

886927

FW - May '95

Polaris  
Taku

Unfortunately there is only 150 meters of room down dip on the North zone to its projected truncation by the Limestone fault which bounds the Mine wedge. The Limestone fault is tentatively correlated with the Llewellyn fault, displaced 4-500 metres west by newly recognized 101 Fault.

Engineer

\*Engineer mine was toured with Swede Martenson of Ampex Mining on May 27-28. Ampex is being funded by Pelly Construction to mill a 1000-1500 tonne sample to be extracted from the Engineer and Governor veins. A series of quartz-(calcite) veins fill tensional fractures that are at right angles to a prominent northwest shear zone cutting folded Laberge Group sedimentary rocks. The mill is a gravity circuit employing a jig and Deister tables. Ampex has studied old mine records and processed small samples to identify gold shoots. The longer term goal is to de-water the 600, 700 and 800 levels. Old sample records indicate ore-grade gold the 700 level which may correlate with the principal area of stoping above 500-level (the mill level).

Trouble in past!

### EXPLORATION AND MINESITE ACTIVITY

\*Kodiak gold heap leach will not proceed at Golden Bear this year. North American Metals Corp will direct its efforts to exploration of the Grizzly and Ursa zones. Six holes in the Grizzly zone average 16.3 g/t Au over 10.8 meters. Mineralization is refractory and would require operation of the mill and roaster. The heap-leachable Ursa will be explored to depth by drilling. Two other targets between Kodiak and Ursa will also be drilled.

Red-Chris

\*Drilling at Red Chris is underway by American Bullion. Geometry of the publicized 100 million tonne deposit (0.58% Cu, 0.46 g/t Au at a 0.4% Cu cutoff) is not amenable to open pit mining and work this year will aim at defining an optimum open pit resource, probably at a 0.3% Cu cutoff. Drilling will also extend to the west into the "Yellow Chris" (Gully zone) area. Work continues to be helicopter supported. To prepare an application to re-open the 8 km access road to Red Chris, a consultant for American Bullion spent two days in Smithers government offices to determine issues and permitting procedure.

\*Milling of stockpiled ore from the Big vein is underway at the Table Mountain mine by Cusac Industries. Ore is described as being low grade (ie 8-12 g/t Au??). Mining of the East Bain and Michelle veins is anticipated.

### OFFICE ACTIVITIES

\*Introductory Prospecting course in Smithers

### NOTICES OF WORK

24 Mineral NoW received. Year-to-date total is 77 (vs 81 in 1994).

24 Placer NoW received (April+May). Year-to-date total is 46 (vs 53 in 1994).

Drill holes have been spaced 200 meters apart, mainly on a north-south fence to test a circular IP anomaly approximately 1 km in size. All completed holes have intersected copper mineralization, with #2 being the best hole. Optimism on the property runs high that results warrant a second phase of drilling to begin in mid-July. Porphyry copper mineralization was discovered at Nak by Noranda in 1964 using stream silt geochemistry. Noranda drilled 28 shallow holes totalling 1835 meters with a best intercept of 0.57% Cu over 60 ft. Hera's drilling has been west of, and deeper than Noranda's holes based on an interpretation of improving copper gradient to the west. Hera's hole #2 is angled beneath a Noranda hole that contained 0.2% Cu over 110 ft.

Exploration access has been an issue viz a viz FPC. To re-use Noranda's access trail, Hera were to replace a stream ford with a 27 meter clear-span bridge and remove an estimated 350 cu. m. of trees cleared for new access to drill sites. Hera opted for helicopter-access and obtained a Free-Use permit, at a cost of several holes from the current program (due to limited budget and drill size). New access by an alternate route is being will be developed later this year.

### EXPLORATION AND MINESITE ACTIVITY

*Red-Chris*  
\* American Bullion will submit a pre-application for mine development of the Red Chris Cu-Au porphyry deposit. The company is scoping feasibility of mining Red Chris by open pit or underground block caving, with adit access from Kluea Lake. Underground consideration stems from recent drilling which has extended the copper zone to 750 meters below surface. A deep angle hole intersected 0.51% Cu over 420 meters commencing at 392 meters down the hole. The focus of current drilling is to increase estimated open pit reserves from 157 million tonnes at 0.48% Cu and 0.37 g/t Au (at a 0.3% cutoff).

*Table #11*  
\* Cusac Industries have reached the rich Michelle High Grade zone with their decline and impressive visible gold has been encountered. Drilling completed just ahead of reaching the zone intersected consistent 1-10 oz/ton gold over 1 meter. With good ore in sight and open for expansion, this could re-establish continuous mining and milling on the Cusac (Erickson) property.

\* Georgia River drilling by Aquaterre will infill the zone of gold reserves indicated by prior drilling. Less work is planned on the adjoining Ashwood claims.

\* Cyprus Amax are about to resume drilling at Taurus with 2 machines. Rumour has it that head office was suggesting 6 drills!

