

MINIFO

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INFORMATION

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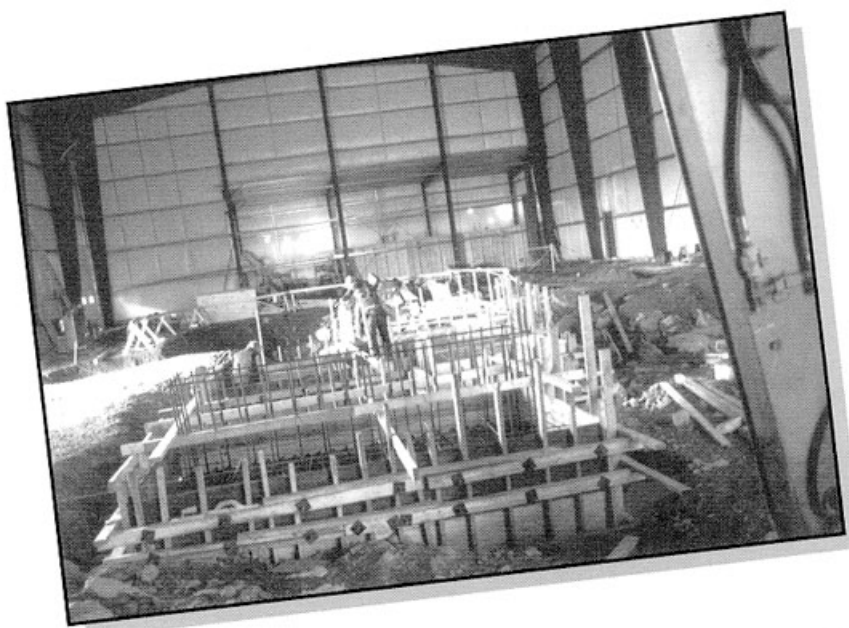
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GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR

Department of
Mines and Energy

Mines Branch

*Mill Construction: -at Roycefield Resources' Beaver Brook Deposit-
Installation of Ball Mill and Foundation Construction*

Antimony Production to Start This Year

Construction is continuing at Roycefield Resources' antimony deposit located near Gander. The hydro poles have been erected and electrical power is expected to be connected to the site by late June. Production is scheduled to start in late summer following the installation of the remaining equipment in the mill and completion of underground geological work.

Current reserves are sufficient for Roycefield Resources to produce about 5% of the world's antimony for the next 13 years. The initial phase of production will include the mining of antimony sulphide for milling into concentrate, both for sale and for conversion into value-added antimony trioxide. Roycefield is developing the world's only commercial hydrometallurgical and environmentally acceptable trioxide process. The antimony trioxide will be used primarily as flame retardants in the plastic and vinyl industries.

Richmont Mines Begins Production

Richmont Mines Inc. began commercial gold production from its Nugget Pond mine located on the Baie Verte Peninsula on April 1, 1997. The mine will produce 1,000,000 grams (32,000 ounces) of gold in 1997 and 1,430,000 grams (46,000 ounces) annually thereafter.



Richmont Mines' first gold bar.

Richmont first acquired a 60% interest in the property in May, 1995, and purchased the remaining 40% interest in January, 1996. In June, 1996, Richmont

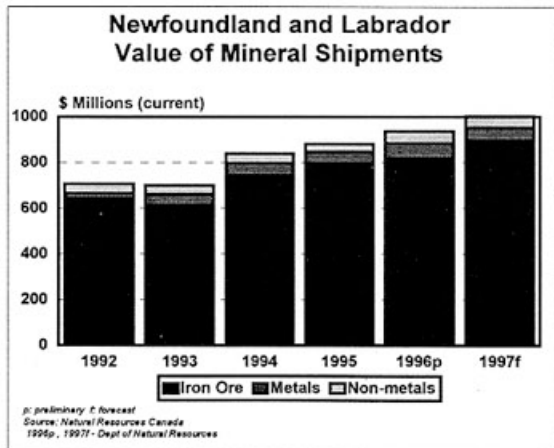
formally approved construction of the project and the mine was put into production in the first quarter of 1997 on schedule and on budget. The company's investment of \$27 million entailed completion of the underground mine development, surface construction, commissioning the mill and the purchase cost of the property.

Over 90% of the workers were Newfoundlanders during the construction and development stage at the mine. The mine is expected to have a workforce of 80 to 90 people during the five-year production period. Nugget Pond's proven and probable reserves as of December 31, 1996, stood at 488,000 tons grading 11.1 grams (0.357 ounces) of gold per tonne.

