

density functions are fitted to the input data and the probability of instability is given as the product of (a) the probability of the dip of discontinuities being steeper than the friction angle and (b) the probability that the dip of the discontinuity lies within the kinematically possible range.

CIM Sept. '76

SESSION 6 — ISA — Metallurgy and Mechanical-Electrical

Hyatt Regency Hotel

A. MULAR, Session Coordinator

(Details not finalized at press time)

887910

Cinola

**Thursday, PM, October 14,
2:30 p.m. - 5:00 p.m.**

SESSION 7 — Geology Division

Hotel Vancouver

R. SERAPHIM, Session Coordinator

Paper No. 7-1 —

MacMillan Tungsten Property.

F.R. HARRIS, Amax Minerals Exploration, Vancouver, B.C.

The MacMillan Tungsten property contains a major scheelite skarn deposit situated on the Yukon - Northwest Territories border in northwestern Canada. The property is held by AMAX Northwest Mining Company Limited, a subsidiary of AMAX Inc.

The deposit was discovered in 1962. To date, 35,000 feet of diamond drilling, 2,450 feet of underground exploration and a preliminary feasibility study have been carried out.

The deposit occurs in Lower Paleozoic limestone and limestone breccia at the eastern margin of the Selwyn sedimentary basin, adjacent to a Cretaceous quartz monzonite stock.

Four tabular zones of scheelite-pyrrhotite-diopside skarn occur in flat-lying strata. Numerous scheelite-quartz veins occur in hornfels above and below the skarn zone. Geological reserves total 30 million tons grading 0.9% WO_3 .

Tungsten-rich hydrothermal fluids emanated from the quartz monzonite stock, travelled along fractures, faults and bedding planes, reacted with permeable carbonate horizons and produced scheelite skarn.

Paper No. 7-2 —

Some Aspects of Northair Mines' Brandywine Property.

A.H. MANIFOLD, Northair Mines Ltd., Vancouver, B.C.

Northair Mines' Brandywine gold-silver property is located about 70 miles north of Vancouver, B.C. To date, development consists of three adits, with drifting, raising and stoping proceeding on each level.

The deposit occurs in an area of volcanic rocks considered to be a roof pendant within the Coast Range Complex. The orebodies are contained in a steeply dipping vein-type structure varying in width from 1 foot to over 15 feet and with a known lateral extent of approximately 4000 feet. Diamond drilling indicates a vertical extent of at least 500 feet. Drifting on the lowest level shows no weakening of the structure or values.

Several geologists have considered the deposit as having a volcanogenic origin, but many characteristics of a hydrothermal vein deposit are evident.

Paper No. 7-3 —

Specogna: A Carlin Type Gold Deposit, Queen Charlotte Islands, British Columbia.

G.G. RICHARDS, J.S. CHRISTIE and M.R. WOLFARD, Quintana Minerals Corporation, Vancouver, B.C.

This deposit contains an indicated reserve of more than 50 million tons of 0.06 oz/t gold and 0.1 oz/t silver. Other metallic elements present in anomalous amounts include Hg, As, Sb and Te. Possible major controls of mineralization include proximity to an unconformity, proximity to a major fault, and permeability of the host Skonun Formation of Miocene to Pliocene age. Quartz-feldspar porphyry dykes, although volumetrically insignificant, may be important in the mineralizing process.

Alteration effects include strong silica metasomatism, pervasive pyritization and intense clay alteration of feldspar in sandstones and in dykes.

Although the gold mineralization is central to a much larger zone of silica, clay and pyrite, zoning of alteration is obscure. Hg in rocks forms a halo about the better-grade gold. Other metallic elements form very weak patterns with peripheral or central tendencies.

The deposit is classified as Carlin type based on metallic mineral assemblage, alteration mineralogy, permeability control of mineralization, mode of occurrence of gold and proximity to a major structure.

Paper No. 7-4 —

Geological Setting of Stratabound Copper-Zinc

CINOLA

City Resources:

Graham Island Project Preparing For Production

A final feasibility study for City Resources (Canada) Ltd.'s Graham Island Project, located in British Columbia's Queen Charlotte Islands, has been completed. But while the numbers look good, the project still has several hurdles to hop before production can begin.

