triassic age.

Geological Setting

Tectonic Belt: Intermontane
Terrane: Quesnel
Physiographic Area: Thompson Plateau

Metamorphic Type: Regional
Grade: Greenschist
Relationship: Pre-mineralization

Inventory

No inventory data

Summary Production

		Metric		Imperial	
Mined:		145	tonnes	159	tons
Milled:		0	tonnes	0	tons
Recovery	Silver	6,314	grams	203	ounces
	Copper	7,225	kilograms	15,928	pounds

Capsule Geology

The Dolphin occurrence is located at about 900 metres elevation, east of Highway 3A and 5 kilometres north of Keremeos, British Columbia.

Work began on the Dolphin occurrence as early as 1903, when it was reported that a large gold-copper orebody was discovered. In 1904, opencuts and tunnel development were initiated through a thick gossan cap. By 1906, workings consisted of 4 tunnels and 7 opencuts and pits, totalling 123 metres. Development work was continued in 1907. The showing was held by three claims in 1908; the Dolphin, Spar Fraction and Bluebird and a total of 427 metres of development work was completed. In 1916, the first shipment of copper and silver ore was made from the Dolphin occurrence by C.W. Jordan. Additional shipments were made in 1917 and 1918.

The Dolphin showing is hosted within a faulted package of Carboniferous to Triassic Shoemaker and Old Tom formations and younger volcanic and sedimentary strata of the Eocene Penticton Group. To the immediate east of the showing is polymictic conglomerate of the Springbrook Formation overlain by pyroxene-rich mafic phonolite lava of the Yellow Lake Member of the Marron Formation.

This showing is underlain by chert, and argillite with minor tuff and chert of the Shoemaker Formation and the overlying greenstone, volcanic flows and breccias of the Old Tom Formation.

The Dolphin occurrence is a quartz vein mineralized with pyrite and chalcopyrite carrying silver and gold values. Chalcopyrite and pyrite occur as small segregations in fractures within the quartz vein. The vein is crushed and faulted in underground workings. The vein is capped by a gossan zone. Ore shipments are reported to have averaged 6.2 per cent copper and 51.43 grams per tonne silver (Minister of Mines Annual Report 1922, page 162).

Several caved adits were discovered to the northeast of the Dolphin showing in 1986. Adit E is 3 metres long and is connected to a 9-metre opencut. The workings have exposed a 8 to 12 centimetre wide quartz vein, striking 192 degrees and dipping 52 degrees northeast. The vein contains up to 0.5 per cent pyrite with trace malachite (Assessment Report 14767). The second adit, Adit F, is 31 metres long and follows a shear-hosted quartz vein, striking 110 degrees and dipping steeply north. The vein is 1 to 25 centimetres wide and is composed of quartz, calcite with up to 2 per cent pyrite and traces of galena, chalcopyrite, molybdenite and malachite (Assessment Report 14767). Grab sample JB-R17, from these adits, yielded 0.35 gram per tonne gold and 10.6 grams per tonne silver over 0.25 metre (Assessment Report 14767). Another sample, JB-R16, yielded 0.04 gram per tonne gold, 8.5 grams per tonne silver and 0.14 per cent copper over 0.10 metre (Assessment Report 14767).

Between 1916 and 1918, a total of 145 tonnes was mined from the Dolphin from which 6314 grams of silver and 7225 kilograms of copper were recovered.

Bibliography

EMPR AR 1899-775; 1903-176; 1904-226; 1906-170; 1907-117; 1908-117; 1910-124;
1911-292; 1916-260,518; 1917-207,215; 1918-211; *1922-162
EMPR INDEX 3-194
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EMPR BC METAL MM0340
EMPR OF 1989-2; *1989-5
GSC MAP 341A; 538A; 539A; 541A; 15-1961; 1736A; 2389
GSC MEM 38; 179
GSC OF 481; 637; 1505A; 1565; 1969
GSC P 37-21

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	2026/04/17	**Revised By:**	Kerri Shaw (KLS)	**Field Check:**	N