Thira 888693

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

MEMORANDUM

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To: Ted Hall, Manager, Northwest Region

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Geological Survey Branch MEMPR

MONTHLY REPORT - MAY 1996

by

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AR# 23795

FIELD ACTIVITIES

***Thira** drill core examined with prospectors Barry Hofsink and Neil Paquette, and student Debbie Olivera (work experience program) on May 1. Cominco recently dropped their option on this large copper porphyry target 25 km north of Huckleberry and the owners wanted advice on how they might attract another optionor. Cominco drilled 11 holes, spaced nearly 1 kilometer apart, eight holes were percussion and three were diamond drilled. The core shows strong argillic altered Bulkley granodiorite with abundant pyrite (to 5%) in a well developed quartz-anhydrite stockwork. Minor secondary biotite occurs near the best intersection, 0.2% Cu over 67 m. Gold values are low, which discouraged Cominco, but anomalous gold occurs in lake sediment of Hill-Tout Lake (GSB - Interior Plateau project).

THIRA

***Silver Queen** (93L 002) was visited on May 16 and 21 with George Stewart and Jim Hutter. Kettle River Resources and New Nadina Explorations are conducting 3,000 feet of diamond drilling south of old underground workings, where a recent random sample disclosed 562 ppb Au in a large alteration zone. At Silver Queen, a series of fault controlled base metal (zinc-dominant) epithermal veins were explored over several decades and mined during 1972-3, primarily for silver. Metallurgical problems arising from complex mineralogy caused mine closure. Exploration interest south of the old workings is not entirely new. The alteration zone induced Kennecott (1960's) and Northgate (1980's) to drill several holes targeting an intrusive source of Silver Queen's veins. A detailed sulphide mineralogy study (UBC, 1988-90) gives a southerly source vector for the veins and complements a new clay alteration study which suggests that better gold values occur with higher temperature alteration to the south. Drilling concluded on May 21 with five holes completed. Two holes intersected fragmental, feldspathic dacite-andesite that occur widely on the property and may be correlative with the upper Cretaceous Kasalka Group. The other three holes, in the centre of the alteration zone, intersected crowded feldspar porphyry that resembles the volcanic rocks in composition but grades to an intrusive texture. It hosts a weak to moderate stockwork of pyrite-sphalerite-(galena-barite) suggestive of porphyry mineralization, and purported to be a new discovery. (Quartz stockwork is locally evident in outcrop) The sub-volcanic(?) porphyry is weakly silicified and contains minor disseminated tourmaline in core. Below the porphyry, one drill hole intersected flow banded rhyolite of unknown correlation.

SILVER QUEEN

AR# 24 392 ('96)

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intrusions. Core is stored off the property and essentially no logs were filed for assessment. I have contacted Gordon Leask to obtain property data and access to drill core. Fireweed was discovered by prospecting based on a caldera model but was drilled (in part) on a VMS model. My aim is to refine deposit type and relate it to a camp model in conjunction with Don MacIntyre.

* I re-visited the **Babs** prospect (owned by prospectors Ralph Keefe, Joe Hidber and Mel McOuat) in the Babine porphyry camp and examined geology on Newman Penninsula south of Bell Copper with Don MacIntyre on July 12. Babs is a worthy exploration target despite Equity Silver and Noranda having dropped their options after drilling programs in 1992 and 1994 respectively. My previous visit was in November 1992 during Equity's drill program when there was snow on the ground. Of prime interest is a glacial boulder train of stockwork veined biotite feldspar porphyry containing up to 0.9% Cu and 1.3 g/t Au. Eleven holes have been drilled, targeted on IP and magnetic anomalies, but none have been collared up-ice of the boulder train. Three holes have intersected low grade copper (eg 0.19% Cu over 78 m) within quartz eye rhyolite tuff (related to Babine eruptive centres?). It has been suggested that the boulders were derived from the Granisle deposit 20 km to the northwest, but it appears fortuitous that mineralized boulders should be deposited on top of low grade copper in bedrock. Northern Dynasty is negotiating to option the Babs.

Babs

*Nak (93M 010) drill core was examined with Don MacIntyre on July 13-15. Bill Howell of Hera Resources was a gracious host. The first phase of drilling comprised 15 holes (3005 m) within a 600 x 1400 meter area. Copper mineralization is widespread but grades somewhat less than expected. Best intercepts are threshold economic grade, 0.425% Cu, 0.106 g/t Au over 104 m and 0.409% Cu, 0.718 g/t Au over 119.5 m, in holes 2 and 15 respectively. Another 10,000 feet of drilling is subject to NoW approval and probably a License to Cut from MoF.

NAT.

At least three Babine intrusive phases are evident and comprise a series of dikes. Intrusive rocks are more prevalent in the southern limits of the drilled area whereas holes to the north are in pyritized andesite (the pyrite halo). Crowded biotite feldspar porphyry (BFP) grades to abundant non-porphyritic biotite, and these are interpreted to be contemporaneous. Sparsely porphyritic BFP is younger and brecciates crowded BFP. Copper occurs as finely disseminated chalcopyrite in crowded BFP and as widely spaced chalcopyrite fracture veins in andesite hornfels and both porphyritic phases. Bornite veins occur in the two BFP's but not in hornfels. Pyrite content is low in areas of copper mineralization. Specularite is abundant in holes at the southern limits of drilling. In the central drill area strong argillic alteration and attendant tourmaline-quartz fracture veining is irregularly superimposed on both andesite hornfels and intrusives, and does not correlate with better copper mineralization. Chlorite alteration was noted in holes drilled to the south. Secondary biotite was identified in hornfels and more rarely in intrusive rocks with best potassic alteration (secondary biotite and minor K-feldspar) occuring in the most southwesterly hole. This may be the direction to pursue better copper grades.

granodiorite

*Cominco's percussion drilling program on the **Thira** (93E 071) property 60 km south of Houston was visited on July 17 with Al Roberts. A large zone of intensely argillized and pyritic feldspar porphyry follows a northeasterly topographic linear, exposed sporadically for 5 km along a logging road. At the southwest end of the linear at "Copper Pond" a weak quartz-chalcopyrite stockwork, with secondary biotite, in a biotite granodiorite stock was drilled (8 holes) by Jorex Limited and Dome Exploration in 1972 (AR 4181). Cominco is drilling about 10 very widely spaced (1 km apart!) percussion holes to test a strong IP anomaly that corresponds to the pyritic zone.

Thira

P Woj. July '95