The Graham Island deposit, originally known as the Cinola Deposit, was discovered in 1970 and bought by Consolidated Cinola, now City Resources (Canada), in 1978. It has all the hallmarks of a classic epithermal deposit with a mercury geochemical signature. It is found in intrusive sub-volcanic felsic rocks and tertiary volcanistic sediments that have been intensely brecciated and silicified. Two types of gold mineralization are present: thick moderate grade disseminations and thin, high-grade veins.

Snowfall here is light and the area can be worked year round. The entire pit area has been logged, stripped of all trees and vegetation, and road access is in place.

City Resources (Canada), a subsidiary of Australian-based City Resources Ltd., reports mineable reserves of 23.8 million tonnes averaging 0.072 oz/ton gold and claims gold recoveries should average 92%. At an annual production rate of 2.1 million tonnes per year, City expects it could recover 1.7 million oz of gold.

Cash operating costs for the first two years of open pit gold mining should be about US \$189 per oz, and costs over an expected mine life of 12 years are projected at US \$230 per oz. Capital costs are estimated to be about Cdn \$100 million, with payback in 2.2 years given that gold stays above US \$300 per oz.

Mine financing can be covered by a 60% Gold Loan repayable over a six year period and 40% bank financing. City has already received full financing proposals from Canadian banks.

That's the upside:

The downside, however, is chock full of Indians, environmentalists, and politicians.

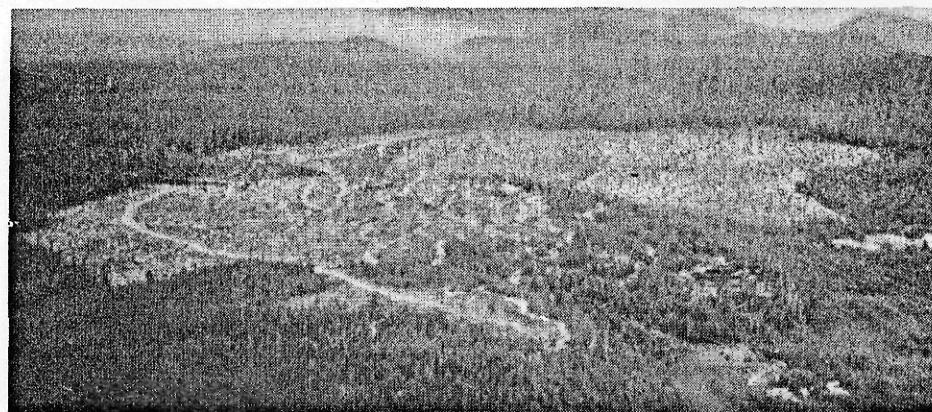
The environmentalists have plenty of experience in the Charlottes. Last year they had a chunk transformed into permanent parkland. And the provincial government, with its recent decision banning further mineral exploration in Strathcona Park, has shown it is unwilling to be tagged as environmentally insensitive.

Last, but definitely not least, there are Haida Indian land claims to consider. There is no easy way round the fact that the Haida have occupied the mine site for over 9,000 years.

The Graham Island mine is located 18 km south of Port Clements and one km from the Yakoun River, the largest watershed in the Queen Charlottes, and a major producer of salmon and trout.

The project "poses a serious risk to the environment," according to Frank Collison, vice president of the Haida Nation. Among the Haida's environmental concerns is the toxic effect sulphuric acid, a by-product of the road building and mining process, will have on the watershed area. The project's mineralization contains acid generating sulphur as well as arsenic and mercury.

City, however, has proposed a "state of the art" environmental plan, which includes treating rock with limestone to



The Graham Island Project: a sensitive situation waiting for a tough decision.

neutralize acid production. Company president John Bailey says it is City's philosophy and practice to protect the environment surrounding its mining projects. "That sentiment aside," he says, "our position is also one of practical realism: the Government of British Columbia will simply not let us proceed with mine development unless we satisfy their appropriately stringent environmental protection guidelines."

The company has also hired newspaper editor Archie Patrick, a prominent B.C. native Indian, to handle public relations with the Haida.

At present the Graham Island Project is being reviewed by a steering committee of the engineering and inspection branch of

the British Columbia Ministry of Energy Mines and Petroleum Resources, and approval in principal, despite what company press releases have been saying, is not expected in the near future.

"It's a very sensitive situation up there, politically and environmentally, so it's going to be a very tough decision," a source within the Ministry said. "Aside from the Haida concerns there are a lot of people living in the Charlottes who are not certain this sort of development should go ahead."

He suspects there will have to be an extended period of public discussion before a decision — a political decision — is finally made by the provincial cabinet.

