

W.A. No. _____

NAME Geo Rn

SUBJECT Reports

48H SW 09 & - 0 7

PROPERTY FILE

009404

92HSW092

MONTHLY REPORT - JULY, 1987

by Tom Schroeter, Senior Regional Geologist

HIGHLIGHTS

Property visits were made to the following:

- Abo, Ashlu, Maggie, Baldwin-McVicar, Blackdome, Bubble Hotspring, Bobcat, Perlite(Aurum), Frasersgold, Quesnel Project (Panteleyev), Brett, Equisis, Chaput, Creighton Creek, Goldfinch, Spider, Platinum Blonde and Union.
- attempted to hire a clerk through the Ministry of Advanced Education and Job Training program but person did not work out.
- reviewed Energex' proposal for road extension of Toodoggone road to their AL property.
- organized MEG Speaker's Committee for '87 - '88.
- ordered binocular microscope for office.
- exploration is at an all-time high.
- 320 publications sold in July.
- 22 people signed into the library during July.

PROPERTY VISITS

ABO - Kerr Addison/Bema International [MI 092H/SW-092]

On July 8th Cathy Lund and I visited the ABO gold prospect located 4.5 km northeast of Harrison Hot Springs. Tor Bruland and Mike Gray were geologists on site. The 187 metre level in the Jenner Stock had been advanced to 116 metres, plus short (5 metre) crosscuts to the east, north, and south. Raising in the north and south 'ends' was just beginning. Quartz and free gold veining appears to have a sub-horizontal preference. Larger quartz veins (up to 10 cm wide) are obvious but there are also many micro veinlets which also carry free gold in the host quartz diorite. Quartz veins exhibit banding (mainly pyrrhotite with minor chalcopyrite). Locally, native gold also appears to be banded (i.e. syn - po +/- cpy precipitation). The host quartz diorite contains abundant (>10%) disseminated pyrrhotite near the contact with hornfels and argillite. However, the quartz diorite appears amazingly 'fresh'. The portal area started in an altered diorite, passed into argillites which became increasingly hornfelsed (including garnet porphyroblasts and 'pods' of pyrrhotite) and finally into the quartz diorite (relatively sharp contact). In the hornfels immediately adjacent to the quartz diorite, good tension gashes filled with quartz +/- pyrrhotite exist.

Bema International holds options (July '87) to earn a 35% interest in the property and are funding the present program. Kerr Addison remains as operator.

Present mineral reserves for the Jenner Stock (120 m N-S by 75 m E-W to 250 m depth) using a 1 gram (.03 oz.) gold per tonne cut-off and a maximum depth of 100 metres are calculated at

867,000 tonnes grading 2.55 grams gold per tonne (0.09 oz. gold/t.). By lowering the cut-off to 0.5 g Au/T (0.077 oz. Au/t.), the reserve is increased to 1,783,000 tonnes grading 2.64 grams gold per tonne (0.077 oz. Au/t). Several other dioritic stocks (7) with anomalous gold values occur on the property and remain to be tested.

Initial metallurgical test work gave 97.7% gold recovery. Between 60% and 70% of the gold is recovered by gravity. The primary objective of the underground program is to provide 1000 tonnes of mineralized material from the adit and raises to a pilot mill rated at 2 tons/hour or approximately 25 tons/day. The mill has been set up near the Kent prison in Agassiz, approximately 11 km from the minesite.

As of Aug. 21, 182 metres (596 ft.) of underground development had been completed. Assay results of face samples taken throughout the stock apparently have been encouraging, indicating a significantly higher average grade than indicated by drilling.

ASHLU - Walter Babkirk/Tenquille Res. [MI 0926/NW-013]

On July 15th Paul Wilton, Cathy Lund and myself visited the Ashlu gold mine and vicinity with prospectors Walter 'Slim' Babkirk (owner) and Alec Husak (friend). In 1984 a \$4 million mill was erected by Osprey Mining (option) with a 100 tpd permit. Unfortunately it operated for a total of 16 hours and has been mothballed ever since.

Native gold, pyrrhotite, pyrite, minor chalcopyrite and scheelite and rare tellurides(s) occur in a relatively gently dipping quartz vein(s) in sheared granodiorite (Coast Range) and a mafic hornfelsed dyke. A high-grade sample reported from the footwall of the vein taken in the lower workings assayed 3.02 oz. Au/t, 1.35 oz. Ag/t and a spectacular 20.5 oz. PGM/t (Inco, 1983).

