

Location/Identification

MINFILE Number:	104B 154		
Name(s):	<u>HOPE-POWER</u> PREMIER, HOPE, POWER, GRANDUC ROAD		
Status:	Developed Prospect	Mining Division:	Skeena
Regions:	British Columbia	Electoral District:	Stikine
BCGS Map:	104B010	Resource District:	Coast Mountains Natural Resource District
NTS Map:	104B01E	UTM Zone:	09 (NAD 83)
Latitude:	56 03 25 N	Northing:	6212883
Longitude:	130 01 32 W	Easting:	436128
Elevation:	305 metres		
Location Accuracy:	Within 500M		
Comments:	Location of 2014 drillhole P14-687.		

Mineral Occurrence

Commodities:	Gold, Silver, Lead, Zinc, Copper		
Minerals	Significant:	Galena, Sphalerite, Chalcopyrite, Pyrite	
	Associated:	Pyrite, Quartz, Calcite	
	Alteration:	Chlorite, Sericite, Silica, Limonite, Carbonate	
	Alteration Type:	Propylitic, Silicific'n, Oxidation, Carbonate	
	Mineralization Age:	Unknown	
Deposit	Character:	Vein, Layered, Massive	
	Classification:	Hydrothermal, Epigenetic, Porphyry	
	Type:	G07: Subaqueous hot spring Ag-Au, G06: Noranda/Kuroko massive sulphide Cu-Pb-Zn, I02: Intrusion-related Au pyrrhotite veins	
	Shape:	Irregular	Modifier: Folded, Faulted
	Dimension:	6x6x2 metres	Strike/Dip: 100/80N

Host Rock

Dominant Host Rock:	Metavolcanic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Lower Jurassic	Hazelton	Unuk River	-----
Lower Jurassic	-----	-----	Texas Creek Plutonic Suite
Isotopic Age	Dating Method	Material Dated	
210+24-14 Ma	Uranium/Lead	210+24-14 Ma	
194.8 +/- 2 Ma	Uranium/Lead	Zircon	
Lithology:	Andesite Lapilli Tuff, Dacitic K-Feldspar Porphyry Dike, Aphanitic Andesite Flow, Andesite Breccia, Andesitic Dacitic Volcaniclastic, Argillite, Siltstone		
Comments:	Date quoted for Texas Creek intrusives is for Premier porphyry dyke (Fieldwork 1985). Unuk River Fm. age date from Brown, D.A., 1987.		

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Boundary Ranges
Terrane:	Stikine		

Metamorphic Type: Regional
Grade: Greenschist

Inventory

Ore Zone: POWER **Year:** 1988
Category: Measured **Report On:** Y
Quantity: 100,000 tonnes **NI 43-101:** N

Commodity	Grade
Gold	4.1000 grams per tonne

Comments: Gold equivalent grade.
Reference: George Cross Newsletter No.102 (May 27), 1988.

Ore Zone: SAMPLE **Year:** 1986
Category: Assay/analysis **Report On:** N
NI 43-101: N

Sample Type: Channel

Commodity	Grade
Silver	93.9200 grams per tonne
Gold	3.8700 grams per tonne
Lead	0.7700 per cent
Zinc	6.1100 per cent

Comments: 7.0 metres
Reference: Assessment Report 15762.

Capsule Geology

The Hope-Power zone showing is located on the north side of the "West" or "Northwest" zone of the main Silbak Premier deposit (104B 054), approximately 1 kilometre west of the Glory Hole area. The zone was first exposed during construction of the Granduc Mine road during 1965. The Power Zone is 200 metres northwest of the Hope Zone along the same trend. Their exact relationship remains to be established.

The area is underlain by the Upper Triassic to Lower Jurassic Hazelton Group, which is a northwest trending belt of folded andesitic to dacitic metavolcanic rocks containing a thick sequence of argillites and siltstones infolded along a synclinal axis. The area, part of the volcanic arc assemblage of the Stikinia Terrane, lies in the Intermontane Belt bounded on the west by the Coast Crystalline Complex and on the east by the Bowser Basin.

The showing is hosted in the Lower Jurassic Unuk River Formation andesite flows, breccia, and lapilli tuff, intruded by Early Jurassic Texas Creek dacite porphyry dikes, capped by volcanoclastics. The most characteristic feature of the andesite package is the pervasive carbonate, chlorite and clay alteration around the Premier deposit.

