

# Industry IN ACTION

NADINA

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Silver Queen  
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## EXPLORATION

### Drilling on Graham Island

City Resources (Canada) Ltd. of Vancouver recently completed an 8,800 m drilling programme on the Cinola Graham Island gold deposit, part of the Queen Charlotte Islands. The results confirm previously calculated geological reserves of 40 Mt averaging 1.9 g/t gold with a richer zone of 6.3 Mt grading 3.4 g/t gold. In addition, several exploration drill holes totalling 490 m were completed.

The company, formerly Consolidated Cinola Mines Ltd., finalized the purchase of Energy Group's 50% interest in the property at the beginning of January when it paid the second \$C2.5 million instalment. As a result City Resources now owns 100% of the claims, subject to a royalty based on the price of gold. The transaction was made possible by a share subscription agreement last year between Consolidated Cinola and City Resources (Asia) Ltd. This led to an infusion of \$C7.5 million in new capital.

### Dominion's Indonesian Gold Search

Sydney-based Dominion Mining Ltd. and its local partner PT Aneka Tambang have been awarded three contracts of work by the Indonesian Government. Two contracts cover a 900,000 ha area explored during the stream sediment programme conducted on the joint venture's Kalimantan exploration tenements during 1986. This involved sampling at a density of about one sample site per 14 km<sup>2</sup>. Results identified several large areas of highly anomalous gold values which will now be followed up. The third contract covers two small promising areas (75,000 ha) outside the original joint venture area.

### Houston Metals Secures More Funds

Vancouver-based Houston Metals Corp., formed by the amalgamation of Bulkley Silver Resources Inc. and Cater Energy Inc., has reached a further agreement with First Exploration Fund and Co. Ltd. Partnership, bringing total funding to the end of 1988 to \$C5.5 million. The funding is being used for exploration work on the Owen Lake property, which includes the Silver Queen mine of New Nadina Exploration and the Cole Lake property formerly owned by Bulkley.

First Exploration Fund 1987 will provide \$C2.5 million for this year following a successful 1986 programme. Houston has now earned a 60% interest in the Silver Queen mine. Assays confirmed the presence of precious, strategic and base metals. Preliminary results on the northern part returned values of up to 12% zinc, 68 g/t silver, 75 g/t germanium and 10 g/t gallium over good mining widths, as well

as indium, gold, copper, lead and cadmium. The current exploration programme includes mine rehabilitation as well as driving and cross-cutting between the various veins followed by diamond drilling. The second phase of the exploration programme will consist of a decline under the No.3 vein and continued drifting on the NG3 vein to develop ore. So far the property contains 600,000 t of proven ore, however, management estimates that up to 4.5 Mt of ore may be proven.

### Audimco at Porphyry

Audimco Ltd. has purchased six licences covering 720 ha in the Porphyry North prospect, north of Coolgardie in Western Australia for \$A250,000. The prospect is situated in the vicinity of the Porphyry gold mine operated by Edjudina Gold Mines and is said to have a similar geological setting to that mine. The belt is an auriferous zone that extends 70 km from Lake Raeside in the north to Lake Rebecca in the south.

Assay results from 29 holes drilled in the north of the prospect ranged between 2.3 g/t gold and 17.6 g/t gold. However, most of the prospect remains untested by drilling. The company is planning to drill the known zones of mineralization to outline possible ore reserves.

### Glamis Examines Sullivan

The U.S. arm of Glamis Gold Ltd. has recently signed a lease/royalty agreement with Omega Resources Co. for the Sullivan property, located near Gabbs in Nevada. Previous exploration has outlined a body of intrusive hosted gold-copper mineralization, in the vicinity of the old Sullivan mine. Using a cut-off grade of 0.68 g/t gold, indicated oxide reserves total 9.3 Mt at 1.3 g/t gold, 2.9 g/t silver and 0.37% copper with a waste-to-ore ratio of 3.7:1. The northern side of the deposit lies close to the surface with lower stripping ratios. Preliminary estimates indicate some 4 Mt with a stripping ratio of 1:1. According to Glamis, cyanide leaching tests on the oxide ore have produced very good recoveries with normal cyanide consumption.

The agreement with Omega Resources includes various payments and a 5% net production royalty due from the start of commercial production.

### Funding for Queenstake

NIM and Co. Ltd. Partnership 1987 has agreed to provide up to \$C600,000 for Queenstake Resources' exploration programmes on its properties in British Columbia and the Yukon. Most of the funds will be used for drilling and pit sampling at the Moyie River placer gold property near Cranbrook, B.C., and placer gold exploration in the Atlin (B.C.) and Klondike (Yukon) areas. The company is also planning to continue drilling the Mar gold vein

property near Mayo, Yukon, to delineate previously-found gold mineralization. Talks are currently underway with other companies for possible joint ventures.

