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Cassiar Courier

the Voice of Cassiar Country

October 1984

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Mines Minister visits area

B.C. Minister of Mines, Energy and Petroleum Resources, Stephen Rogers, toured Cassiar Resources Mine and Erickson Gold Mine on a recent three and a half day fact finding tour of the province's north west.

This is the first time he has visited the area as the Minister of Mines. He said there is nothing like first hand experience to make him aware of the kinds of operations and problems we have here.

He added, "It's easier for people to phone you if they've met you. They won't be apprehensive about phoning."

At Cassiar the Minister met with Mine Manager Keith Jones, Hugh Snyder President of Brinco Ltd., Peter Jones Vice President of Brinco Mining, and Paul Clarke, Bill Zemenchik, Stefan Dyk and Frank Buckley.

Keith Jones said they discussed the new McDame deposit as well as the possibility of hydro power for Cassiar and Erickson.

Speaking of Cassiar's future Mr. Rogers said, "I'm optimistic about what will happen in Cassiar. (There was the) Asbestos scare (but) people are becoming more knowledgeable about how much asbestos is used in their lives."

"The company also has to battle with other fibres and synthetics. They have a lot of little problems they need help with and there are things I can do to help," he said.

At Erickson Mr. Rogers toured the surface mine site on top of Table Mountain, several mine portals, the mill and a surface diamond drill. Mine Manager Al Beaton said the Minister was impressed with Erickson. He enjoyed the tour and the operation.

The Minister expressed optimism about this corner of the province. He said "I expect to see some big developments in the north west."

In particular Mr. Rogers spoke enthusiastically about the large anthracite orebody at the Gulf Klappan project about 100 km north of Meziadin Junction. This high quality coal deposit could see as much as one to three million tons of ore produced each year.



Pictured at Erickson were: Tom Schroeter Dist. Geologist; Mines Minister Stephen Rogers; Erickson Mill Supt. Jasman Yee and Mine Supt. Tom McGrail; Asst. Deputy Minister (Mines) Lorne Sivertson; Erickson Mine Manager Al Beaton.

"This may be the breath of life for Stewart," Mr. Rogers said. The anthracite could be shipped by truck to Stewart and then by boat.

During his tour the Minister visited Mt. Klappan, flew over the Chevron property near Telegraph Creek, toured a placer operation in Atlin, and visited Cassiar, Erickson and Stewart. He was accompanied by the Assistant Deputy Minister (Mines) Lorne Sivertson, Executive Assistant Penelope Chandler, District Geologist Tom Schroeter and journalist Joel Connelly of the Seattle Post Intelligence.

Meacock retiring

On Monday, September 17th, the Cassiar Detachment was visited for the last time by retiring Superintendent Andy Meacock. He will retire



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→ Cassiar

Project breathes life into old Cassiar mine

The former Cassiar mine is returning to life with the extraction of asbestos fibre from long-disused tailings.

"We're producing some material this winter and hope to resume both winter and summer production in 2000," Clifford Frame, chairman and president of Minroc Mines, said from Toronto.

Through wet process technology, the company is producing about 1,000 tonnes of magnesium silicate (asbestos) fibre per month, but hopes to raise that figure to 65,000 tonnes a year by 2000. Fibre reserves are worth between \$500 million and \$700 million and can be used for cement-based building pipes.

Long-term plans include a preliminary feasibility study of the production of magnesium metal at Cassiar. Currently, only 15 people live at the mine site. The number could near 100 within two years, said Frame, though most employees may live in Watson Lake or Dease Lake. Frame expects "a fair number" of indirect jobs to be created through trucking asbestos to Vancouver and transporting materials needed for the mine's operation.

The Cassiar mine closed in 1992 after 38 years of operation, when a production shift from open-pit to underground methods proved unprofitable and the company operating it became insolvent.

Minroc has an agreement

with a Japanese company, Kakiuchi, to distribute the fibre in Asia.

Asbestos fibre is used principally to strengthen cement pipes and make them water-resistant in humid climates. Such pipes are utilized in parts of the southern U.S., South Africa, Africa and the Middle East.

Frame said the use of wet process technology can continue when the mill is winterized. He said the technology has been tried for decades in Quebec, South Africa and Zimbabwe, but

has only recently been perfected.

Frame called the white asbestos fibre, also known as chrysotile, "relatively safe," adding that any dusty substance can cause problems if precautions aren't taken. Health risks have been associated with other varieties of asbestos, according to the company.

Minroc has no immediate plans to use underground asbestos reserves at the mine, Frame said.

