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- A REALLY BIG SHOW The Spokane, Washington-based Northwest Mining Association has had a rich and colourful history. We look at where the NWMA has come from — and where it is going — as well as preview its annual convention this fall. By Kathy Ramsey

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ON THE COVER:

The Iskut River has been the centre of attention in recent months as one of the prime mining exploration regions in the province. Seen here, Smithers-based Bruce Hobson Contracting works on a geophysics grid, alongside and on the Foremore Glacier, for Cominco Ltd. PHOTO: MYRON KOZAK

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Fax: (604) 985-7399

PUBLISHER Deborah Pound

EDITOR Jim Hutson

ASSOCIATE EDITOR Tom Tevlin

CONTRIBUTORS Robin Brunet Michael Guy Vivian Hartnétt Bill Plumb Kathy Ramsey

TRAFFIC MANAGER Suzanne Broome ADVERTISING SALES Greg Lewis (Manager) Mark Bowen Peter Kaulius Jody Talibart

LAYOUT & DESIGN Lexie Smart

PAGINATION Donna Fedorowich

TYPOGRAPHER Irene Pohorecky Russell

> ADVERTISING ART Michele Buchanan Corinne Fix Archie Meekis Susan Redfern

Branch Offices:

MANITOBA - 100 Sutherland Avenue, Winnipeg R2W 3C7. Telephone: (204) 947-0222, Fax: (204) 947-2047.

ONTARIO - 920 Yonge Street, 6th Floor, Toronto M4W 3C7. Telephone: (416) 961-1028, Fax: (416) 924-4408.

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In the remote, heavily wooded mountains of northwestern British Columbia, extending in a 300-kilometre belt north of Stewart, a new "gold rush" has erupted. But unlike the gold rushes of the past, the Iskut isn't attracting thousands of prospectors in a frenzy of exploration. Instead, most of the action is taking place in the corporate boardrooms and stock-exchange towers.

The Iskut River area gold rush seems to be a recent phenomenon, though it has been a focus for exploration activity since the early 1900s.

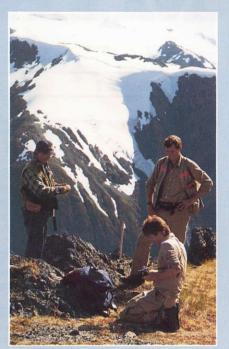
The media coverage focused on the Iskut's Eskay Creek area - which depicted a "battleground" where companies, including Placer Dome Inc. and Corona Corp., "fought for control of the hottest gold play in North America" - has little to do with reality. A handful of mining companies, large and small, are compiling drill results indicating some potentially rich ore deposits. And some mining — such as at Cominco's Snip joint-venture project — is about to go into production. Estimates for 1990 expenditures are as high as \$100 million, the largest amount ever committed to the area in one year. Of this amount, \$60 million has been tagged for exploration - including 40 planned diamond-drilling programs.

Without doubt, the Iskut story has generated considerable interest in the exploration field, good news for an industry that has gone a little flat in recent months with federal government exploration cutbacks and mounting pressure from environmental groups.

"Historically," says B.C. and Yukon Chamber of Mines manager, Jack Patterson, "the old Silbak-Premier exploration dates back to the 1900s, but if we're looking directly at the Iskut River area, which runs roughly from Stewart to Telegraph Creek, it's only recently been given attention. Reg Davis of Skyline Gold Corp. really started the production ball rolling in the early 1980s."

Tom Schroeter, senior regional geologist for the B.C. Ministry of Energy, Mines and Petroleum Resources, says that although Eskay has become the key focus in media reports and corporate manoeuvrings, it is hardly the sole attraction in the Iskut area.

ISKUT REPORT



The Iskut area north of Stewart is one of North America's hottest mining zones, with between \$50 million and \$100 million slated for exploration in the near future.

Placer Dome Exploration Ltd.'s Kerr property in the Iskut belt is one of the main players in this exploration hotspot. Seen here: district geologist, John Kowalchuk (left), Bob Hewton, of Western Canadian Mining (standing), and original staker, Chris Graff.

by Mining Review staff

On the gold trail

"It's been estimated that between \$50 million and \$100 million will be sunk into the Iskut River/Telegraph Creek/Galore Creek region for development. Providing road access improves in the near future, it's definitely a lucrative mining zone."

Hotbed of activity

The Iskut River, flowing in a south-westerly direction across the B.C.-Alaska border near Wrangell before emptying into Frederick Sound, without question represents the largest active exploration play in Canada today.