Value of Mineral Shipments to Increase

According to figures released by the Department of Mines and Energy, the total value of Newfoundland and Labrador's mineral shipments in 1997 is forecast to be \$1 billion, an increase of 7% over the 1996 preliminary total of \$935 million. This is due mainly to increased production from Iron Ore Company of Canada (IOC) and Wabush Mines in Labrador West. The value of iron ore shipments from the two iron ore operations should increase about 9% in 1997.

The value of other metals, such as copper, gold and silver, will decrease 7% and the value of non-metals will decrease 5%. These decreases are a result of the temporary termination of copper mining at the old Rambler property by Ming Minerals, and Lodestone Limited's completing its contract to supply heavy ballast to Hibernia's Gravity Base Structure.



Employment in the Newfoundland and Labrador mining industry is expected to increase 4% to 3,530 in 1997. This increase is due mainly to the start-up of Richmond Mines' Nugget Pond gold operation and the expected start-up of Roycefield Resources' antimony mine.

Voisey's Bay Nickel Obtains Refining Process

On May 14, 1997, **Inco Limited**, owner of **Voisey's Bay Nickel Company Ltd.**, signed an agreement with Sumitomo Metal Co. Ltd. of Japan for the use of Sumitomo's refining process for nickel and cobalt. This process is to be used at Argentia to refine the nickel and cobalt from the Voisey's Bay deposit in Labrador. The Sumitomo process, when combined with Inco's own flash smelting technology, will allow the development of a state-of-the-art processing facility.

Initial production from Voisey's Bay in the form of concentrate is anticipated by late 1999, with initial refined production expected by late 2000 from the smelter/refinery complex to be constructed at Argentia.

In other industry news, **Raymo Processing Ltd.**, a subsidiary of **Electra Gold Ltd.** in partnership with **Pine Cove Resources and New Island Minerals Ltd.**, proposes to construct an open-pit gold mine and mill at Pine Cove on the Baie Verte Peninsula. The project has cleared environmental assessment and the company has completed its feasibility study. The capital cost for the project is estimated at \$14.5 million and sources of financing are being pursued. If financing and all regulatory and permitting requirements are received, construction could begin in 1997, followed by production in 1998.

Burin Minerals Ltd. is continuing its talks with financial institutions to arrange Public Equity Financing for reopening of the fluorspar mines and mill at St. Lawrence. The parent company, **Burin Fluorspar Ltd.**, is currently preparing a prospectus for a public offering of shares which is expected to commence during the summer of 1997.

Burin Minerals has completed a feasibility study at a cost of nearly \$400,000 on reopening the mines and mill. Production of the operation at St. Lawrence will be approximately 120,000 tonnes per year and employment will be approximately 100. Letters of

Intent have been signed by customers covering about 90% of projected production during the first two years of operation. **Minmet Financing Company of Lausanne, Switzerland**, has been appointed exclusive worldwide sales agent for acid-grade fluorspar from St. Lawrence.

Hi-Point Industries (1991) Ltd. has been developing a peat bog in the Gander Bay area near Island Pond. The peat harvested from this bog will be used exclusively for sale in the horticultural peat market.

In the last couple of years, there has been an over-supply of horticultural peat in the North American market, which is leading to depressed prices. If prices rebound in 1997, harvesting of peat from the Gander Bay bog should start sometime this summer. **Hi-Point** has completed the drainage patterns at the site, and the bog is 75% developed. If no harvesting occurs this summer, then bog development will be completed in 1997 with harvesting to begin in 1998.

Taiga Resources Inc. is proposing to establish a wet peat harvesting operation in the St. George's area. The peat will be shipped in its wet form, in bulk, to Egypt where it will be dried, packaged and distributed to markets. The company is presently attempting to secure the required financing.

Dimension Stone Inc. will open two quarries in 1997 and produce granite blocks for export. The **Ackley Granite** near Terrenceville is suitable for such dimension stone uses as countertops and tiles. The **Swift Current granite** will be quarried for monuments and other dimension stone uses. The operations will initially employ a total of 10 people.

In 1997, **Industrial Fillers Ltd.** of Vermont will take a large bulk sample from the Coles Pond marble deposit to further evaluate the resource. The deposit is located just west of Roddickton on the Northern Peninsula. Coles Pond is a potential source of high-purity marble for such industrial applications as mineral fillers and whiteners. **Industrial Fillers Ltd.** is owned by **Pluess-Staufner AG**, one of the largest calcium carbonate producers in the world.

