some 350m below the Bear Main zone) is currently the subject of a \$3.3 million underground exploration and development program designed to delineate reserves (est. @ 500,000 tons grading 0.45 opt Au). Progress had been slowed by poor ground conditions in 'landslide' material; however, worked has speeded up in the more competent 'greenstones'. Production from this deposit is expected to begin in late 1995, assuming the indicated ore in the silicified limestone package is there. The new (i.e. continued life) focus of operations at Golden Bear now centre on recent discoveries of lower grade, heap leachable deposits. During the fall and winter months of 1993-94. Wheaton River discovered and outlined the near-surface Kodiak A zone, 3 km north of the mill. Mining reserves (proven or probable) within the proposed pit design were estimated at 350,000 tonnes grading 5.3 g/t Au with a waste/ore ratio of 4.3:1. The "no-secum" gold is hosted by silicified limestones at the northwest headwall of Fleece Bowl.

A number of "spectular" drill intersections were recorded, including 150 ft. of 0.2 opt Au. Column leach test indicate a very high 96% recovery in 34 days. By mining 3,600 tons of ore per day, for 90 days, a total of 325,000 tons. crushed to minus 0.75 inches, will be loaded on the leach pad to recover 47,000 oz Au within 6 months (Oct. '94 to April '95) at a capital and operating cost of \$12 million. Capital and operating costs for this batch are expected to total (\$35 per tonne or US \$225 per ounce Au (cf. US \$275/oz Au from refractory ore). Heap leach comparisons with Beal Mtn. (Montana), Zortman/Landusky (Montana) and Warf Res. (South Dakota) place the Kodiak deposits very favourably. During our visit, the reserve for the Kodiak A zone was increased to 473,000 tonnes grading 4.6 g/t Au. The first bench blast was scheduled for Wed. August 17th. Mobilization charges for the Kodiak project(s) are estimated at \$0.25 million.

The Kodiak B (Fleece B) and Kodiak C (Fleece A) zones have estimated reserves of 242,000 tonnes grading 8.3 g/t Au (64,000 oz contained gold) and 276,000 tonnes grading 7.9 g/t Au (70,000 ounces contained gold) respectively. Early indications are only 13% of this material is refractory and 87% is oxide/carbonate gold mineralization available for heap leaching. These deposits will be further tested by underground work.

The pre-1992 waste dump from the Bear Main zone is now being referred to as a "low-grade stockpile" (est. 8 to 12 g/t Au grade). Potential (refractory) resources are estimated at up to 1.5 million tonnes worth about \$32 million. This East zone dump will be the focus of a 'tough' sampling program. Gold recovery is estimated at 60% with processing costs estimated at \$6 to \$8/tonne. This summer a significant new zone, the Kodiak North zone, was discovered 800m to the north of the Kodiak open pit. Mineralization is similar to Kodiak mineralization (i.e. leachable). Trenching and drilling will further test the potential of this new zone.

Activity on site is at a feverish pace to get ore off the mountain top on to the leach pad before weather conditions force mining from the open pit. Hopefully, everything will proceed on schedule. The heap leaching scenario at Golden Bear is a "first" for hardrock in B.C., and may open up a new 'era' of exploration for lower-grade gold deposits in B.C.

# OTHER PROPERTIES

Exploration was being carried out by Wheaton River on the following properties in the region: Ram-Tut, Nie, Slam and Misty-Sam.

#### **BANDIT** [MI-104K086]

On August 16th Paul Wojdak and I visited the Bandit gold property with Andrew Hamilton. This season Wheaton River tied the surface grid into the Golden Bear mine grid. Three drill holes were completed on the Post zone and 2 on the Ram Reef zone. The target(s) is bulk-mineable gold (i.e. heap leachable) in silicified rocks (Stuhini volcs./Stikine Assemblage volcs.). The Ram-Reef zone consists of a 4 to 5 metre wide structure with a good geophysical (VLF and IP) and geochemical (500 ppb Au) anomaly. Grades of 6 to 8 g/t Au have been encountered.

RED-CHRIS MI-104H006

On August 11th Paul Wojdak and I visited American Bullion's base camp at Eddontenajon. We very briefly discussed the current \$3.5 million exploration program with geologist Bill Mann. Doug Blanchflower, who was recently hired as Project 'Chief', was on site. To date, approx. 25,000 feet of core had been drilled in over 20 holes, all to at least 1000 ft. vertical depths (i.e. twice as deep as the earlier 1970s drilling). Two drills were at work, with a third expected shortly. In addition, previous (pre-1944) core intervals which were less than 0.25% Cu and not assayed for gold, were being re-assayed for gold in hope of increasing the overall tonnage (while lowering the copper grade). Preliminary metallurgical tests for gold indicate recoveries of 50 to 60%. Test work is continuing. The company is now looking at a plan to mine both the East and Main zones from a single pit.

