## Province of British Columbia

## Ministry of Employment and Investment MEMORANDUM

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June 1996 Monthly Report for the Northeast-Central Region by Bob Lane, Regional Geologist, Prince George

**Geological Survey Branch** MEMPR

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HIGHLIGHTS:

**Mount Polley.** Mill and mine construction is full steam ahead. First concrete was poured at the minesite on June 19. A crew of over 60 construction personnel is on site and progress is well underway on road building, filling and leveling of the mill yard, stripping of ore stockpile area, waste dump and tailings/water reclamation sites, as well as the delivery of pipeline and milling machinery.

Presented talk in Tumbler Ridge to coal group on "Mining and Exploration Summary '95 and Preview '96" as part of Barry Ryan/Dave Lefebure tour of coal mining areas in the province.

## FIELD ACTIVITIES

**Redgold.** On June 5, Steve Robertson, Project Geologist with Imperial Metals, provided me with an excellent tour of the Redgold property. The property, operated by Imperial Metals under option from Eastfield Resources, is located in the Cariboo, between Mitchell Bay (Quesnel Lake) and Shiko Lake. It is one-half hour north of Horsefly along the Mitchell Bay forestry road. Past exploration focused mainly on 'QR-type' propylite gold mineralization (Redgold zone), but the current program is targeting porphyry Au-Cu mineralization hosted by the Early Jurassic alkalic Shiko Lake stock (Cracker Quarry zone). Mineralization occurs in syenitic, monzonitic and dioritic intrusive phases. The syenite was being quarried (and crushed), as recently as last year, by Quarry Pacific Industries for its use as an exposed aggregate product and the operators must have noticed a green stain on some of the material! Quarry Pacific has filed a NoW to operate the quarry this year, although their lease agreement with Eastfield has apparently expired.

The exposure is less than  $1000 \text{ m}^2$  and the intrusion appears to be composed of a core of monzonite flanked by syenite, at least on the north and south sides, and intruded by small irregular dioritic bodies. Fracture-controlled and disseminated chalcopyrite, bornite and pyrite, totaling up to 3% locally, occurs in all three phases of the intrusion. Mineralization is spotty and sparse, and a preferred orientation was not evident, although Imperial oriented their saw-cut channel samples, spaced at 3-metre intervals, and trenches, at about 160/.

Ten of 13 trenches reached bedrock and were sampled. The trenching program exposed a 10 to 20 cm thick impervious clay-rich layer (glacio-lacustrine) over top of till that might very well prevent the development of a Au and or Cu soil geochemistry anomaly. Imperial is testing the application of biogeochemistry (using the most recent growth on Noble Fir species). The company also plans to drill 4 - 6 diamond holes later in the summer.

Alteration consists of zones secondary K-feldspar that are difficult to identify due the primary pink colouration of the host rock.

Mount Polley. Late in the afternoon, on June 5, I dropped in (unannounced) to the mine and mill site and spoke briefly with Eric LeNeve. Heavy equipment (scrappers, bulldozers, etc.) were actively preparing the area for mine and mill building facilities. Temporary offices (ATCO trailers) had just been connected to a temporary power plant earlier in the day. Several photographs were taken "for the record."

**Cariboo Gold Quartz.** On June 11, Ken Macdonald and I spent the better part of a day at International Wayside Mines advanced exploration property, in Wells. Company staff (including project geologist Richard Hall, geologists Jim Miller-Tait and Ken Lord, president Frank Callaghan, and geophysicist Ken Robertson) were also showing the property to potential investor/JV partner, Glamis Gold (represented by John Hogan). Other companies said to be interested include Hemlo Gold, Eldorado and Crystallex. Richard Hall provided us with an historical overview of area, review of the geology and the potential for the site to host a bulk tonnage gold deposit.

Rehabilitation is proceeding, along with underground drilling, at a slow pace and on a shoestring budget, until money is raised or a JV partnership formed. The project is far from the picture painted by news releases! A tour of the rehabbed undergonnd workings, along the 1200 level, through the Rainbow and Sanders zones to the edge of the Pinkerton zone, left me with the impression that the company is still relying on a more dense pattern of high grade veins, versus lower grade mineralized wallrock, to constitute the 'bulk tonnage' deposit. However, some encouraging assays have been obtained from 'pyrite replacement'zones in sericite schist wallrock.

**Spanish Mountain**. On June 18, Tom Schroeter and I visited Cyprus Canada's bulk tonnage gold project centred on the old CPW claim, located about 10 minutes east of Likely. Tracy Hurley, project geologist, provided us with an excellent overview of the project. Over 1,850 metres of trenching, out of a 4,000 metre program, has been completed so far. Three trenches extend northeasterly and down slope cutting Nicola Group metasedimentary strata (which trends NW and dips moderately to the NE). Host rocks consist of graphitic shales, mudstones, siltstones and intermediate to felsic volcanic rocks and intrusions. In general all rocks are oxidized and the shaley units are typically folded and 'shattered'. Pyrite and its oxidation product, limonite, are ubiquitous. Weathering of the rocks has resulted in the development of abundant limonitic boxwork that is typically enriched in gold, especially where the texture occurs in association with quartz veins. Quartz veins, oriented in numerous directions, are generally quite narrow. They range in widths from less than 1 centimetre to more than a metre. They commonly contain accessory sericite and where they are not oxidized, contain abundant pyrite, galena, sphalerite, chalcopyrite and tetrahedrite, with local limonite occur along the margins of, and within, felsic dikes.

Encouraging results from trench 101 (~650 metres long) have been released and include a 64metre section grading 1.83 g/t Au and a second 112-metre section averaging 0.85 g/t Au. If more encouraging results are received from the trenching program, phase 2 of the project, 2,000 metres of RC drilling, will get under way in late July or August.

Gibraltar. On the afternoon of June 18, Tom Schroeter and I visited the Gibraltar mine site. George Barker, Mine Geologist, provided us with an update of their mining development and exploration plans. Mining is taking place from the Gib East stage 3 pit and its reserves will be exhausted by early 1998. Development of the stage 4 Pollyanna pit will get underway later this year. Exploration drilling on the GM claims (ex-Teck ground), just north of the Pollyanna pit, added approx. 13 million tonnes to the mineable reserve. Development of the stage 3 and 4 Granite Lake pit will follow. The Connector zone, located between the Gib East and Pollyanna pits,

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