### More Indonesian Coal

PT Kaltim Prima Coal, a joint venture between CRA Exploration and BP Coal, has delineated a reserve of some 100 Mt of export quality coal in East Kalimantan, which would enable a mine to operate at the rate of 4-6 Mt/y for 20 years. According to Robertson Research, the coal has a very low ash content and less than 0.5% total sulphur. The deposit is within sight of the Makassar Strait coastline with deep water close to the shoreline.

### Amax Ups Sleeper Reserves

Amax Mineral Resources Co. has announced that an intensive drilling programme carried out during the final quarter of 1986 and into 1987 has outlined additional gold-silver ore reserves in the vicinity of the Sleeper mine near Winnemucca, Nevada. The mine is operated by Nevada Gold Mining Inc., a unit of Amax. Part of the drilling was carried out on an area about 0.5 km south of the Sleeper pit, and has been designated as the Wood pit.

As a result of this drilling, reserves at the Sleeper mine are now estimated to be 2.24 Mt of ore averaging about 8.2 g/t gold and 17.1 g/t silver, treatable by conventional milling methods. Additional reserves, amenable to heap leaching, are estimated to be 34.7 Mt grading about 0.8 g/t gold and 8.2 g/t silver. The drilling programme is continuing and additional mineralization has been identified laterally and at depth.

### New Zones at Tsirku/Jarvis

Vancouver-based companies, Freeport Resources Inc. and Stryker Resources Ltd. have discovered several new mineral occurrences on their jointly owned Tsirku/Jarvis polymetallic project in northwestern British Columbia (M<sub>J</sub>, August 1, 1986, p.76). The new discoveries occur within a 150 m thick volcano-sedimentary unit exposed over a strike length of 2.5 km on Mt. Henry Clay. Both the Jumar and the Cindy showings contained lenses of massive sphalerite within a felsic horizon.

At Grizzly Heights, Freeport completed five diamond drill holes in 1986 and outlined a wide shear zone up to 150 m thick. A breccia zone intersected in one hole showed similarities to the gold-bearing rock unit at Andrews Showing discovered in 1985.

Expenditure to date totals over \$C2.0 million. Agreement has been reached with First Exploration Fund 1987 and Co. Ltd. Partnership for a proposed 1987 budget of \$C1.0 million. The commitment is accompanied by options for an additional \$C1 million during 1987 and in 1988 a further \$C2.0 million.

(MT) HEARTY  
CLAY



NEW NADINA

# Silver Queen Mine accelerates

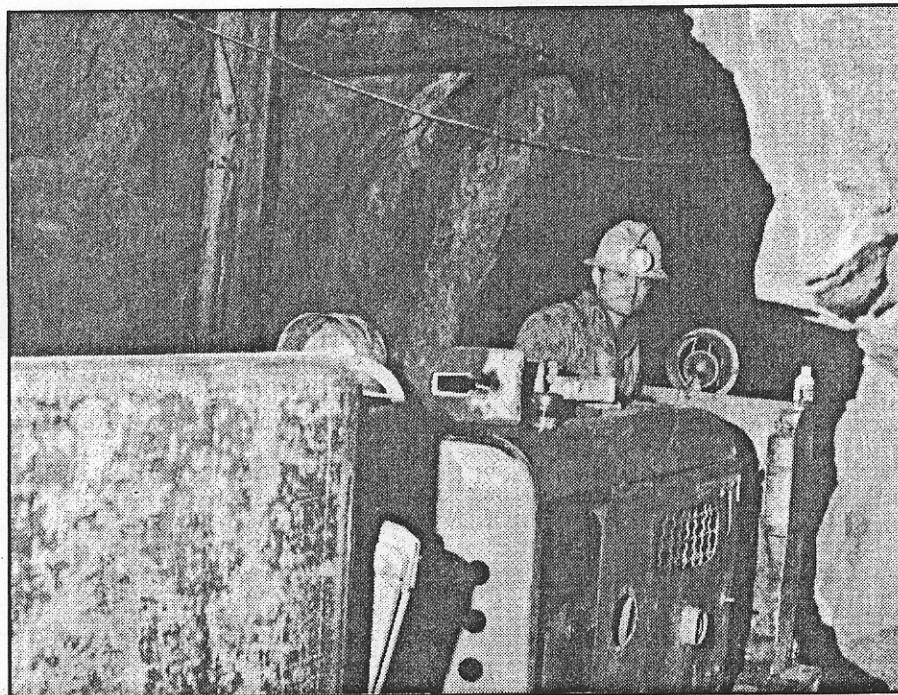
New Nadina Explorations Ltd. (VSE-NNA) and Houston Metals Corp. (VSE-HML) have made a decision to accelerate the development of the Silver Queen Mine Project located 30 miles south of Houston, British Columbia.