One of the main players active both in the Iskut and the corporate boardrooms is Vancouver-based Placer Dome Inc., which made headlines when the gold giant became embroiled in a battle for control of the potentially lucrative Eskay Creek property with Toronto's Corona Corp. At stake was control over Prime Resources Group/Stikine Resources Ltd.'s 50-per-cent ownership split in the hot Eskay property, which is estimated to contain gold

and silver reserves with a gross value of \$2.3 billion. Placer Dome — based in Vancouver since its New Zealand founders moved here in 1926 — was cash-rich after selling off major oil and gas holdings and eager to increase its control in the region. Corona said it was rolling its gold assets into a new company, Corona Gold, and was moving its head offices to Vancouver.

The complicated manoeuvrings involving control of Prime Resources and Stikine show that in the mining industry today, the action is as much in the field as it is in the stock-exchange towers and head offices.

Also in the Eskay dispute was Adrian Resources Ltd., which owns claims just north of Prime/Stikine's Eskay Creek property. Drill hole data indicates that the mineral zone at Prime/Stikine's property extends on to Adrian property to the north.

Both Placer and Corona are also involved in properties in the Sulphurets property, situated halfway between the Stikine and Silbak-Premier camps north of Stewart. Newhawk Gold Mines has just finished a feasibility study on the silver/gold property: proven and probable reserves are 715,400 tons, grading 0.431 opt. silver and 19.70 opt. gold. Corona owns about 40 per cent of the Newhawk property.

Placer has been also putting a great

amount of time and money into its Kerr property in the Sulphurets gold earnings over the first half of 1990 camp, a copper-gold property op- compared to '89, has announced it is tioned from Chevron Minerals at Ball putting its Snip mine into production Creek, and a gold deposit on Taku (see sidebar). The mine, adjoining the Arm. District geologist John Kowal- Johnny Mountain property to the chuk says the company hopes to north and south of the Iskut River, spend about \$2.8 million on explora- will cost Cominco about \$65 million tion at the Kerr property.

Cominco, despite a plunge in net in capital, with an annual gold pro-

continued on page 9

Snip: A story of persistence

n some of the toughest terrain in North America and in the worst possible year-around weather conditions, the Snip joint venture gold mine in the Iskut River area of northwestern British Columbia will go into production at the end of this year after four years of exploration and construction and at a cost of \$65 million.

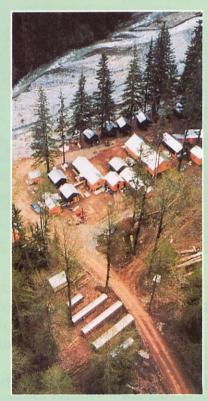
The joint venture, 60 per cent owned by Cominco Ltd., and 40 per cent owned by Prime Resources Ltd., will be operated by Cominco. The company expects to mine 110 000 tonnes a year of high-grade ore over the next eight years, producing about 30 grams of gold per ton.

Because the grade is so high, operating costs are expected to be less than \$200 U.S. an ounce, and the mine will need a gold price of about \$400 U.S. an ounce for a reasonable return on the investment.

Cominco's vice-president of mine operations, Dave Johnston, says the company is in an enviable position in knowing that they have a significant find, and he is confident, despite a currently low gold price, that the venture is a solid one.

"One of the constant factors is that the gold price is always going up and down, so yes, we are very optimistic," Johnston says.

Cominco had claims there as early as 1929. These were dropped and subsequently restaked in the '60s, dropped again, and picked up in the late '70s.



Cominco's Snip gold mine in the Iskut River area: Production starting by the end of this year.

PHOTO COURTESY COMINCO LTD.

In 1986, an option was taken on the property by a junior company, Prime/Delaware, which, through expenditures, was able to earn an interest in the property from Cominco.

Johnston has been dealing with Prime/Delaware since August 1988. The exploration people were managing the property and the junior company — Delaware Resources — was paying for the work through flow-through share financing.

Exploration costs at that time (1988) amounted to \$6 million. By January 1989, when exploration had been completed, costs had risen to \$10 million — \$9.5 million by Delaware-Prime and \$500,000 by Cominco.

In order to buy back the 60 per cent interest in the property, Cominco had to spend \$2 for every dollar Prime/Delaware had spent on exploration. This meant that as Prime Delaware had spent \$9.5 million at the end of exploration in 1988, Cominco had to spend \$19 million. This resulted in the ownership's being set at 60-40.

The other story in a place like Snip, and in developing successful mines like it, is the persistence that it requires. Because that part of the country is so rugged, it takes a great deal of time and large amounts of money to make it operative.

The Snip joint venture spent about \$10 million on exploration alone, which is a very high cost factor for such a small deposit there are small mines that started up for that amount - but it was worth it, for it is one of the highest-grade deposits to have been brought on stream in the last ten years.