## ESKAY CREEK - [MI-104B008]

On August 17th and 18th Paul Wojdak and I visited the Eskay Creek project. We drove in the new (60km) access road. The part just up to and past Volcano Creek, which was cleared out last year, was in excellent shape. The remainder was under active work, including log hauling and bridge construction. The snow piled off to the sides of the road remained covered with dirt, etc. Site contacts included Ron Britten, Dave Kuran, and Andrew Kaip (Homestake-Exploration), and Tina Roth (MDRU-PhD candidate). Drilling this season consists of 3 deep holes on Adrian's IKS claims on the WNW side of Andesite Creek Fault (i.e. northwestern 'extension' of 21B zone type mineralization); 1 hole to test a deep (600m) northerly-trending I.P. anomaly and a semi-conincident mag high (i.e. fault brought up favourable Salmon River stratigraphy?); and 2 holes on the GNC claims testing 'transitional' (mudstone) targets on the east side of the anticlinal limb.

We examined the excellent road and quarry exposures created by the development for the mine. A new exposure of massive sulphides in mudstone/argillite was discovered in the "Rock Quarry", approx. 150m up into the Salmon River Fmn. andesitic rocks (hangingwall) - vertically above the "109 zone". This confirms the further potential for discovering additional mineralization in the hangingwall. In the hangingwall section abudant new fossils were uncovered in road cuts, including tree fragments, 'squids', and other marine creatures. We toured the underground workings, spending most of our time in the 865 crosscut. The walls have dirtied up considerably since previous visits. Places look like a "forest" with all the cribbing and bolting required underground. On the mine construction side, everything is progressing very well. It is hoped/expected that many of the contractors will be leaving the site by the end of September. It certainly looks like a first class mill site (see photos).

### TREATY CREEK [MI-104B078]

On August 17th we had a "Show and Tell" from Andrew Kaip who was in charge of the Treaty Creek project on behalf of Homestake. The epithermal targets located 20 km east of the Eskay Creek site; access is by helicopter. The property is under option from Teuton Resources. Seven areas of mineralization have been identified in this glacierabundant area. In 1993 trenching in the Eureka zone in altered rhyolite and K-feldspar prophyry returned values of up to 0.125 opt Au (4.3 g/t Au) over 9.1m. Teuton's prospector had found grab samples up to 7 g/t Au. The highly altered acid sulphate system contains pyrophyllite, diaspore, alunite, quartz, and native sulphur. I suspect Homestake believe they are looking at the top of an epithermal system, above an intrusive source. Typical geochemical signatures include Au, Ag, Sb, and As. The drill was just being mobilized on to the property. A minimum of 6 holes are planned, concentrating on the Eureka and Main zones.

## RED MOUNTAIN [MI-103P086]

On August 19th I visited the Red Mountain gold property with Paul Wojdak, Ron Smyth, and Dani Aldrick. Hans Smit provided an excellent overview/update on this summers' work in the Lac office in Stewart. Two drills were at work underground, two on surface, and a third surface drill was expected soon. Approx. 16,000m of surface drilling is planned; the underground program is dependent on results. The total project budget is \$20 million, which includes costs for road and tram construction, as well as the beginning of the underground development decline from the 1750m portal level. The tram will be 2.3 km in length and rise over an elevation of 1200m. The access road up Bitter Creek has been progressing well; however, it crosses abundant avalanche corridors and comes precariously close to the 'raging' Bitter Creek in places. Closer to the site, abundant rock work will be required to connect with the lower tram station. The access/development decline, currently being started, will be 1.3 km in length to reach the Marc, AV, and JW ore zones and will also come under the newly discovered 141 zone. In order to keep to a development/production decision schedule, both the access road up Bitter Creek and the tram line must be in by next year. The mining (long hole) and milling is planned to take place underground, with a crusher installed in the ore zones and a conveyor used to transport ore 'up' the decline.

To date (publically announced by audit, June 1994) probable and possible reserves total approx. 1 million ounces of contained gold (2.5 million tonnes grading 12.8 g/t Au and 28.6 g/t Ag). Undoubtedly Lac has a new 'internal' figure that has not announced any (cf. take over bids by Royal Oak and American Barrick). A 'reserve' specialist is due on site shortly. All we were told (unofficially) was that this season they had "lost some and found some new mineralization". The new areas of intense activity are the 141 zone, the area below (150m) the Marc, AV, and JW zones, and the ridge to the SE of Goldslide Creek. The underground development has been extended this year to 350m under Red Mountain.