Frame formerly headed the ill-fated Westray coal mine in Nova Scotia.



→ Cassiod

search for low-sulphur coal and the development of large strip mines to exploit such deposits which, says Worldwatch, brings attendant environmental damage and uprooting of indigenous peoples.

The organisation advocates the phasing out of subsidies to encourage coal use which are available in some countries, and applauds the introduction in certain countries of a tax on high-sulphur coal as a means of encouraging users to switch to natural gas and/or renewable energy sources. In order to phase out the use of coal successfully, Worldwatch says that a fair transition for affected workers, estimated to be about ten million worldwide, "will need to be managed". However, it does not elaborate on this aspect, apart from referring to the establishment of solar-cell manufacturing sites near some abandoned coal-mines in China and the UK to "minimise the dislocation for workers".

Representing coal producers, the London-based World Coal Institute (WCI) has issued a response to the Worldwatch message. It asserts that coal will continue to play a major role in world energy for the foreseeable future and cites a number of reasons: reserves are abundant and coal is mined in more than 50 countries; it is safe to transport, store and use; abundant reserves guarantee security of supply at competitive prices; the development of clean-coal technology and more efficient use of coal; and coal's pre-eminence as the major source of energy for power generation.

The WCI points out that one third of the world's population does not have access to commercial energy and contends that for many people in developing countries coal will provide the most viable indigenous energy resource, providing early access to improved living standards.

Referring to the environmental challenges, the WCI says that innovation and technology have delivered a range of solutions and answers to efficiency issues. The greatest gains can be made in the Asia region which is expected to dominate future demand for coal. The net plant-efficiency of coal-fired power plants in the region is up to 10% lower than the OECD average of 36%. It is even further below the 45% efficiency now being achieved with the advanced technologies. The WCI says it is actively supporting technology transfer leading to more efficient coal combustion, and notes that an improvement in coal-combustion efficiency from 30% to 40% results in a CO₂ reduction of 25% per unit of energy produced. At the present time, the average global efficiency has yet to reach 25%.

The WCI says that dependence on coal is increasing and notes that annual demand for coal has grown by over 1,000 Mt in the past two decades. It asks whether it is feasible to reverse this dependence, in the context of growing demand and in light of the

economic and social objectives of the majority of the world's population.

According to BP-Amoco, in 1998 coal met 26% of the global requirement for primary energy. Oil contributed 40%, natural gas 24%, nuclear power 7% and hydroelectricity 3%. In contributing more than one quarter of total global primary energy demand, coal continues to be the major energy source for power generation, with some 37% of the world's electricity needs being generated from coal. Based on the reserves to production ratio, there is sufficient coal to satisfy requirements for well over 200 years at current consumption rates. This compares with just over 40 years for oil and nearer 60 years for natural gas.

Coal's share of electricity generation varies widely amongst individual countries, however. For example, coal's share in Japan is around 15% compared with a 56% share in the US. The EU obtains about 15% of its electricity from coal, whereas China, India, Poland and South Africa depend on coal for over 75% of their electricity requirement. □

South Africa's other problem

As if the low gold price was not enough, a far more serious (and insidious) problem facing South Africa's mining industry is the rapid spread of AIDS within the workforce. At a recent seminar organised in Johannesburg, Janina Slawski, convenor of the Actuarial Society of South Africa's AIDS Committee, produced some startling facts and figures. Amongst South Africa's miners, she said, the rate of infection with HIV (the virus which causes AIDS) is 7-17% higher than amongst other population groups and she warned that it could be 50% higher within the next few years. AIDS is now of epidemic proportions within the mining sector and threatens to kill up to 10% of the workforce each year.

According to Ms Slawski, South Africa has the fastest-growing HIV infection rate in sub-Saharan Africa. At the gold mines, which employ a workforce of almost 250,000, the problem is worse because most workers live in single-sex hostels and the virus spreads easily through prostitution. A recent study of mineworkers in the Carletonville area, the centre of some of South Africa's biggest gold mines, showed that up to 75% of prostitutes in the area are infected with HIV. The study, conducted by South Africa's Epidemiology Research Institute, estimated that the infection rate among Carletonville mineworkers was more than two-thirds higher than the national average.