Potassium feldspar porphyry (historically known as the "Premier" porphyry) is spatially associated with the mineralization; this relationship is thought to indicate a Lower Jurassic age of mineralization.

The showing consists of a siliceous zone and a near vertical layer of massive sulphides along the contact of a vertical northwest striking porphyry in andesite. The porphyry is 50 to 75 metres wide and extends east to the Glory Hole area. A zone of limonitic weathering, silicification and pyritization occurs along the contact. The showing is exposed in a high roadside cut. The south wall of the cut is fine grained, strongly chloritized andesitic tuff with medium grained disseminated pyrite and the north wall is Premier porphyry dacite dike with disseminated pyrite.

Massive sulphide mineralization consists of pyrite, sphalerite, galena and chalcopyrite. This layer dips 80 degrees north and strikes 100 degrees.

A few short drill holes from above and below (underground) have failed to find extensions to this small high-grade layer (6 by 6 by 2 metres). A channel sample taken over 7.0 metres assayed 3.87 grams per tonne gold, 93.92 grams per tonne silver, 0.77 per cent lead, 6.11 per cent zinc (Assessment Report 15762). The Power zone is reported to have 100,000 tonnes of measured geological ore grading 4.1 grams per tonne gold equivalent (George Cross Newsletter No.102, (May 27), 1988).

In 2009, surface sampling by Ascot Resources yielded good results including the re-sampling of an old trench on the Hope Zone. A 1.0 metre chip sample (743956) assayed 6.72 grams per tonne gold, 179 grams per tonne silver, 2.174 per cent copper, 1.61 per cent lead and 29.04 per cent zinc, while other chip samples yielded from 3.75 grams per tonne gold over 8.0 metres to 13.80 grams per tonne gold over 3.0 metres (Christopher, P.A. (2009-08-03): Technical Report on the Premier Gold Project; Kirkham, G. (2012-06-18): Technical Report on the Resource Estimate for the Premier Gold Property). Drill holes 012 to 014, and 018 to 019 targeted the Power Zone, while holes 015 to 017 targeted the Hope Zone, all located within the same area. Holes 012 to 014 yielded good results with one intersection in P09-013 of 7.68 grams per tonne gold over 3.0 metres (Assessment Report 31489) which demonstrates the continuity of the flat-lying Power Zone vein over 60 metres. Drill hole P09-013 also identified minor silicification and mineralization below the Premier Porphyry body that opens up the lower contact to additional exploration.

Drilling in 2014 and the projection of the mineralized zones of the Power and Hope zones, in relation to the Premier West zone, revealed that the Power and Hope zones were the continuation and the extension of the Premier West zone with a shallower dip orientation. The gently to moderately northeast-east dipping Power and Hope zones are characterized by a 5 to 10 metre thick massive to semi-massive pyrite-siliceous-breccia zone with local trace sphalerite-galena-chalcopyrite. The Power and Hope zones were found to have a higher silver:gold ratio relative to the Premier West and the Premier Main zones of the Premier deposit (104B 054). In 2014, drillhole P14-687 intersected 8.5 metres (181.50 to 190.00 metres) grading 0.84 gram per tonne gold and 9.9 grams per tonne silver (Assessment Report 35410, page 66-67).

Work History

In 1986, Westmin Resources conducted induced polarization and resistivity surveys were over the Northern Light (104B 053), Simcoe and Hope areas of the Silbak Premier property (Assessment Report 15762). See Simcoe (104B 158) for further details.

Ascot Resources Ltd conducted exploration on the Dilworth Property in 2007 and 2008 and subsequently acquired the Premier Gold Property from Boliden Ltd under the terms of a 2009 option agreement. Work was carried out in 2009 and 2010 on the property and on the Hope, specifically drilling 923.57 metres in 8 holes in 2009.

In 2014, Ascot completed a total of 5 diamond-drill holes from the Hope and Power zones

See Premier (104B 054) and Yellowstone (104B 039) for details of the Dilworth and Premier properties that were worked on as a single entity.

Bibliography

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 EMPR PFD 503012

Date Coded:	1988/05/31	Coded By:	Dani J. Alldrick (DJA)	Field Check:	Y
Date Revised:	2022/03/27	Revised By:	Nicole Barlow (NB)	Field Check:	Y