\* Sable Resources are drilling at Shasta on the Creek zone where 0.516 opt Au and 24.5 opt Ag over 12.5 ft was intersected in 1994.

\* Bronson Slope drilling is underway on the Cu-Au porphyry zone by Int'l Skyline.

\* Adastral Resources Ltd plan to drill Fire Mountain moly prospect in the Atlin area.

\* Spokane Resources has optioned the Mac moly prospect from Rio Algom and are committed to \$250,000 and 800 meters of drilling this year. Prior drilling on one of three zones on the property includes an intercept of 0.1% Mo and 0.13% Cu over 187 meters.

*PW (Smithers) - June '95*

\*Examined Louise Lake (93L 079) Cu-Au porphyry prospect was visited with Don MacIntyre, Andre Panteleyev and Tom Schroeter on July 19. Discontinuous exploration since 1968 by Canadian Superior, Granby/Noranda, Lacana/Corona and Equity Silver has outlined 50 million tonnes at 0.3% Cu and 0.3 g/t Au in a 40-70 meter thick tabular zone that strikes ENE and dips gently north. Copper occurs mainly as tennantite with lesser chalcopyrite, and is associated with a pyrite stockwork. Skeena Group rocks are intruded by feldspar porphyry that has been variously interpreted as a stock, sill or dike swarm. The Cu-Au zone lies within a 4 km long zone of intense clay-pyrite alteration that masks primary lithology (sediment or volcanic or plutonic). Intrusions and hydrothermal alteration are controlled by a regional ENE fault along Coal Creek which separates Skeena volcanic and sedimentary rocks to the north from Bowser Lake Group to the south. The Louise Lake deposit has a high-level geochemical signature; As is enriched in the Cu-Au zone and Sb is enriched above it, including locally prominent stibnite. Equity's drilling in 1992 left the zone open to the west and discovered geochemically similar mineralization 1 km to the east, beneath the north shore of Louise Lake. Global Mineral and Chemical Limited conducted an IP survey in July east and west of previous drilling and propose to drill 3-5,000 ft in September.

LOUISE  
LK.

\*Tatsi (93L 305) property, subject of strong promotion by Golden Hemlock Exploration, was examined with Tom Schroeter and Andre Panteleyev on July 21-22. Geologists Stu Tennant and Will Tompson of Golden Hemlock showed us the Main zone, discovered by prospectors in 1994, and the Discovery zone about 1.5 km to the north discovered several years earlier. The two zones are similar, comprised of sub-horizontal to gently dipping vuggy, comb-textured quartz-(barite) veins mineralized with bornite, chalcopyrite, galena, possible tetrahedrite and native silver. Individual veins are 10-20 cm thick, can be traced about 10-20 meters east-west and have a several meter halo of buff-brown weathering carbonate alteration. Each zone is comprised of a number of sub-parallel veins which combined with the carbonate alteration gives each zone a NNE trend. Host rocks are Telkwa Formation grey andesite to rhyolite within an alternating red and grey volcanic and sedimentary succession. Fresh granodiorite dikes several metres wide (and a swarm of narrow lamprophyre dikes) follow a similar northerly trend but appear unrelated. Low-temperature carbonate alteration also affects the granodiorite. The veins are interpreted to be epithermal. Drilling is planned for August but the zone appears to have little economic potential.

TATS

\*Red Chris (104H 005) Cu-Au porphyry project, 10 km east of Hwy 37 at Tatogga was reviewed with John Deighton and Brian Thurston on July 24. Reserves are unofficially estimated at 200 million tonnes of 0.5% Cu and 0.4 g/t Au (0.3% Cu cut-off). Proposed pit dimensions are 1000m x 1600m x 350m deep. Initial drilling this year targetted the south side of the Main zone where better than average gold was encountered. Currently one drill is on the west margin of the Main zone and a second drill is further west on the Gully zone (12 holes planned, 10 completed) and Far West zone (9 holes planned, 5 completed). The Gully and Far West zones (aka Yellow Chris) form a continuous IP anomaly with the Main zone that is segmented by two deeply incised gulleys that correspond to northerly cross faults. Two ore-grade intercepts have been returned from the most southerly holes drilled in the Gully zone but any follow-up is beyond the scope of the planned program (22,000 m in 70 holes) which is expected to wind up by the end of August. Geotechnical drilling may begin in August for proposed tailings impoundment and the southern pit wall in barren Bowser Group sedimentary rocks. American Bullion also hopes to receive NoW approval to begin re-construction of the old property access road this season but hunting access to Dall sheep is an issue with MoE. No significant geological insights have emerged from

RED  
-CHRIS

P. Noj. July '95

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.

Babs

\* 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 Peninsula 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.

Nak

\*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.

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-porphyrific 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) occurring in the most southwesterly hole. This may be the direction to pursue better copper grades.

granodiorite

Thira

\*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.

P. Waj. July '95