Ms Slawski says that the adverse impact of the epidemic on South Africa's gross domestic product could amount to 1-2% annually. Companies will need more labour in order to maintain production, and mining

companies could be faced with the grim prospect that each year 5-10% of their workforce could be lost to AIDS. Apart from illness-related absenteeism, the disease, she said, could put enormous strain on the mining companies' hospitals, and on their death and disability funds. □

UK asbestos ban

The UK Health and Safety Commission (HSC) has announced that the importation, supply and use of chrysotile (white asbestos) in Britain is to be banned with effect from November 24 this year. The ban also extends to the supply and use of second-hand asbestos-cement products, and of board, tiles and panels which have been painted or covered with paints and textured plasters containing asbestos.

The HSA says that the move comes after widespread consultations in 1998 on proposals to impose a ban "indicated overwhelming support". The UK domestic regulations will implement a European Directive five years ahead of its deadline. A technical amendment to the European Commission's Marketing and Use Directive which became European Law this month requires all EU members to cease the marketing and use of chrysotile after January 1, 2005, but allows individual countries to implement the ban beforehand.

The chairman of the HSC, Sir Frank Davies, said that he is delighted that the ban is being introduced and noted that the HSC had indicated in 1997 that it intended to ban chrysotile, in order that manufacturers and employers could take steps to convert to substitutes. "It makes absolutely no sense at all to continue using chrysotile products when we know that safer substitutes can be used in most situations", he said.

The regulations include a number of time-limited exemptions which permit the use of chrysotile in safety-critical applications, where no substitute is currently available, such as the use of compressed-asbestos-fibre gaskets in situations involving hazardous substances, and the use of asbestos for the manufacture of protective clothing used in very high temperatures. Under the regulations, the supply of asbestos for disposal purposes, and the importation, supply and use of chrysotile for research, development or analysis, will also be allowed. The continued use of products containing chrysotile will be permitted until they reach the end of their service lives, if they were in use before the new regulations came into force.

The use of the most dangerous form of asbestos, crocidolite (blue asbestos) and amosite (brown asbestos) has been prohibited in the UK since the mid-1980s, and certain uses of chrysotile have been prohibited since 1992. □

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m instead of 9 m), and mill throughput (18 Mt/y instead of 11 Mt/y).

A new feasibility study of the Wandoo deposit, which lies beneath the laterite horizon of the original operation, has identified several innovative flowsheet improvements over the initial feasibility study completed in 1997, allowing the increases in scale to be contemplated. If the operation achieves 18 Mt/y throughput, gold output would be around 500,000 oz/y. Pilot testing will be conducted, extending the study schedule into the first half of 2000.

... Gladstone magnesium plant progress

Normandy also reports that the development of 65%-owned Australian Magnesium Corp.'s (AMC) magnesium plant near Gladstone in Queensland (this issue, p.191) is continuing, with a feasibility study scheduled to be completed early next year. The pilot plant for the operation has produced its first magnesium metal ingots, confirming AMC's process technology and flowsheet design (*MJ*, October 2, 1998, p.258). The plant has taken 12 months to complete commissioning, and the company will now attempt to demonstrate "sustainable production of high specification magnesium metal".

Dr Ian Gould, AMC's executive chairman, says that the first metal ingots represent an important step in the creation of a magnesium metal industry in Australia. Dr Gould expects to be able to decide whether the process is commercially viable by the middle of next year. If so, a 90,000 t/y facility is envisaged at Stanwell, outside Rockhampton in Queensland

Bula attracts IMO

Irish Marine Oil plc (IMO) has completed a feasibility study on the purchase and development of the Bula zinc orebody at Nevinstown, Co. Meath, Ireland. The orebody is being sold by the receiver of Irish exploration junior Bula Ltd (*MJ*, May 14, p.358). IMO has concluded that the deposit would support a stand-alone underground mining operation via a decline, utilising underground crushing. The concentrate would be transported to Dublin by rail, and would maximise underground tailings disposal, with the remainder being railed to a suitable location.

John Teeling, chairman of IMO, told *MJ* that the company is at an early stage of discussing the financing of the project.

Kroondal ships first concentrate

Aquarius Platinum Ltd reports that its 45%-owned Kroondal platinum group metals (PGM) mine in South

Africa has shipped its first PGM concentrate, four weeks ahead of schedule. The site works for the 175,000 oz/y Kroondal operation were started only 12 months ago, after Kroondal Platinum Mines Ltd was listed on the Johannesburg Stock Exchange (*MJ*, August 7, 1998, p.115). A total of 13 t of PGM concentrates has been delivered to Impala Platinum Holdings Ltd's Rustenburg refinery. Implats has a life-of-mine offtake agreement with Aquarius on the output from Kroondal (*MJ*, April 17, 1998, p.304).