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THIS MONTH IN MINING

system, many of the company's black employees have taken advantage of a project enabling them to buy their own homes. At Kuthlwanong, close to Fred-dies No. 1 shaft, 229 homes have been built and occupied and another 511 are planned for 1988.

Freegold is installing or plans to install the latest proven mining develop-ments, incorporating in-stope trackless mining at Fred-dies No. 1 shaft, Presi-

dent Brand No. 6 shaft, and Saaiplaas No. 5 shaft.

Gush said that Freegold's intensive drilling program will continue to prove up reserves east of Free State Geduld and north of Erfdeel, where results to date have been encouraging.

The company's agreement with Free State Development and Investment Corp. on the exploitation of the Du Preez Leger and Jonkersrust farms has

been signed, and granting of a lease and its incorporation within Freegold's lease area is now awaited. ■

CAROLIN Preliminary findings favor development of Ladner Creek deposit

Joint venture partners Wright Engi-neers Ltd. and Giant Bay Resources Ltd. have notified Carolin Mines Ltd. that based on a first-stage analysis Car-olin's gold deposit at its Ladner Creek mine near Hope, B.C., can profitably go into full-scale production. The deci-sion is subject to confirmation of the grade and tonnage and additional met-allurgical testing confirming earlier re-sults.

Independent consultants have esti-mated Carolin's known gold deposit at about 1 million mt grading 0.125 oz/st gold and 800,000 st of mine tailings grading 0.045 to 0.055 oz/st gold. Only about 5% of Carolin's total mineral claims have been explored, and the po-tential for discovery of additional gold deposits exists.

Currently, 1 st of mineral samples is being collected by Carolin to permit the next step of metallurgical testing. On Oct. 23, 1987, Carolin signed a Letter of Intent with Wright and Giant Bay to have the joint venture evaluate, test, and bring into production the Ladner Creek mine. With positive completion of this six-month program, a feasibility study will be carried out as a final step before production.

The Ladner Creek mine was devel-oped in the 1970s and early 1980s at a cost of about \$C50 million. Its assets include a 1,500-st/d production facility and related equipment. ■

Feasibility study is completed for Cinola gold project in B.C.

Wright Engineers Ltd. of Vancouver, B.C., has released a summary of a feasi-bility study on the Cinola gold project prepared for City Resources (Canada) Ltd. that indicates the deposit can be mined profitably. The project is on Gra-ham Island in the Queen Charlotte Is-lands in British Columbia. The mine site is near the center of the island, about 18 km south of Port Clements.

The study envisages an open-pit mine extracting ore at a rate of 6,600 st/d, with a waste-to-ore ratio of 2.08:1. Gold production is projected at 175,000 oz in the first full calendar year of produc-

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GRAHAM ISLAND DEVELOPMENT ON HORIZON

The large, low grade, near surface gold deposit on Graham Island in the Queen Charlotte Islands of British Columbia, was initially discovered by two prospectors in 1970. By 1977 five major companies had worked on the deposit, and in the following year, the property was acquired by Consolidated Cinola. However, despite further detailed investigation of the orebody it remained undeveloped. In September last year, City Resources (Asia) acquired 28% of Cinola and the company was restructured and renamed City Resources (Canada) Ltd., to reflect its position within the Sydney-based City group. In January this year, City acquired 100% control of the Graham Island deposit, subject to a net smelter return royalty of 0.05%-5%.

During 1984, as part of a project for Cinola, Kilborn Engineering identified a higher grade zone within the orebody, amenable to selective open pit mining, containing 7 Mt grading 3 g/t gold. City Canada has since completed over 9,000 m of drilling on the property and re-logged more than 36,000 m of existing core and in-fill drilling. It confirmed that the deposit contained in excess of 40 Mt of ore grading about 1.8 g/t gold, including the 7 Mt of higher grade ore already mentioned. City Resources estimates that 28 Mt of this total is recoverable by low cost open pit mining with an extremely low stripping ratio.

The company is now awaiting the final feasibility study on the project being carried out by Wright Engineers of Vancouver. This is expected before month-end and will form part of the documentation to be submitted to the authorities for permits necessary to develop a 4-6,000 t/d open pit mining operation. City anticipates the permitting process to be completed by March next year and expects that production at Graham Island will begin in the second quarter of 1989.

