

Property/Project

Name : Willa Project
 NTS : 82F/14
 Claims :
 Acreage: 2925 Ha

Authors: Ken Hicks (Northair Mines Ltd.)

Commodities: Gold, Copper

Names/Numbers

Agreements

70% Northair Mines/30% Rio Algom & BP Minerals

History

Exploration (Techniques) Period	Amount	Type	Cost
1980 - 1984	14,000 m	Diamond Drilling	\$2.8 million
1985 - 1986	9,300 m	" "	
Development	883 m	Drifting	\$3.9 million
	Amount	Type	Cost
Period 1986 - 1987	942 m	Drifting	
	7200 m	Drilling	\$2.8 million

Production Period	Tonnage(s)	Method	Grade
N/A			

Geology

Regional

The Willa property is centered on a pendant of probable lower jurassic Rossland Group mafic volcanics within the Nelson Batholith.

Local

A gold-copper enriched hydrothermal breccia pipe cuts through earlier volcanic and intrusive rocks.

Alteration

The rocks in the vicinity of the project area have undergone lower greenschist facies metamorphism. The mineralized area near the breccia pipe have also been subjected to an earlier hydrothermally developed propylitic and retrograded calcsilicate alteration.

Near Slocan in the south-central part of the province, extensive underground exploration continued at the Willa property of Northair Mines Ltd., where recently calculated proven mineable reserves stand at 456,700 tons grading 0.17 oz/t Au and 0.92% Cu, with an additional 242,000 possible tonnes of similar grade. Gold-copper mineralization at Willa occurs in silicified porphyries, intrusive breccia and strongly propylitized coeval volcanics of the Lower Jurassic Rossland Group.

EPITHERMAL DEPOSITS

Classic epithermal systems in Mesozoic to Tertiary volcanic rocks have produced one of the Province's new gold mines, and are about to produce another. The Lawyers deposit of Cheni Gold Mines Inc. is located in the Toadogone area, 190 miles north of Smithers, has reserves of 1.98 m tons grading 0.196 oz/t Au and 7.1 oz/t Ag. This deposit is expected to begin production before the end of the year at a planned 550 tons per day. Anticipated capital investment is \$42 m and projected employment is 140. This remote camp was accessed by an all weather road in 1987.

Other deposits of this type under advanced exploration include the Al deposit of Energex Minerals Ltd., also in the Toadogone area, with reserves of 360,000 tons grading 0.26 oz/t Au and the Cinola deposit of City Resources (Canada) Ltd., on the Queen Charlotte Islands, with pitiable reserves of 26.4 m tons grading 0.072 oz/t Au. Exciting new discoveries in Eocene volcanic rocks in the easily accessible Okanagan region include the Brett deposit of Huntington Resources and the Vault deposit of Canadian Nickel Co. Ltd.

Also worthy of note is a \$6 M exploration program designed to extend reserves at the operating Blackdome Mine located 155 miles north of Vancouver. This work included extensive drilling and underground exploration on the newly discovered Watson Vein south of the mine and on the Giant and Red Bird veins north of the mine.

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INFO circ. 1988-10: EXP 8 DDU FACILITY BC 1988

BRITISH COLUMBIA EXPLORATION AND DEVELOPMENT HIGHLIGHTS - 1988

(Page 3)