In addition, Aquarius reports that it has recently commissioned a full feasibility study of its wholly-owned Marikana PGM property, also in South Africa. The company expects that Implats will buy the output from a mine developed from the Marikana deposit.

Avisma sues US investors

Russia's largest titanium producer, Avisma, has filed a US\$150 million lawsuit in New Jersey, US, against Kenneth Dart, the head of Dart Container Corp., and other investors, according to Interfax. Avisma alleges that Mr Dart and other investors embezzled funds and laundered them through offshore companies, causing damages to Avisma of US\$50 million.

Foreign funds sought for Ikot Abasi

Nigeria's ALSCON aluminium producer is looking to its foreign shareholders to raise funds overseas to restart its Ikot Abasi plant, providing the scheme wins government approval next week. Ferrostaal and Reynolds International have apparently considered a number of different options to raise the US\$330 million required to recommence operations at the troubled smelter, which closed down in June (*MJ*, June 18, p.460). The gas-powered smelter has been plagued by power supply problems, and has achieved only 29% of its 193,000 t/y nominal capacity since its start-up in 1997 (*MJ*, November 7, 1997, p.383).

Egyptian steel plant development

A new steel project worth US\$668 million will start production in the year 2001, according to Egypt's Industry Minister, Soleiman Reda, speaking in Cairo on August 26. He said the project in southern Aswan, 690 km south of Cairo, is being built by the South Aswan Iron & Steel Co. German, American, Italian and French companies are investing in the project, according to Mr Reda, but he did not elaborate. Reserves of raw materials have been increased from 75 Mt to 90 Mt in order to supply the new project for 30 years, although no details of the proposed production capacity of the new plant were given.

Mr Reda expects current domestic steel production of 4.5 Mt/y to reach 8.5 Mt/y by the year 2002.

Lithium plant output brought forward

The planned 750 t/y lithium carbonate plant to be built at Shawinigan, Quebec, by Lithium Metal Technologies Inc. will achieve its full output capacity early in 2000. The previous timetable had output beginning at 50 t/y by the end of this year, rising to 200 t/y by March/April 2000, and 750 t/y by late 2000.

Additionally, the company is developing a lithium chloride process, with the construction of a pilot plant expected to begin late this year.

Production

South African coal wage deal

A four-day strike by 9,000 National Union of Mineworkers (NUM) members in South Africa at Anglo American Coal's operations was ended on August 26, after terms were agreed between South Africa's Chamber of Mines and the NUM. The two-year agreement will give NUM members an 8% wage increase in the first year, and an increase in the second year equivalent to average inflation plus 1%. Workers at the other main coal producer in South Africa, Ingwe Coal, a subsidiary of Billiton, settled with the Chamber on similar terms, according to Reuters.

The Chamber of Mines also negotiated wage deals with NUM members at South Africa's gold mines as part of the same round of talks (*MJ*, August 20, p.143).

Highland Valley to reopen

A five-year labour agreement between management and unions at the Highland Valley copper mine in British Columbia should allow the mine to reopen as soon as possible. The mine was closed in May this year after the two sides failed to reach a wage agreement (*MJ*, May 21, p.382). A vote by workers previously employed by the operation endorsed the labour agreement by 86% to 14%, according to union officials. The company and union have pledged to work together to get the mine and processing facility back up to full operating capacity by October 24 at the latest.

The wage deal ties pay to the price of copper, which has been the key demand by Highland Valley management in its negotiations ever since the mine closed. The mine was closed because the management and unions could not agree on cost reductions in the face of low copper prices. The agreement is back-dated to October 1, 1998, and links workers'

pay to the LME price for copper, allowing for a 15% fluctuation in wages based on the metal's price performance.

BHP copper output falls

Predictably, the July production figures from BHP show a steep fall in copper production to reflect the cessation of production at its North American operations on June 25 (*MJ*, July 2, p.2). Compared with July 1998, group production was down by 27% to 58,300 t of copper in concentrates. An additional factor affecting output was reduced production at Escondida in Chile where mill recovery and head grades were both lower. However, Escondida's cathode production and shipments were higher, following the commissioning of the oxide leaching plant.

BHP's iron-ore shipments in July were maintained at the record level achieved in July 1998 and reflected stronger-than-expected customer demand. This enabled some reduction of stockpiles, and actual production at the Pilbara mines was down by 15% to 4.2 Mt. Monthly production of hot briquetted iron at the Port Hedland plant, which was commissioned in April, reached 56,000 t.