There is a legal dispute over the current ownership of the property between Walter Babkirk and Tenquille Res. A recent court ruling appears to favour Tenquille. Through their consultant, Cooke Geological Consultants, underground work includes pumping out the lower level (1440 m), rehabilitation of the upper stopes and workings to enable a sampling program to validate and reconfirm assays for gold, silver, and if present, to confirm the presence of platinum group metals. Samples from the dump were taken for possible identification of telluride(s) and assays.

Mr. Babkirk (PAA) continues to carry out regional prospecting using his small winkie-drill. He appears to be obsessed by the existence of 'tellurides'.

MAGGIE(Hopkins) - Minnova [MI 0926/NW-042]

On July 16th Paul Wilton, Cathy Lund and I visited the Maggie (Hopkins) polymetallic massive sulphide deposit located 20 km southeast of Squamish at the headwaters of the Indian and Stawamus Rivers. Unfortunately, Minnova's field geologist Colin Burge was unavailable to discuss the project or provide a

Cordilleran Roundup
Feb 2-5/88

092HSW092

KERR ADDISON MINES LIMITED

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*Information Circular
from Core Shack Display*

HARRISON LAKE GOLD PROJECT

PROPERTY: Previously known as Geo, RN and ABO, covers about 30 km² in 123 units.

LOCATION: East shore of Harrison Lake, main workings on west slope of Bear Mtn. in the District of Kent 4.5 km NE of the Village of Harrison Hot Springs, and 100 km of Vancouver, B.C.

OWNERS: R. B. Pincombe and Brunor Mines.

AGREEMENTS: Purchase Option by ABO Resource Corp in 1983. Optioned by Kerr Addison Mines Ltd. in 1984: 60% by spending \$1.750 million prior to December 1989. Joint venture with Bema International Resources Inc.: 35% by spending \$1. million.

CURRENT STATUS: Expenditure by end of December 1987 by Kerr Addison and Bema \$1.575 million. Joint Venture between Kerr Addison (25% and operator), ABO (40%) and Bema (35%).

HISTORY: High grade surface and underground mining 1972 - 1982 on .3 to .45 m quartz vein, 642 tonnes of 47 g/tonne Au, 16 tonnes Ag and 1% cu. Shut down due to fault offset of vein.

ABO drilled 3,341m in 32 holes in 1983 and 1984 and intersected 40m of 4.0 g/tonne Au, 64m of 3.7 g/tonne Au and 28m of 2.5 g/tonne Au in the Jenner Stock quartz diorite.

Kerr Addison drilled 2,804m in 19 holes in 1985 and 1986 in the Jenner and Portal Stocks to outline size and grade. An additional 391m in 9 holes which identified gold mineralization in three additional quartz diorite stocks. Expenditure on the project was \$575 thousand.

Kerr Addison and Bema completed underground bulk sampling in 1987 which included 290m of drilling in 5 holes, 269m of drifting, 81m of raising and 1,052 tonnes were processed in a portable pilot plant at a cost of \$1.0 million dollars.

REGIONAL GEOLOGY: The Cascade Mountain system, where an axial core of gneiss and granitic rocks metamorphosed to greenschist and lower amphibolite facies are flanked to the east and west by folded and faulted sedimentary and volcanic rocks. The contact between the axial core and the Western belt is the Harrison Lake Fault, a strike slip fault with a 65° E dip.

The Western Belt is greenschist metamorphic facies adjacent to the Harrison Lake Fault. Fossiliferous Jurassic to Lower Cretaceous sequence which includes two major volcanic episodes. The Western Belt has been intruded by Cretaceous to Tertiary granodiorite and quartz diorite stocks and batholiths and is locally hydrothermally altered.

Several mineral occurrences are located in the Western Belt, where the Harrison Lake Fault is the feeder for the post faulting fluids. The influx of fluids in several pulses (pyrite-arsenopyrite, pyrrhotite-chalcopyrite, marcasite, tellurides and native gold) is of Tertiary age. (24 m.y.)