The Graham Island deposit has the hallmarks of a classical epithermal gold deposit with a mercury geochemical signature. It lies against a north-west striking fault which dips to the east at 50-55° in Tertiary volcanic sediments which have been intensely brecciated and silicified. The fine grained disseminated gold mineralization is closely associated with the degree of silicification. In addition, the orebody contains up to 1.5% of sulphide or marcasite. Metallurgical test work suggests that gold recoveries in excess of 90% are achievable using the Arsenol process. This involves

elevating the temperature of the pulp in a closed pipe system and the introduction of oxygen to oxidize the sulphides in the ore and increase the level of gold recovery. The pulp is then subjected to cyanidation following which the gold is recovered on activated carbon.

Previous owners of the property were apparently reluctant to take a production decision because of the perceived mercury problem associated with the deposit. However, City Canada now believes that this was an inaccurate assessment due to a misinterpretation of data and the use of non-representative samples. The company's own investigations have shown the mercury mineralization at Graham Island to be largely in the form of a halo around the deposit and not spread throughout the orebody. Tests

LEADING INDICATORS

Share Indices	Sept 9	Sept 2
F. T. Industrial	1756.1	1763.2
U. S. Dow Jones	2549.3	2602.0
M. J. Gold Mines	886.0	880.0
Australian Met/Min	1376.8	1369.5
Toronto Met/Min	3129.7	3156.1
Nikkei Dow	24937.9	25946.0
Hang Seng	3577.6	3635.8
Commodity Prices	Sept 9	Sept 2
Gold	\$461.00	\$463.00
Copper (U.S. prod.)	85.625c-88.0c	81.625c-85.0c
Lead (U.S. prod.)	42.0c	42.0c
Zinc (U.S. prod.)	43.0c-48.5c	47.5c-48.5c
Aluminium (U.S. prod.)	74.5c-80.0c	74.5c-80.0c
Brent Crude (dated)	\$18.00-\$18.15	\$18.25-\$18.45
Exchange Rates on September 10	Value of	\$(US)
\$ (US)	1.66	
Franc (French)	9.94	5.99
Franc (Swiss)	2.46	1.48
Deutschmark (F. R. G.)	2.97	1.79
Yen	234.50	141.27

have shown that the mercury will report with the gold on the activated carbon and can be removed and recovered during the carbon stripping and regeneration process. The ore also has quite a high carbon content due to the presence of fossilized wood. However, the carbon is inactive (metallurgically) and does not present a problem during the gold processing operations.

Initial mining operations will concentrate on the higher grade zone within the orebody, giving an estimated production of 200,000 oz/y of gold from 2 Mt of ore mined at a direct cash operating cost of less than \$US200/oz. The estimated capital cost of such a project is \$C100 million and this will probably be financed by means of a gold loan. At current gold prices and on the basis of the planned production rate in the early years and the projected cash operating costs, the payback period on the company's investment could be very rapid. In addition, City will have the benefits of an initial

tax holiday as it works off a \$C18-20 million accumulated tax loss.

On the basis of the reserve estimation completed to date, the Graham Island orebody contains about 2.4 Moz of gold, which according to Canarim Investment Corp. makes it the largest undeveloped gold deposit in North America. After passing through many hands and lying dormant for many years, it is at last moving towards development and is likely to prove a money spinner.

AMAX GOLD PROJECT

Continued from p. 197

In March this year, the company announced that an intensive drilling programme in the vicinity of the mine had identified additional gold-silver reserves. As a result, total reserves of milling ore now stands at 2.47 Mt grading nearly 8 g/t gold. In addition there are 38.3 Mt of lower grade ore (about 0.8 g/t gold and 8 g/t silver) amenable to heap leaching.

Sleeper, together with Amax's other gold interests, was floated off into a separate company, Amax Gold Inc., in mid-year, with the parent company retaining 87% of the equity. Amax Gold has now announced that expansion at Sleeper is proceeding on schedule; the mine is currently producing at an annual rate of about 148,000 oz/y of gold and this will increase to an annual rate of 200,000 oz by January 1988. This will be achieved by increasing the rate at which heap leaching ore is processed from the current 750,000 t/y to 4.5 Mt/y. This will result in the production of an additional 54,000 oz/y of gold.

This expansion calls for the development of ore reserves located in an area some 300 m south of the current Sleeper pit. This has been designated the Wood pit and the mineralization appears to be a continuation of the Sleeper deposit, comprising both milling and heap leach ore. This expansion will result in the addition of some 46 full time employees being added to the existing workforce of 90 and the upgrading of the mine operating schedule from single shift to double shift.