Morenci moves to full leach

Phelps Dodge Corp. is to expand SX-EW operations at its Morenci copper mine in Arizona, leading eventually to all production being by the process. At present about half of Morenci's output comes from SX-EW. The move is designed to reduce operating costs associated with concentrating, smelting and refining at the facility. The concentrator at Morenci will be put on stand-by. The US\$220 million expansion, scheduled to be complete by 2001, will reduce costs by US\$0.07/lb of copper, according to Phelps.

Kosaka output increased

The copper smelting and refining plant at Kosaka in Akita Prefecture, Japan, has raised output from 5,000 t/month to 6,000 t/month, according to operator, Dowa Mining Co. Ltd. The smelter at Kosaka has had a 6,000 t/month output for some years and the increase is because the capacity of the refinery has been boosted to match that of the smelter (*MJ*, April 11, 1997, p.290).

Iquique strikers return to work

Workers at the Chilean port of Iquique have returned to work, after negotiations between unions and management of the shipping agency successfully resolved the wage dispute which caused the recent strike.

Asbestos

By Tom Kendall*

Battered by the Asian economic crisis, under fire from new legislation in Europe and continuing headlines about litigation, who would choose to be an asbestos producer today? But despite all these blows, the industry remains on its feet, albeit clinging to the ropes, and 1998 even saw a new entrant enter the fray. Global asbestos production has slid to around 2.0 Mt/y – a massive fall from the heydays of the early 1980s when output was closer to 4.8 Mt/y. The last crocidolite mine has closed and chrysotile producers are having to work hard to retain existing markets. That said, asbestos cement remains an important construction material throughout much of Latin America and Asia.

Asbestos cement products are the key to the health of the asbestos industry, consuming 85-90% of total crude output. A wide range of products are manufactured such as pipes, jackets, boards, cladding panels and roofing shingles. Asbestos cement products remain under the threat of substitution in a number of markets, particularly in pipes where PVC, fibreglass and reinforced concrete have all taken market share. Friction products such as brake pads and gaskets make up the bulk of the remaining market in volume terms, while woven articles are important consumers of the high value longer fibres.

Asia is the crucial market for most chrysotile suppliers. A list of the top ten importers would normally include Japan, Thailand, South Korea, China and Indonesia. These five countries alone accounted for close to 30% of world consumption 1996. The severe economic crisis in Japan and South East Asia therefore had an exaggerated impact on the asbestos industry and the pattern of Canadian exports in recent years demonstrates the problem. In 1992, Canadian chrysotile exports were 600,577 t. By 1996 they had decreased to 504,747 t and in the following year they slumped to 420,258 t. Last year producer shipment figures indicate that exports totalled just 322,074 t.

The impact has varied across Asia – Indonesian imports remain virtually non-existent, South Korea is showing flickers of recovery, while India on the other hand has remained stable. All suppliers, however, can only hope that recovery in the Japanese economy comes sooner rather than later. Japan is traditionally the single most important asbestos market, importing over 170,000 t/y.

With chrysotile consumption so closely linked to construction activity, exports to Japan from the main production centre of Quebec have fallen sharply and the value of

exports to Japan dropped 28% between 1997 and 1998.

South America is also an important region of asbestos consumption. Brazil is the main producer and exports to virtually all other South American countries.

Production trends

Canada remains the largest asbestos producing country outside the CIS, although production has been heading downwards over the past two to three years. This has been accompanied by the number of active mines falling to three (down from eight in the early 1980s) and a further reduction in the asbestos mining/processing workforce. The industry is centred around the Thetford Mines-Asbestos region of Quebec and is still a very important employer. Sales of chrysotile by the two producers bring in annual revenues of around C\$260 million.

The largest producer, LAB Chrysotile, produced some 275,000 t of chrysotile in 1997, around 220,000-240,000 t in 1998 and is planning to produce 200,000-210,000 t in 1999. The company will close its Bell underground mine for several weeks during the second half of the year to undertake development work on new levels. Development work is also continuing at the company's large Black Lake open pit. JM Asbestos Inc. operates the Jeffrey mine close to the town of Asbestos in Quebec. The mine is currently still operating as an open pit (similar in size to LAB's Black Lake pit) but the company is spending about C\$125 million to take operations underground early in the next century. Production is estimated to have fallen to 100,000 t in 1998, less than half production three years ago.