Map Staking Rush Opinion Survey

The Mineral Lands Division of the Department of Mines and Energy has received forty responses to the "Opinion Survey on Procedures to Deal with the

Tuesday Morning Staking Rush" mailed out on March 6th of this year. When the mineral rights to an area is made available for staking, a notice to that effect must be published in the Newfoundland Gazette and the area comes open for staking after the hour of 9:00 am on the 32nd clear day following publication of the notice, usually on a Tuesday.

The present procedures for map staking requires an interested party to submit his/her application to the office of the Department of Mines and Energy in St. John's. Applications are accepted and given priority on a "first-come" basis. The present procedure has inspired some groups to line up at the St. John's office for days in order to be the first to apply for an area coming open for staking.

There are three basic procedures that can be used to deal with map staking rushes for areas coming open on a predetermined date. The three options are: 1) the line-up procedures presently in place; 2) an auction or sealed-bid for areas; and 3) a draw or lottery.

The survey suggests low support for option 2, an auction (2 in favour, 29 opposed) or sealed bid (12 in favour, 24 opposed).

The opinions on option 1 and option 3 were comparable, but varied with the type of company. The present line-up procedure was favoured by 22 and opposed by 17 respondents. A draw or lottery was favoured by 21 and opposed by 15 respondents.

For now, the department has to continue with the procedures presently in place because a change in the procedures to a draw or lottery system will require an amendment to Subsection 21(3) of the Mineral Act.

A lottery draw could allow groups to participate in a map staking rush without having to line up at the office in St. John's. The procedures for a lottery draw could be set up to allow all interested parties to participate in a manner similar to the way ground staking rushes operate. If you wish to comment on this, please contact Ken Andrews, Director of Mineral Lands at (709) 729-6425.

Hope Brook: A Mining Success

The Hope Brook gold mine will officially close its doors this summer, ending 10 years of production at the site. During that time, the mine will have produced

over 23,300,000 grams (750,000 ounces) of gold and over 2,500 tonnes (5,500,000 pounds) of copper, employing about 280 people per year.

Exploration on the Hope Brook property dates back to 1902 when copper was discovered along the banks of the Cinq Cerf River. However, exploration was sporadic until 1983 when gold mineralization was discovered on the property. Exploration continued in 1984 and 1985.

In 1985, a prefeasibility study of the property was conducted by BP Canada and a full-scale feasibility study was completed by April, 1986. BP Canada spent approximately \$9 million on exploration and development of the property to delineate the gold reserve.

Development of the property occurred at two stages: an open pit and heap leaching process and an underground mine and conventional mill operation. The open pit commenced in April, 1987 and continued until 1989, producing approximately 2,020,000 grams (65,000 ounces) of gold. Production from the underground mine commenced in 1989 and produced approximately 7,460,000 grams (240,000 ounces) of gold. In May, 1991, BP Canada voluntarily suspended operations due to environmental problems. In September, 1991, BP Canada announced it was selling its mining assets to focus its attention on oil and gas.

The total project cost at Hope Brook, from initial construction in 1987 to March 31, 1991, was \$185 million. The operation employed 283 permanent workers.

In December of 1991, Royal Oak Mines Inc. announced its intention to buy the property. The purchase was completed in April, 1992. Commercial production commenced on July 1, 1992 and the production cost per ounce of gold dropped dramatically due to a change in the mining method, a reduction in employment levels and closure of the Corner Brook administration office. Also in 1992, Royal Oak constructed a gravel airstrip, complete with lights and instrumentation. People, groceries and small parts are transported from Stephenville airport to the site.

In April, 1993, Royal Oak commissioned a copper recovery plant which also increased the gold recovery. The copper concentrate is sold to a smelter in Quebec for refining. This copper circuit also has a positive environmental impact as it removes most of the copper-

bearing sulphide minerals from the mill tailings stream and reduces the possibility of generating acid rock drainage.

From 1992 to 1996, Royal Oak produced approximately 12,440,000 grams (400,000 ounces) of gold and 2,130 tonnes (4.7 million pounds) of copper from the Hope Brook property and employed an average of 271 people. In 1997, production is forecast at 1,560,000 grams (50,000 ounces) of gold and 450 tonnes (1.0 million pounds) of copper with employment at 280.

Royal Oak spent approximately \$4 million in exploration in southwestern Newfoundland since acquiring the property but, unfortunately no additional ore reserves which could be processed at Hope Brook were discovered. As a result, on November 6, 1996, Royal Oak announced that the Hope Brook mine would permanently close in 1997 as economic ore reserves will be depleted.

It is anticipated that the mine will close in June and the mill will shut down in July, at which time the workforce will be approximately 30 people. Some of these people will remain for the dismantling of the mill and for reclamation of the site which is expected to be completed by 1999 at a cost of \$10 million. The remainder of the employees will be considered for employment at other Royal Oak facilities currently under development in Ontario and British Columbia. The mining and milling equipment will be relocated to the Matachewan mine, currently under development near Timmins, Ontario.