OK TEDI COPPER IN JAPAN

From Papua New Guinea, Ok Tedi Mining Ltd. has announced that the first shipment of copper concentrates in bulk quantity from its mine in the Star Mountains took place on August 21. The concentrates were conveyed from the mine and mill as a slurry via a 160 km long pipeline to the river port of Kiunga where they were filtered and dried and then loaded into river barges for an

tion, 192,000 oz in the second year, and an average of 114,600 oz/yr over the remaining 10 years of mine life. At 90% recovery, total gold production will exceed 1.5 million oz.

Production is scheduled to begin in October 1989, based on mineable ore reserves of 27.3 million st of gold at an average grade of 0.062 oz/st, using a 0.032-oz/st cut-off grade. Operating costs will vary from \$207/oz for the first two years of production at design capacity to \$322/oz for the balance of mine life. Further refinements in metallurgical processing, currently being tested in a pilot plant, may reduce indicated capital and operating costs.

Ore treatment will use the proprietary Arseno process, which uses nitric acid to catalyze the oxidation of the sulphide minerals, which otherwise render the gold refractory to conventional cyanidation.

Control of potential acid mine drainage, water quality impacts, and protection of fish habitats in the Yakoun River system are key environmental issues for the Cinola gold project. Proposed mining and reclamation plans, mill process selection, location and layout of the

plant site, and water and waste management plans all reflect special environmental protection measures.

The total mine labor force is estimated at 188, of whom 120 to 130 will probably be Queen Charlotte Island residents. ■

Newsbriefs

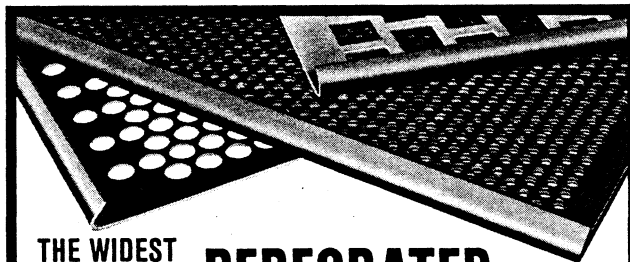
Newmont Mining Corp. has announced a desire to sell all or part of its 75% shareholding in Newmont Australia Ltd. Mineral resources have been significantly expanded at Newmont Australia's Telfer and New Celebration gold mines in Western Australia. Estimated gold resources as of Dec. 31, 1987 are: Telfer 2,860,700 oz (contained) and at New Celebration 809,700 oz (contained).

Record production in 1987 was achieved by Pegasus Gold Inc. totalling about 228,000 oz of gold, 782,000 oz of silver, 14.4 million lb of zinc, and 8.6 million lb of lead. Production in 1986 amounted to 92,000 oz of gold and 229,000 oz of silver.

Pegasus produces gold and silver from the Zortman/Landusky mine in Montana and from the Florida Canyon and Relief Canyon mines in Nevada. In addition, the company produces gold, silver, lead, and zinc from the Montana Tunnels mine in Montana.

Gold-Canada
A total of 13 new primary gold mines began production in Canada in 1987, and total output for the year was about 225,000 oz. At full production, these mines will add over 600,000 oz/yr to Canadian gold mine capacity. Production from these new mines, plus increased output from existing mines (estimated at an additional 310,000 oz), resulted in Canadian gold mine production of an estimated 3.3 million oz in 1987, excluding by-product and placer gold. These are some of the conclusions drawn in Metals Economic Group's new 300-page study *Active Canadian Gold Mines*, available for \$695 from Metals Economics Group, P. O. Box 1699, Boulder, Colo., 80306-1699.

Harnischfeger Corp. and Page Engineering Co. have announced an agreement that will enable Harnischfeger to



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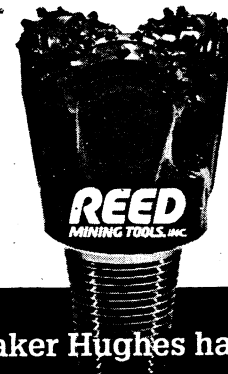
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CINOLA

“Rim of Fire”

The quest for epithermal gold by City Resources Ltd. of Australia, has moved to Canada in a big way. The company has taken over the Consolidated Cinola project in the Queen Charlotte Islands by buying a controlling interest in the company and its 2.4-million ounce gold deposit. The intention is to develop what could potentially become British Columbia's largest primary gold producer.