PROJECT STATUS	COMPANY	PROJECT NAME	COMMODITY	ESTIMATED TONNAGE AND GRADE	CAPITAL EXPENDITURES	ESTIMATED EMPLOYMENT
ADVANCED EXPLORATION CONT'D						
	Laramide Resources Ltd.	Lara	Cu, Pb, Zn, Ag, Au	0.583 m tons † 1.01% Cu, 1.22% Pb, 5.87% Zn, 3 oz/t Ag, 0.14 oz/t Au	\$ 2.3 m	80
	The Quinto Mining Corp.	Lumby	Au	0.229 m tons † 0.12 oz/t Au	\$ 1 m (3*)	58
	Huldra Silver Inc.	Treasure Mountain	Ag, Pb, Zn	0.130 m tons † 2 oz/t Ag, 8.39% Pb, 3.51% Zn	\$ 1.2 m	?
	Houston Metals Corp.	Silver Queen	Ag, Pb, Zn, Au, Cu	1.38 m tons † 0.1 oz/t Au, 6.0 oz/t Au, 1% Pb, 8% Zn, 1% Cu, plus Ga and Ge	\$ 3 m	65
	Better Resources Ltd.	Mt. Washington	Au, Ag	0.472 m tons † 0.256 oz/t Au, 1.27 oz/t Ag	? m	?
	Hewhawk Gold Mines Ltd., Granduc Mines Ltd.	Sulphurets	Au, Ag	1.50 m tons † 0.50 oz/t Au, 20.2 oz/t Ag	\$ 5+ m	50-60
	Sumac Mines Ltd., Esso Minerals Inc.	Kutcho Creek	Cu, Ag, Au, Zn	18.7 m tons † 1.51% Cu, 2.61% Zn, 0.79 oz/t Ag, 0.009 oz/t Au	\$ 275* m	450
	Korthair Mines Ltd.	Willa	Au, Cu, Ag	0.456 m tons † 0.17 oz/t Au, 0.92 % Cu, 0.28 oz/t Ag	\$ 2.5 m	50-60

* - ESTIMATED COST OF PROJECT TO PRODUCTION

HIGHLAND (MOUNTAIN)

082 F/14W

49 51 30 117 23 00

Pb Zn Ag Cu

UTM 55 22750 N 473 000 E

8?

MAPEN IN RC '87: (35) : - 58 samples

- underlain by Stearn Gp. slates, argillites, limestones, ^{congl.} ~~1~~ fault, intruded by prop. gr. gdt, etc, & hbl syenite of Jurassic Nelsonian ~~formation~~

A.R. 17052 : Geol. Report Highland Claim
KOSMINKA, 1988. (June) ^{cont. Feb 87}

- on SW flank mt Aylmer between 1670m - 1798m.
- access via 700m track w-side Highland Creek
- Road described in ~~the~~ O.F. 1195 (1975)
- Soil survey indicates a poss. mineral zone starting at SW corner of prop & striking 025°, broad 700m.
- hand specimen of volc. rx ca mo rosettes in a gte str.

A.R. 16738: See L.H.

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
EXPL. TARGET:
WORK DONE:

MacDonald, E.D.
Slocan
NTS 082F14E
Comstock (L.1814), Silver Chief (L.1813), Silver Cup (L.1815), C.S.C. 1-2
Lead, Zinc, Silver
DIAD 1008.0 m 4 hole(s);NQ, RQ
GEOL 196.0 ha - 4 Map(s); 1:2500, 1:200
ROAD 22.8 km
SAMP 215 sample(s);PB,ZN,AG,AU
TOPO 5.0 ha - 3 Map(s); 1:200
TREN 187.5 m 4 trench(es)
UNDD 99.0 m 2 hole(s);AQ
UNSD 170.0 m

LAT. 49 53 39 LONG. 117 13 42

GEOLOGY:

The area is underlain by granite and granodiorite of the Cretaceous-Jurassic Nelson Plutonic Rocks and/or Valhalla Intrusions. Galena, tetrahedrite and silver mineralization occurs in quartz fissure veins in extensive and persistent shear zones that have strikes of 035 to 055 degrees and dips of 35 to 55 degrees southeast. Mineralization has been traced for a strike length of 2100 metres between the elevations of 1670 and 2040 metres.

RELATED A.R.:
MINFILE:

04583
082FHW077

Purcell

A.R. 16984

REPORT YEAR: 1988, 40 Pages, 2 Map(s)

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
EXPL. TARGET:
WORK DONE:

Sweden Res.
Spearing, C.G. Ostler, J.
Slocan
NTS 082F14E
Grey Copper, Grey Copper Fr. 1, Goodenough, Purcell, Idaho 2, Rawdon, Link 1
Silver, Lead, Zinc
LINE 7.4 km
SOIL 219 sample(s);CU,PB,ZN,AG,AS - 2 Map(s); 1:2500

LAT. 49 59 18 LONG. 117 11 00

GEOLOGY:

The Purcell Property is underlain by fissile metasediments of the Slocan series which are intruded by sill-like granodioritic bodies. Northeast-trending tear faults host quartz-carbonate veins that are mineralized with argentite, pyrrhotite, native silver, galena, tetrahedrite and spangolite. Three veins on the property have previously been mined at a profit. They are the Goodenough vein, the Grey Copper vein and the Idaho vein. Ore grades in these veins ran up to 2830 grams of silver per tonne.