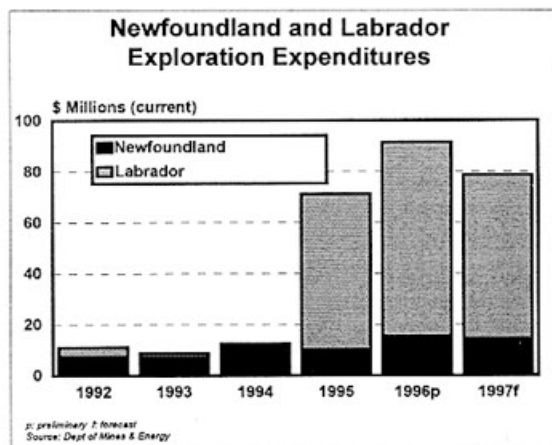
Exploration Expenditures Remain High

The 1997 forecast for exploration expenditures in Newfoundland and Labrador is \$73.3 million. A total of \$58.8 million of this amount will be spent in Labrador. The 1997 total represents a small decrease from the record high of \$91.4 million spent in Newfoundland and Labrador in 1996. Total diamond drilling in 1997 should be in the 100,000 metre range. The Department of Mines and Energy is forecasting about 15,000 new claims to be staked in the province in 1997.

In Labrador, **Absolut Resources Corporation** resumed diamond drilling operations on its 132-claim Throat Bay property located approximately 20 kilometres east of the Voisey's Bay nickel-copper-cobalt deposit. The

operation was suspended in early April due to equipment failure. Absolut is testing its claims for an eastern extension of the Voisey's Bay mineralization.

Columbia Yukon Resources Ltd., International CanAlaska Resources Ltd. and Falconbridge Limited recently signed a joint venture agreement to explore the VBE-1 property, located 15 kilometres east of the Voisey's Bay deposit, for an eastern extension of the Voisey's Bay mineralization. Exploration planned for 1997 includes 13,500 metres of diamond drilling, at a cost of \$3.3 million.



NDT Ventures Ltd. will explore 22 mineral projects in Labrador in 1997, with a projected budget of \$2 million. The projects are located in an area extending from Staghorn lake in the north to 100 kilometres south and just beyond the Voisey's Bay deposit. A variety of geotechnical surveys, including drilling, is planned.

On the island, **Buchans River Ltd.** completed an IP geophysical survey on its Buchans claims in early 1997. Plans for the remainder of 1997 include a gravity survey with diamond drilling scheduled for July.

Major General Resources Ltd. completed diamond drilling in February 1997 on its Green Bay properties located west of Springdale. The property contains a geological gold reserve of over 11,800,000 grams (380,000 ounces) contained in the Hammerdown-Rumbullion zones and the Orion zone.

On April 3, 1997, **Exploration Sulliden Inc.** announced the discovery of a new gold-bearing structure located four kilometres east of Richmond Mines' Nugget Pond gold deposit. Values of up to

17.0 g/mt (0.55 oz/mt) of gold over 0.6 metres have been reported. Exploration is ongoing.

Elsewhere, **New Island Resources Inc.** and **Newfoundland Goldbar Resources Inc.** completed an airborne geophysical survey on its Robinson River claims in late April and early May, 1997, and **Britannia Slate Company** completed a limited drill program for slate on its Random Island mineral holdings in April. The drill core is currently being assessed.

Prospectors Training Program Successful

The 7th Prospector's Training Course, which is part of the Department of Mines and Energy's Prospector's Assistance Program, has been successfully completed. The Prospector's Course provides comprehensive training in basic prospecting skills. The instruction emphasizes the practical aspects of mineral prospecting through geological principles, and combines classroom and laboratory work with prospecting field trips.

This year, 25 successful candidates were chosen from approximately 100 applications. The course took place from May 30 to June 12, 1997 at the Bay St. George Campus of the College of the North Atlantic (formerly Westviking College) in Stephenville. The course, which is now tuition-based, is supported by the Department of Mines and Energy.

If sufficient interest exists, the training program will continue to be a joint initiative of the Department of Mines and Energy and the College of the North Atlantic. Geologists of the Department of Mines and Energy will continue as instructors in the program.

Geological Survey Field Program – 1997

The Geological Survey's field program for 1997 will consist of 10 field projects. This is a slight decrease from the total of 12 in 1996. However, field activity should stabilize at this number for the next three to four years. The field program is summarized below.