The Cinola deal provides Consolidated Cinola with \$7.5 million in new capital and a maximum of \$8.1 million through the exercise of the attached warrants. The funds will be used by Cinola to retire its obligation to Energy Resources Group, allowing Cinola to attain a 100% interest in the project.

City Resources' interest in the project - which sat relatively inactive for a number of years - is based on an interesting geological theory. City Resources believes the Cinola deposit is similar to many classic epithermal deposits in the South Pacific.

The term epithermal, loosely defined means “close to thermal heat” and is used to refer to those deposits formed at relatively low temperatures such as 150 deg. C. to 250 deg. C. and low rock pressures near heat sources close to the earth's surface. City Resources has always believed that the south-west Pacific has significant potential for the discovery and development of major gold mines. It concentrated its suc-

cessful efforts on the Pacific “rim of fire” - the chain of volcanic islands embracing Japan, the Philippines, Indonesia, Papua New Guinea, Australia, the Solomons, Fiji, Vanuatu and New Zealand.

Interestingly enough, the Cinola deposit was staked by a prospector who believed in the same “rim of fire” theory; Efram Specogna, then a weekend prospector who worked in the logging industry on the Queen Charlotte Islands.

From Chile, the fault line skirts the Antarctic then moves north through the South Pacific up to Japan. Further north it crosses the Bering Sea to Alaska, then on down to the Coast of British Columbia and down the west coast of the Americas...completing the circle in Chile.

This “zone of crustal weakness” as it is known to geologists, is peppered with 60% of the world's volcanoes. Epithermal deposits have their origins in the movement of tectonic plates, where one plate slides underneath another or clashes head-on, throwing up ranges of mountains. Plate collisions generate enormous amounts of heat and force rocks so deep they melt. Then the molten rock with its entrapped gases are forced back up to the earth's surface in faulted areas and we have our volcanoes...and without going into too much detail, our epithermal gold deposits.

After building a successful track record in the South Pacific based on this theory, First City moved into Canada in September, 1986. The company entered into an agreement to acquire a 29% interest - with an option to expand to 44% - in Consolidated Cinola Mines Limited, a VSE-listed company.

Cinola's reported geological probable reserves are 40 million tonnes averaging 1.8 g/t gold. An ore zone about 700 metres long by 300 metres wide has been defined by detailed drilling and underground testing and mineable probable reserves of 17.3

NW Prospector
Sept./Oct. 86

during the first year and \$3.52 per share during the second year.

Consolidated Cinola intends to eliminate their obligation to Energy Resources Group which will give them 100% ownership of the Graham Island Gold Deposit, located in the Queen Charlotte Islands off B.C.'s coast.

Reno J. Calabrigo, president of Consolidated Cinola went on to say that work on the property would begin almost immediately "with the intention of completing a feasibility study in the near future".

The company estimates there is two million ounces of gold on this property and with this financing, they are ready to begin work immediately. The property contains an estimated 40,000,000 tons grading .06 oz. ton gold.

City Resources (Asia) Limited is listed on the Hong Kong Stock Exchange. It is a member of the City Resources group of Australia. The group has an extensive involvement in gold exploration and development in countries on the Pacific Rim including Australia, Papua New Guinea, Vanuatu, Fiji and New Zealand.

The current chief executive of the Hong Kong company and one of the founding directors of the group, Mr. John Bailey, will move to Canada as president of the extended company.

Consolidated Cinola Mines Ltd. trades on the Vancouver Stock Exchange: trading symbol CSZ and on the NASDAQ system: trading symbol CCIMF.

Consolidated Cinola

Consolidated Cinola Mines Ltd. recently announced they have reached an agreement with City Resources (Asia) Ltd., which will result in an influx into Consolidated Cinola's treasury of \$7,500,000 in new capital.

The agreement calls for the issuance of 2.5 million shares at a price of \$3.02 per share with a two year warrant for an additional 2.5 million shares at \$3.27 per share

COMING UP

The B. C. & Yukon Chamber of Mines will be holding their Annual Cordilleran Roundup on January 26, 27 and 28th, 1987 at the Hotel Vancouver. It's a special year for the Chamber which will be celebrating its 75th year of service to Western Canada's mining community.

Call 681-5328 for further information.

Northwest Prospector

CINOLA Continued From Page 3
million tonnes averaging 2.46 g/t gold have been announced.

