

Location/Identification

MINFILE Number:	092L 013	National Mineral Inventory Number:	092L2 Au10
Name(s):	<u>ROPER</u> SPUD VALLEY (ROPER)		
Status:	Past Producer	Mining Division:	Alberni
Mining Method	Underground	Electoral District:	North Island
Regions:	British Columbia, Vancouver Island	Forest District:	Campbell River Forest District
BCGS Map:	092L007		
NTS Map:	092L02W	UTM Zone:	09 (NAD 83)
Latitude:	50 00 54 N	Northing:	5542629
Longitude:	126 47 41 W	Easting:	657990
Elevation:	550 metres		
Location Accuracy:	Within 500M		
Comments:	Roper No. 4 adit on Gold Valley Creek, 3 kilometres southeast of Zeballos River and 5.5 kilometres northeast of Zeballos. Production is included with Gold Field (092L 211).		

Mineral Occurrence

Commodities:	Gold, Silver, Copper, Lead, Zinc		
Minerals	Significant:	Pyrite, Arsenopyrite, Sphalerite, Galena, Chalcopyrite	
	Associated:	Quartz, Calcite	
	Alteration:	Chlorite, Clay	
	Alteration Type:	Chloritic, Argillic	
	Mineralization Age:	Unknown	
Deposit	Character:	Vein, Shear	
	Classification:	Hydrothermal, Epigenetic	
	Type:	I01: Au-quartz veins, I06: Cu+/-Ag quartz veins	
	Shape:	Tabular	Modifier: Sheared
	Dimension:	60x0x0 metres	Strike/Dip: 060/85N
	Comments:	Shear zone hosting vein.	

Host Rock

Dominant Host Rock:	Plutonic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Lower Jurassic	Bonanza	Undefined Formation	-----
Tertiary	-----	-----	Catface Intrusions
Isotopic Age		Dating Method	Material Dated
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38 +/- 14 Ma		Potassium/Argon	Biotite
Lithology:	Quartz Diorite, Andesite, Tuff		
Comments:	Age date from Geological Survey of Canada Paper 74-8.		

Geological Setting

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

Inventory

Ore Zone: SPUD VALLEY
Category: Combined
Quantity: 220,429 tonnes

Year: 1988
Report On: Y
NI 43-101: N

Commodity	Grade
Gold	10.7000 grams per tonne

Comments: Proven/probable/possible reserves in 4 veins (combined with the Gold Field deposit, 092L 211).

Reference: McAdam Resources Inc. Annual Report 1988.

Capsule Geology

The Roper occurrence lies in the Zeballos gold camp, an area underlain by an island arc sequence of 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 tholeiitic basalts of the Karmutsen Formation, all belonging to the Upper Triassic Vancouver Group. Dioritic to granodioritic Early-Middle Jurassic plutons of the Zeballos intrusion phase of the Island Plutonic Suite have intruded all older rocks. The Eocene Zeballos stock, a quartz diorite phase of the Tertiary Catface Intrusions, is spatially related to the areas gold-quartz veins. Bedded rocks are predominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis.

Recorded production for the camp totals 9465 kilograms of gold and 4119 kilograms of silver from 652,000 tonnes of ore mined (Fieldwork 1982, page 291). Most production came from the Spud Valley deposits (092L 211 and 092L 013) and the Privateer mine (092L 008).

The Roper vein, located 200 metres southeast of the Gold Field occurrence (092L 211) is hosted in quartz diorite of the Zeballos stock near its western contact with Bonanza Group andesites and tuffs. The vein is associated with a shear zone striking 060 degrees and dipping 85 degrees north. The zone is up to 60 centimetres wide. The quartz vein, up to 30 centimetres wide but usually about 5 centimetres wide, contains ribbons of fine-grained pyrite, arsenopyrite, sphalerite, galena and chalcopyrite. Locally calcite replaces quartz. Zones of chloritic and argillic alteration, up to 1 metre wide, envelopes the shear zone; chlorite replaces mafic minerals and clay minerals replace feldspar.

Production for the Roper vein is included with that for the Gold Field mine (092L 211). The combined occurrences are known as Spud Valley.

Proven/probable/possible reserves in 4 veins (combined with the Gold Field deposit, 092L 211) total 220,429 tonnes grading 10.7 grams per tonne gold. In view of an unsuccessful 1989 mill test, the reserve figure of 49,890 tonnes in old workings, grading 4.6 grams per tonne gold, reported in 1942 near the end of the mine life may be more credible (McAdam Resources Inc. Annual Report 1988).

Bibliography

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EMPR MAP 65 (1989)
EMPR P 1991-4, p. 188
EMPR PF (see Gold Field - 092L 211; Various maps and plans)
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EMR MP CORPFILE (Spud Valley Gold Mines Ltd.; Valley Explorations Ltd.; Glencair Resources Ltd.; McAdam Resources Ltd.; Tashota- Nipigon Mines Ltd.)
GSC EC GEOL 1
GSC MAP 4-1974; 255A; 1028A; 1552A
GSC MEM 204, p. 16; 272, pp. 48,62,63
GSC OF 9; 170; 463
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N MINER Apr. 1938; Jul.4,Sept.16, 1985; Jan.13,26,Jul.21,Sept.22, Dec.1, 1986; Jan.5,Feb.16, 1987; Feb.20,May 8, 1989

NW PROSP Dec., 1987/Jan., 1988; Oct./Nov., 1988; Mar./Apr., 1989

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Date Coded: 1985/07/24

Coded By: BC Geological Survey (BCGS)

Field Check: N

Date Revised: 1989/03/15

Revised By: Wim S. Vanderpoll(WV)

Field Check: N