R. Ross Blusson, director of New Nadina, says results of the recently completed C\$1.8 million development program were so encouraging that it led to the decision to collar a 3,000-foot decline to encounter the vein systems 450 feet below the lowest level of the mine. The decline, which is targeted for completion by December 1987, is designed to test a zone 200 feet below a known block of ore that has been drill tested for 900 feet in length. The grade of this zone that was intersected by 21 diamond drill holes has an average true width of 4.5 feet and grades 0.186 ounces of gold per ton, 10.81 ounces of silver per ton, and 9.05% zinc (not weighted to width).

Houston Metals Corp., the operator of the project, anticipates that by completion of its program by 1988, reserves will increase from 600,000 tons to 1.8 million tons with an average mine grade of 0.10 ounces of gold per ton, 10.0 ounces of silver per ton, 2.1% lead, 0.76% copper, and 6.96% zinc. There are also values of indium and germanium.

Exploration to date has delineated a major vein adjacent to the old workings. The main vein system has been discovered to the south of the old mine, beyond what was thought to be a fault zone.

Diamond drilling beneath the camp area



Underground at the Silver Queen Mine, Houston, British Columbia.

is presently in progress on what may be a new vein system with silver grades well above the mine average. One hole graded 36.75 ounces of silver per ton over 6.0 feet.

In this program a dozen separate veins are under investigation. The presence of commercial quantities of germanium and indium in the veins has led to a retesting of all mineralized exposures in the camp for

these elements.

Blusson says that the ores are being tested for metallurgical amenability at four separate testing facilities in Canada and the United States.

Blusson hints that with the accelerated development program in place, a decision to place the Silver Queen Mine into production may not be far off.

## Platinum joint venture

Coventry Ventures Inc. has signed a letter of intent with Fleck Resources Ltd. (VSE-FLK) whereby Fleck can earn a 55% interest in Coventry's Bedivere Lake platinum project through expenditures of C\$1 million prior to September, 1994. Under terms of this agreement, Fleck must spend a minimum of C\$100,000 in exploration before September 30, 1988.

At the 38-claim Bedivere Lake property located in the Thunder Bay Mining Division of northwestern Ontario, previous drilling for copper-nickel mineralization intersected up to 239 feet (core length) of 0.02 ounces of platinum per ton, 0.02 ounces of palladium per ton, 0.53% copper and 0.23% nickel. Higher grade mineralization is evidenced by 1960 Ontario Department of Mines rock sampling, with values up to 0.30 ounces of platinum per ton. More recent sampling by Coventry has yielded up to 0.15 ounces of platinum per ton and 0.17 ounces of palladium per ton.

Stephen C. Millen, president, says results to date have indicated a very high platinum to palladium ratio, with platinum generally occurring in greater abundance than palladium.

The Bedivere Lake prospect is situated in the same belt of mafic to ultramafic intrusions as the Lac des Iles Complex where reserves of 22.5 million tons grading 0.21 ounces of platinum per ton and 0.1 ounces of palladium have been reported.

## Tenajon discovers high-grade

Tenajon Silver Corp. (VSE-TJS) has discovered a new high-grade outcrop on the Kansas Zone of the company's SB property located near Stewart in northwestern British Columbia.

Samples from the outcrop, which is

reserves on four open pit zones total 1,860,760 tons grading 0.089 ounces of gold and 1.17 ounces of silver per ton. Westmin recently announced a 2,000-ton-per-day feasibility study on the Silbak Mine

## Golden Horizon acquires Guildcor



the mineral rights to the Selvag titaniferous magnetite deposit located in the Vesteralen region of arctic Norway. The deposit contains about 200 Mt of ore and is one of the largest titaniferous magnetite deposits in Scandinavia. It also contains some copper, nickel and cobalt as well as approximately 70 g/t of scandium.

A mining operation producing 1.2 Mt/y of ore is currently in the planning stage. The company aims to start construction work in summer 1988 with a production start-up in mid-1989.