"The early company prospectors were the real heroes of exploration in the area. The Snip is very steep and wet - a real jungle," says Johnston.

They climbed up and prospected the gullies to find mineralization and were able to pick up visible continued on page 7

Just another day at the office.

offices can be wintry, windswept lakes or sweltering, fly-infested bogs. Don't get us wrong, we also have conventional offices over the all world. Some of them are even air-conditioned. The point is, discovering new re-

sources isn't always easy, but Cominco's exploration teams will go to the ends of the earth to find them.

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Cominco Ltd. 2600 - 200 Granville Street Vancouver, B.C. V6C 2R2 Phone (604) 682-0611 Fax (604) 685-3041 Snip: continued from page 5 gold. On this basis, Cominco started a helicopter support drill program that led to the discovery of the top of the deposit. Going in from the bottom enabled the zone to be welldefined. The site is about 100 metres above sea level, and quite low - a good thing, according to Johnston, "because it gets more rain and less snow than Skyline, the adjoining property."

Using trackless mining rubber-tired equipment, working from the spiral ramp — which had been driven to 420 metres elevation — apparently, they found that the ore ran out at 700 metres. Drilling continued up inside the mountain. One of the first jobs Johnston had to get done was to build an all-weather airstrip. They flew in heavy equipment through the Skyline strip, including scrapers, dozers and compactors, to realign and extend the airstrip to 4,700 feet and establish a very effective airport that could handle, among others, Hercules and DC6-B aircraft.

The company knew there was gold at the site for at least 60 years; however, it had taken several tries and a lot of money to pin down a mineable deposit. Johnston acknowledges it is a tough business trying to find a good, successful deposit in that type of country. It's not easy, when the weather is extremely rough and problematic. If you are lower down, you suffer extreme rainfall, and higher up, extreme snowfall, and in both cases - lack of visibility.

While the company was still waiting for their permits to go ahead under the mine development process, they did some drilling, only to discover the gold was not where they thought it was from the initial drilling. In some haste, they extended their ramp up inside the mountain, at an extra cost of about \$3 million, and detailed-drilled about 90 per cent of the deposit on close centres. They then had a very good fix on the deposit.

The company expects to have 150 people employed at Snip when the

project is in full production. At present there are about 100 on site, who are mostly contractors doing construction work, and the complement is growing.

Cominco bought a passenger hovercraft in Australia in June, and after some alterations to suit the needs of the operation building a solid deck with tiedowns — it is now an open-deck freighter ferrying fuel, goods and people between Wrangell, Alaska near the mouth of Iskut - and the Snip site, about 70 miles upriver. The freighter makes the trip in about two hours.

Johnston says it was a good buy at about \$2 million (Canadian). New, they cost about \$8 million (Canadian). He believes this is the first mining operation to have used a freighter hovercraft anywhere in the world, and until the new road is built into the area, it is proving most effective.

- Vivian J. Hartnett

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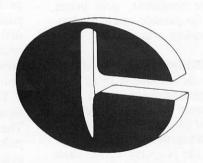
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Johnny Mountain: Mine's future uncertain

The loss of \$30 million by Skyline Gold Corporation on its Johnny Mountain mine in the Iskut River Valley, northwestern B.C., was the result of the company's having exhausted all proven mineral reserves.

In the last six months, the drilling that was done has failed to be able to upgrade inferred and possible categories to the proven category.

Skyline's president, Bill Price, says that in retrospect, the mine was put together prematurely, without sufficient work being done to get enough prudent reserves ahead to see four or five years of ore that the company could be relatively confident in.

"The mine only had two years of proven ore. At the time, people were confident, gold prices looked favourable and a production decision was made," Price says.

In hindsight, he says, if one were to do the whole thing over again, management would have taken more time (Price was not prepared to comment on the original management) and a broader look at the property, rather than focusing as quickly as they did on the Stonehouse area.

Skyline has been milling more ore than they have been finding, to the point that in August, they will not have any mill feed left. They started producing 200 tons a day but they were not producing any gold. Their recoveries were not very good because the circuit that had been installed — a cyanide process — was not suitable to the type of ore that was there. This was when Bill Price came in.

Formerly with Blackdome, in the Cariboo, Price came along following a change in management at Skyline and reduced the ore reserves, as the company did not believe in the estimates that had been done. Even the company's own estimates were unable to stand up to the test of time, as it turned out.

A lot of changes were made to the method of milling, and there were other changes made in the organization.

They got the production up from 500 oz. a month to about 5,000, by getting the metallurgy sorted out. Their next problem was to increase tonnage to cope with the fact that the grades were not what Skyline had expected.