MINFILE:

082FHW033, 082FHW230

Golden Thorn

A.R. 17064

REPORT YEAR: 1987, 41 Pages

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
EXPL. TARGET:
WORK DONE:
GEOLOGY:

Malkin, P.
Malkin, P.
Slocan
NTS 082F14W
Golden Thorn
Lead, Zinc, Gold
PROS 30.0 ha

LAT. 49 54 30 LONG. 117 20 00

The few outcrops on the property consist of granite, quartzite and fine-grained metasedimentary rocks. The author feels that the north-west flowing creeks on the property represent zones of weakness and possible sites of mineralization.

Highland

A.R. 17652

REPORT YEAR: 1988, 23 Pages

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
EXPL. TARGET:
WORK DONE:
GEOLOGY:

Northair Min.
Kosmynska, D.P.
Slocan
NTS 082F14W
Highland
Lead, Zinc, Silver, Copper
SOIL 58 sample(s);PQ,CU,PB,ZN,AG,WD

LAT. 49 51 30 LONG. 117 23 00

The property is underlain by Triassic and Lower Jurassic Slocan Group slate, argillite, limestone, conglomerate and tuff, which are intruded by porphyritic granite and granodiorite, diorite, quartz diorite, and hornblende syenite of the Jurassic Nelson Intrusions.

L.N.

A.R. 16738

REPORT YEAR: 1987

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
WORK DONE:

Horanda Ex.
Mitchell, I.G.
Slocan
NTS 082F14W
Lot 2229, Lot 5738-5740, Lots 6908-6911, Lots 14515-14516, Lots 14924-14925
DIAD 794.8 m 2 hole(s);NQ
GEOL 112.0 ha
LINE 6.6 km
PITS 1 pit(s)
ROCK 129 sample(s);CU,PB,ZN,MD,AS,AG,AU
SAMP 425 sample(s);AU,AG,CU,PB,ZN,MD,AS
SOIL 346 sample(s);AS,AG,CU,PB,ZN,MD,AU
TREN 75.0 m

LAT. 49 53 41 LONG. 117 20 14

GEOLOGY:

The property is underlain by a roof pendant of Jurassic-Triassic Slocan Group sediments conformably overlain by Jurassic Rossland Group volcanics. Gold occurrences are associated with pyrite-pyrrhotite-arsenopyrite mineralization along major shear zones or structures which have been variably silicified, chloritized and/or clay altered.

RELATED A.R.:

15747, 16665

Maurier Creek-PBX

A.R. 17265

REPORT YEAR: 1988, 88 Pages, 11 Map(s)

OPERATOR(S):
AUTHOR(S):
MINING DIV:
LOCATION:
CLAIM(S):
EXPL. TARGET:
WORK DONE:

PBX Res.
Lyman, D.A.
Slocan
NTS 082F14W
Pandora's Box, Condo 5, Condo 7, Palada, Wedge 1-2, Le Roi (L.5754)
Gold, Silver, Copper, Lead, Zinc
ENGR 11.0 km;Viz - 4 Map(s); 1:2500
GEOL 318.7 ha - 3 Map(s); 1:10 000, 1:5000, 1:2500, 1:2000
LINE 22.5 km
LSUR 6.8 km - 2 Map(s); 1:10 000, 1:1000
MAGG 20.0 km - 2 Map(s); 1:2500
ROCK 48 sample(s);ME
SILT 32 sample(s);ME
SOIL 275 sample(s);ME
TREN 50.0 m 2 trench(es)

LAT. 49 53 42 LONG. 117 16 47

GEOLOGY:

The claims are underlain by porphyritic granite of the

EXPLN IN BC 1988

FOLDER

A.R 7853

1967: DDH started on small molybdenum showing
in Aylwin Creek on NE boundary
Depth 30'; chip samples of outcrop
of silicified gneiss porphyry ran up to
0.3% MoS₂ p. 3