Regional Geological Mapping

(i) Labrador

- 1) Bruce Ryan will conduct 1:50,000-scale geological mapping of the northwestern Nain Plutonic Suite continuing from last year's

work. The area contains many of the new nickel-copper-cobalt prospects identified in the post-Voisey's Bay exploration rush.

- 2) Charlie Gower will conduct 1:100,000-scale geological mapping along the southern flanks of the Mealy Mountain terrain in the eastern Grenville Province. This project is a continuation of the regional mapping program in this part of Labrador and is designed to investigate the mineral potential of an area that has seen very little previous mapping or exploration work.

(ii) Newfoundland

- 1) Sean O'Brien will continue 1:50,000-scale geological mapping and stratigraphic studies in the southeastern Avalon Zone of eastern Newfoundland. The work will be carried out in conjunction with metallogenic studies by Benoit Dubé of the Geological Survey of Canada. The area has a high potential for gold mineralization, and has seen a dramatic increase in mineral exploration.
- 2) Brian O'Brien will continue his 1:50,000-scale geological mapping in the western Notre Dame Bay area of the Central Mobile Belt. This belt has been the most prolific producer of base metals in the province.

Mineral Deposits

- 1) Andy Kerr will continue with his study to document and develop models for nickel and magmatic sulphide mineralization in mafic plutonic rocks in northern Labrador and the Harp Lake area.
- 2) Dave Evans will commence a three-year study to document the style and setting of epigenetic gold in the western Dunnage Zone of Central Newfoundland.

Geochemistry and Terrain Sciences

- 1) Martin Batterson will conduct 1:50,000-scale Quaternary mapping and till geochemistry in the Grand Falls - Glenwood area. the geochemical survey will link similar surveys over the Robert's Arm Group to the west and over the Davidsville Group to the east.
- 2) Jerry Ricketts will conduct 1:50,000-scale surficial mapping and granular aggregate-

resource assessment along sections of the Trans-Labrador Highway between Goose Bay and Churchill Falls. This will assist in the highway upgrading program.

- 3) David Taylor will conduct glacial striation mapping in the Red Indian Lake map sheet, focusing on the Granite Lake area. This information is used in mineral exploration for the interpretation of geochemical surveys.
- 4) David Liverman will conduct reconnaissance studies of the Quaternary geology of the St. George's Bay area, and will continue monitoring work in coastal areas.

Upcoming Events

Happy Valley-Goose Bay Mining Conference and Trade Exhibit

June 16-19, 1997

Happy Valley-Goose Bay, Labrador

The "Voisey's Bay and Beyond" Mineral Development Conference and Trade Exhibition will be an important event for everyone concerned with mineral exploration and development in Labrador. Keynote speaker is the Hon. Brian Tobin. For further information, contact:

Win Barnes

Tel: (709) 896-8855

Fax: (709) 896-0585

Baie Verte and Area Chamber of Commerce Mining Conference

June 20-22, 1997

Baie Verte, NF

The Baie Verte and Area Chamber of Commerce is hosting its 10th Annual Mining Conference. This is an opportunity for business persons, representatives from all levels of government, people in the mining/geological industry and investment community to meet in a social environment to exchange information and ideas. A one-day "Exhibition" will be held for companies and individuals to display their products and services. For more information, contact:

Kevin Thistle

Tel: (709) 532-4279

Fax: (709) 532-4065

Annual Mines and Energy Ministers Conference

July 6-9, 1997

St. John's, NF

Newfoundland last hosted this conference in 1987 and will be the host this year to coincide with the Cabot 500 celebrations. Key issues to be discussed on the Mines side are regulatory efficiency and geoscientific databases. On the Energy side, key issues for discussion are electricity trade, climate change and energy/environmental issues. For more information, please contact:

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Fax: (709) 729-2508

e-mail: clester@atpl.dnr.gov.nf.ca

Exploration '97

September 14-18, 1997

Toronto, ON

This is the fourth decennial international conference on mineral exploration. Exploration '97 will review the current state-of-the-art in geophysics and geochemistry, the achievements made over the past 10 years, and provide a outlook to the future of the methods in mineral exploration and mine development. For more information, please contact:

Exploration '97 Committee

Tel: (905) 513-0046

Fax: (905) 513-1834

e-mail: 103214.545@compuserve.com

CIM District One Meeting

November 6-8, 1997

St. John's, NF

The Newfoundland Branch of the CIM is host for the CIM District One meeting in 1997. The meeting will include a two-day technical program, trade show and local field trips to areas of interest. The 21st annual review of Mines Branch activities and open house will be held in conjunction with the CIM Conference. For more information, please contact:

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