LOCAL GEOLOGY The central and southern part of the property is underlain by Upper Jurassic Mysterious Creek Formation metasediments (black argillite) injected or intercalated with sills or flows of mafic diorite, in fault contact along the Harrison Lake Fault to the north with Chilliwack Group Sediments. The eastern part is underlain by the middle Tertiary Hicks Lake granodiorite batholith. The Mysterious Creek Formation is intruded by at least nine igneous apophyses and is intensely hornfelsed within 3-4 m of the contact.

MINERALIZATION: The metasediments/metavolcanics contains 1 to 3% disseminated pyrrhotite with minor pyrite and chalcopyrite which locally increase to 15%. Gold is sporadic and uneconomic. The Jenner Stock which host the gold bearing quartz veins is 120m NS and 72m EW on surface and dips E at 65°, contains disseminated pyrrhotite with minor pyrite, chalcopyrite and rare molybdenite. Microfaulting and fracturing of the brittle stock were followed by injection of fluids to form the quartz veins stockwork. The quartz veins contain pyrrhotite, minor pyrite and chalcopyrite and rare molybdenite in addition to native gold and a silver bismuth telluride. The fluids were injected along low angle faults. The Jenner Creek Fault is a post mineralization splay of the Harrison Lake Fault.

RESERVES: Although only preliminary results from the 1987 program are available economic gold values have been identified in a 37 m wide "FW" Zone along the footwall contact of the stock. This zone has a 9,360 tonnes per vertical meter potential.

ECONOMICS: A preliminary engineering study based on a very theoretical 2.2 million tonnes and 3.0 g/tonne gold showed that profitable underground mining by block caving or sub level caving of 1,100 tonnes per day can be done with a capital cost of \$25 million and an operating cost of \$25/tonne.

FUTURE PLANS: Further sampling and drilling to confirm the theoretical ore model.

MAIN PROBLEM: Reliable grade estimation of an erratically mineralised body with extreme nugget effects.

CORDILLERAN ROUNDUP - SNAP SHOT REVIEWS

February 4, 1988

Property/Project

Authors: Tor Bruland

Name : Harrison Lake Gold Project Commodities Au

NTS : 92 H/5

Claims : RN, MB1, FF, HOT 1-8

Names/Numbers

Acreage: 123 Units

Agreements

Joint Venture between Kerr Addison Mines Ltd., Operator (25%)
Bema International Resources Inc. (35%) and ABO Resource Corp. (40%)

History

Property optioned by ABO Resource Corp in 1982 from R. Pincombe.
Optioned to Kerr Addison from ABO Resource Corp. in November 1984.

<u>Exploration (Techniques)</u> <u>Period</u>	<u>Amount</u>	<u>Type</u>	<u>Cost</u>
1982-84	3,341.4m	geological mapping geochemical survey drilling	
1985-86	3,194.5m	geological mapping geochemical survey drilling	
1987	289.6m	drilling	
	268.65m	drifting	\$1,000,000
	80.63m	Raising	
	1052.04	tonne Pilot Plant/Bulk Sample	

Production

<u>Period</u>	<u>Tonnage(s)</u>	<u>Method</u>	<u>Grade</u>
1972-82	642.8 tonne	High Grade	47.36 g/tonne Au 15.77 g/tonne Ag .096% Cu

Geology

Regional: Western flank of the Cascade Mountain system with folded and faulted but little metamorphosed sedimentary and volcanic rocks of Pennsylvanian and Permian to Lower Cretaceous to Tertiary granodiorite and quartz diorite stocks and batholiths.

Local: Middle Jurassic Mysterious Creek Formation of uniform monotonous black argillite in fault contact to the north and south to Pennsylvanian and Permian Chilliwack Group sediments. The Mysterious Creek Formation have been intruded by Miocene quartz diorite apophyses which dips about 65° E.

Mineralization: Quartz diorite stocks disseminated pyrrhotite and minor pyrite and chalcopyrite. Quartz diorite hosted quartz vein stockwork with pyrrhotite, minor pyrite, chalcopyrite and rare molybdenite, bismuth telluride and native gold.

Current Exploration

1988

Bulk Sampling
Drilling to prove ore reserve

Reserves

Geological, possible,
probable and/or proven UNDER REVIEW

Number of zones _____
Number of sample points _____
Average grade _____
Average thickness _____
Cut-off grade _____

Costs

Recent exploration costs,
i.e. this period \$1,600,000

Projected exploration costs of program
to development \$ Under Review

Projected development costs given
positive economics \$25 million

Projected operating costs given
positive economics \$ 25 per tonne