They brought the tonnage up from 200 tons a day to about 350 a day on average, sometimes hitting peaks of 400 tons. They have been pushing tonnage to make up for the deficiency in grade. The original promoters had bandied about figures of 900,000 tons of .73 oz. per ton, which never materialized.

The proven ore that is there will be mined out at the end of August. The other categories were disappointing, and the more drilling the company did, the less they found.

Up to the start of production, Skyline had spent about \$30 million. The company is now concentrating its efforts elsewhere on the Reg Claim property, which is about 15,000 acres, and the company's land holding is about double that.

Sklyine spent more than \$2 million on exploration last year and came up with a number of very interesting showings, mostly at the north end of the property, which adjoins the Cominco/Snip project.

One of the possibilities is to find an extension of the Snip, which, if there is one, would go on to the Skyline property. The company has optioned out about 11 per cent of the north end of the Reg claims property to Placer Dome Inc.

Of the original crew of 130, there are about 58 left. By September, this will have dropped to four. There is no road into the site. A charter plane flies in every Wednesday from Vancouver — subject to good weather. All aspects of the operation are extremely weather-dependent. North coastal weather is subject to heavy snows, rains and clouds.

Price says these are the toughest mining conditions he has ever seen and the most difficult in which to operate a mine.

"You have from about the middle of July to the end of September that's snow-free. The rest of the time you are under 40 feet of snow," he says.

Price has great hopes for the future of the company. He says the property as a whole claim has great potential, even though there isn't a mine any more at that particular location.

He feels that the potential to find something really big is very real, and that excellent prospects exist in the C3, the Mike showing, Bonanza and Bronson areas.

Skyline has a certain amount of preliminary evidence that is encouraging. There are drill hole results that have gone out in previous news releases that are promising.

The company is going to focus its attention on these areas and leave the Johnny Mountain mill in a mothballed state for the time being.

- Vivian J. Hartnett

continued from page 7

duction expected to be more than 93,000 troy ounces. Aiding the Snip production, as well as the Johnny Mountain and Sulphurets sites, will be the new \$20-million, 72-kilometre toll road from the Cassiar highway, to be in operation in the fall of next year. Energy Minister Jack Davis said \$15 million of the costs will be picked up by the province and the rest divided among mining companies in the Iskut Valley belt.

Westmin Resources is currently operating the 2 000-metric-tons-perday Premier Gold open pit gold/silver mine near Stewart. Production commenced last May and good grade control, along with a reduction in operating costs, bodes well for Westmin, say company spokesmen. Westmin also has an option to acquire a 50-per-cent interest in Tenajon Resources' Silver Butte (SB) property, north of Stewart and adjacent to the Premier site.

"We get it if we spend \$2.45 million on the property over an 18-month period starting October 31," says Harlan Meade, Westmin's vice-president of exploration. "Prior to

that, Westmin has taken 200,000 shares of Tenajon at a dollar per share, substantially above market price. Tenajon is currently drilling on the SB property, and we will give credit to Tenajon for 75 per cent of the final exploration expenditure."

Tenajon has reported SB reserves of 308,000 tons at .505 ounce/gold per ton, and 1.07 ounces per ton silver, in two separate mineralized zones. "It's a substantial property," Meade comments. "Also, our related company, Scottie Gold, is trying to commence an underground gold mine about 10 miles further up the road from the SB property." Don McLeod, president of Northair Group, Tenajon and Scottie, is the mastermind behind the restarting project.

North of the Iskut, Pass Lake Resources Ltd. has been reporting excellent results from its Galore Creek property and its Telegraph Creek property north of the Stikine River. During 1989, \$500,000 was spent on Pass Lake properties at Galore Creek and Telegraph Creek, resulting in several gold discoveries, a Pass Lake spokesman said.

ISKUT REPORT

It's not all good news from the Iskut, of course. At Johnny Mountain, Skyline Gold Corporation has cited lack of transportation venues as one of the main reasons it shut down its mine in September after nearly \$30 million in expenditures. Skyline had been conducting a costly airlift operation to and from the site, and not enough future reserves have been identified (see sidebar).

"Also, our ore grade had dropped to .35, adding to the decision to close," commented Skyline chairman Ron Shon, a prominent Vancouverbased property developer. "However, we brought in Placer Dome as a partner with the idea of doing a lot of exploration on the property for other ore bodies — work is currently under way."

Shon, however, is quick to point out that the Iskut is still a very important future prospect for his company. "The Iskut is a hot area, no question, and to have Placer as a partner is a great boost in confidence."

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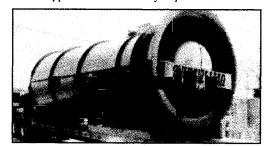
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