The ore-bearing sequence is truncated by a major northwesterly trending fault, to the south-west of which lie unaltered, unmineralized argillites and mudstones.

Two stages of open pitting are planned. During the first stage, a higher-grade portion of 6.4 million tonnes averaging 3.11 g/t gold is scheduled for mining at a rate of 6,000 tonnes per day (two million tonnes per year) to produce 160,000 ounces of gold per year, at an operating cost of U.S.\$225 per ounce. Expectations are that mining will begin at the end of 1988.

The second stage contains probable reserves of 10.9 million tonnes averaging 2.09 g/t gold, and will require further prospecting and feasibility studies to delineate the full potential of the deposit.

Final capital costs are estimated in the \$90 million range. Current plans to get the project moving, call for 30,000 feet of drilling within and slightly outside the proposed pit boundaries.

Energy Reserves, which was formerly Cinola's joint venture partner, will retain a small royalty interest in the project based on gold prices.

NORAMEX DRILLING ON GRAHAM ISLAND

Before all this current excitement and activity on the Queen Charlotte Islands at the Cinola deposit, the company most active in the Cinola camp was Noramex Minerals Inc., a Vancouver-based mineral exploration and development company. Noramex, with its joint venture partners, has spent some \$400,000 dollars in the camp with some "good-looking results" according to company president Brian Fairbank, P.Eng.

Exploration has begun on Noramex's 100 percent owned JET, NOV and HOODOO properties, which total 8525

acres in the Cinola gold camp. These properties are located on structural breaks (faults) and are favourably situated geologically relative to the Cinola deposit. All of the Noramex claims contain either anomalous gold geochemical values, anomalous geophysical values or both. A three-man crew has begun a mapping and sampling program.

The properties are readily accessible by road year round. Noramex anticipates that an aggressive exploration program will be mounted this winter. The company is currently seeking joint venture participation in the project.

Noramex also recently announced that diamond drilling is currently underway on the Golden Dyke project on Graham Island in the Queen Charlottes. The property is located approximately 20 km southwest of the Cinola deposit and has many geologic similarities.

"We think this property has tremendous potential" says Brian Fairbank. Noramex's joint venture partners are Noranda Exploration Co. Ltd. and Umex Inc. and the current drilling budget is \$200,000...bringing the total expenditures by the joint venture partners to \$400,000. Exploration has concentrated on the Courte Zone - one of

several gold zones on the 9-mile long property.

Drill hole DDH 86-1 was drilled under the Courte gold-antimony showing to a total depth of 1144 feet. The Courte structure was intersected in this hole between 600-863 feet. Other holes will test a coincident IP and soil anomaly and the projected Courte zones at depth. Noranda Exploration is operator.

Noramex Minerals Inc. trades on the Vancouver Stock Exchange; trading symbol NXM.

★

Prospectors and Developers Association of Canada

"What's After Gold?"

That's the theme chosen for the 1987 Annual Prospectors and Developers Association of Canada Convention to be held from March 8 - 11, 1987 at the Royal York Hotel in Toronto. New topics are under discussion and preparations are already underway to ensure that Canada's largest mineral industry convention will again be a big success. Set the date on your calendar....it's an event you won't want to miss.

Under the able Chairmanship of Dutch Van Tassell, an excellent list of speakers has been prepared by his technical program committee who will tell delegates what's after gold.

The theme for the upcoming convention is not meant to imply that the PDAC thinks gold is phasing out. As the *PDA Digest* puts it... 'Would we be so crazy?'

The theme is meant to show that there are, and will be, other metals to seek as well as gold and to demonstrate the

PDAC's optimism for the long term outlook of Canada's mineral industry.

One of the keynote speakers will be the Honourable Gerald S. Merrithew, the new federal Minister of State (Forestry and Mines), who will address delegates at the joint luncheon hosted by the Canadian Club of Toronto and the PDAC on Monday, March 9th.

The membership of the Prospectors and Developers Association of Canada comprises the singlemost important group of explorationists and developers in Canada. Formed in 1932, PDAC membership has grown to 3,346 individual members and 140 corporate members. It's a veritable Who's Who in Canadian Mining and not only includes those directly involved in the search for and the development of mineral wealth but many of the support and service industries as well. In general, all those who rely on the minerals industry for their livelihood are eligible for membership.

For further information on the Prospectors and Developers Association of Canada - or the PDAC Convention coming up this March in Toronto, contact:

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