#### Drake Gets Approval

Melbourne-based Mount Carrington Mines Ltd. has announced a go-ahead for the Drake gold and silver project west of Casino in New South Wales, Australia, reports the *Gold Gazette*. The operation, due to commence producing in May 1988, is expected to have a processing rate of 300,000 t/y with a mine life of four years. Mineable reserves are 580,000 t at 2.7 g/t gold in the Strauss zone, 340,000 t at 1.7 g/t gold in the North Kylo zone, 61,000 t at 4.6 g/t gold in the Guy Bell zone and 423,000 t at 1 g/t gold and 103 g/t silver in the Lady Hampden zone. Capital costs should be \$A10.6 million and working costs about \$A1.8 million. Estimated gold production is 22,200 oz

for the first year, rising to 25,900 oz in the second year based on 89% recovery for gold and 60% for silver.

#### Malawi Promotes Gemstones . . .

The Malawi Development Corp. (MDC) has formed the Gemstone Company of Malawi which will be responsible for developing the country's gemstone potential. MDC has already started the implementation of a gemstone mining project at Chimwadzulu in Ntcheu district. Previous mining there produced good-quality sapphires and rubies. A Reserves Mineral Licence has been granted to MDC in the Chimwadzulu area, which gives it the right to buy, hold and sell all types of gemstones.

#### . . . Garnet Find in U.S.S.R

Also in the gemstones field, a large garnet deposit has been discovered on the Kamchatka peninsula of the U.S.S.R. According to the B.B.C.'s *Summary of World Broadcasts*, the value of these stones is said to be particularly high.

#### Milling Facility at Magino

Muscocho Explorations Ltd. and McNellen Resources Inc. anticipate that the 360 t/d plant currently being constructed in the Goudreau area of Ontario will become operative before year-end.

As a result, extensive bulk sampling and test milling of gold-bearing material from the Magino joint venture can be initiated in December as part of the final exploration programme.

A deep diamond drilling programme is underway at Magino to test ore conditions down to 600 m. Currently drill-indicated reserves are calculated to a maximum depth of 150 m and consist of about 1.7 Mt averaging 8.6 g/t gold.

#### Underground Work at Houston's Silver Queen

Houston Metals Corp. has entered the final phase of its \$C4.5 million exploration programme at the Silver Queen mine, Owen Lake, north central British Columbia. The company is driving an 850 m long decline to intersect the No.3 vein about 130 m below the 790 m level. In addition, some 1,300 m of cross cuts will intersect a number of other veins. To date proven, probable and possible reserves are placed at: 1.39 Mt averaging 3.4 g/t gold, 34 g/t silver, 10% combined lead-zinc, 0.7% copper, 0.1% germanium plus values of indium and gallium on the basis of a 1.2 m mining width and a 15% dilution factor.

Based on a 136,000 t/y operation, operating costs are estimated at about \$C120/t milled and annual operating profits at about \$C26.2 million. Metallurgical studies indicate that three types of concentrates can be obtained, zinc, copper and lead, with the zinc concentrate containing 0.45 kg/t of germanium. A pyrite circuit would recover by cyanidation the gold and silver remaining in the pyrite tailings. The concentrates will be custom smelted.

The company plans to complete the feasibility and environmental studies by early 1988 and start on the construction of a 450 t/d concentrator complex at a projected cost of \$C10.0 million for a start-up date in the winter of 1988-89. Houston has a 60% interest in the claims held by New Nadina Explorations Ltd.

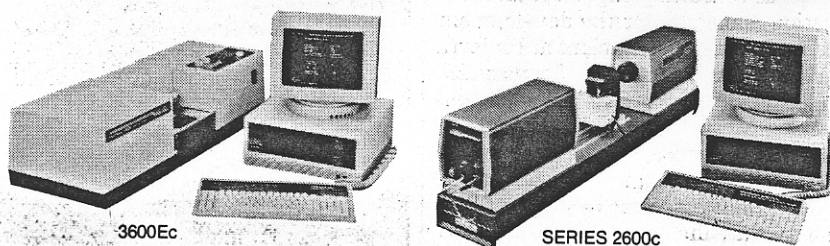
#### Gold Revival for Yugoslavia?

Studies are underway to examine the feasibility of reopening the Blagojev Kamen gold mine situated in the Bor area of eastern Serbia. The mine was closed in 1964 because it was not profitable at the world price of gold then prevailing. Surveys have shown that some of the mineralization is very high grade, between 20 and 30 g/t gold. Expenditure on the project for 1987 and 1988 is projected at Din890 million (\$US1 = Din848.50).

#### Kaaba/Alawas Plan Picacho Mine

Vancouver partners Kaaba Resources and Alawas Gold are planning to bring the heap leach gold mine in the Picacho Peaks area of Imperial County, Califor-

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