Cassiar Mines and Metals Inc. (formerly Minroc Mines Inc.) is recommissioning the chrysotile processing plant at Cassiar, BC. After delays in raising the necessary finance, the company expects the plant to be in production by the end of the third quarter 1999. Cassiar intends to produce 18,000-20,000 t/y of dry processed fibre plus 6,000-7,000 t/y of wet-milled fibre from tailings.

SA Mineração de Amianto (SAMA) of Brazil remains an important supplier of chrysotile to Latin American markets. Because well over 50% of output is consumed domestically, SAMA has not been as heavily impacted by the Asian crisis as the Canadians. Production over the past five years has fluctuated between 190,000 t and 210,000 t/y.

The sole asbestos producer in Greece, Hellenic Mineral Mining Co. had been enjoying a strong level of orders until the Asian crisis hit sales. Production fell from 80,000 t in 1996 to under 50,000 t in 1998. Over 95% of production is exported, with the majority of this heading to Asian markets. The company also supplies consumers in Spain and Portugal which will be lost if the proposed EC ban on asbestos is enforced.

EC ban

The decision by France to ban the production and importation of asbestos products on January 1, 1997 was controversial and provoked a strong reaction from the Canadian producers. In May 1997, the Canadian Government instigated formal consultations at the WTO to resolve the dispute. The European Commission pre-empted any decision by announcing its own ban on almost all remaining asbestos applications in July 1999. The only exemption is the use of chrysotile in electrolysis diaphragms in chlorine plants. The ban will be applied throughout the EC by January 1, 2005 at the latest.

China produces around 450,000 t/y of chrysotile asbestos from well over 100 mines. These are concentrated in two main regions; the far western provinces of Qinghai and Xinjiang, and the eastern provinces of Liaoning and Hebei. The majority of Chinese production is of fairly short fibres for asbestos cement. Imports, particularly of longer fibres, have been increasing rapidly throughout the 1990s, with Russia being the only significant supplier. Russia is now estimated to supply 80,000-100,000 t/y of chrysotile to China.

The only internationally important chrysotile producer operating in South Africa, Msauli Asbes Beperk, produced 35,000-40,000 t of fibre in 1998 from its underground mine and processing plant in the Barberton area of Mpumalanga (Eastern Transvaal). Again, Asia is the company's most important market, and production has halved over the past five years.

Across the border in Zimbabwe, African Associated Mines operates the Shabanie and Gaths mines, near Zvishavane and Mashava respectively. They produce 3 Mt/y of crude chrysotile ore, yielding some 150,000 t/y.

Price stability

Prices for most asbestos grades have only slipped slightly in the face of the Asian crisis, as output is being adjusted downwards to reflect the slump in demand. Producers recognise the need to avoid the situation of the mid to late 1980s when the height of hysteria was reached by those opposed to any use of asbestos. During that period several operations closed, the market was oversupplied and prices suffered. Current indications for Canadian asbestos (C\$/t examine) are as follows:

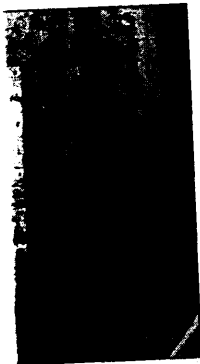
Group 3	1,495-1,800	Group 6	425-610
Group 4	1,030-1,440	Group 7	210-435
Group 5	685-950		

* Industrial Minerals Research, 16 Lower Marsh, London SE1 7RJ.

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TMIM

time gain of \$4.2M from the July 1 completion of a partnership with Normandy Mining Ltd. The transaction provided TVX with cash proceeds of \$211M, and management said the partnership will actively pursue new opportunities in the Americas.—WAC

IN CANADA

ALBERTA

Syncrude Canada has received approval from the Alberta Energy and Utilities Board for its \$C3B Mildred Lake upgrader expansion near Fort McMurray. The project is designed to lift Mildred Lake oil production from 93M bbl/d to 173M bbl/d. Startup for expanded production is targeted for the fourth quarter of 2003 (*E&MJ*, January 1999 and 1998)—LW

BRITISH COLUMBIA

Minroc Mines Inc. has changed its name to Cassiar Mines & Metals Inc. The change was made to reflect the company's core business, which is the redevelopment of the Cassiar mine in northern British Columbia to produce magnesium silicate fiber and magnesium metal.

The Cassiar mine has some 20M mt of mined serpentine ore stockpiled on surface. This resource grades about 23.5% magnesium metal and 4%-10% magnesium silicate fibers. Cassiar's stage-one development plan calls for production and sale of 18K mt/yr high-quality fibers, beginning in the third quarter of 1999.—LW

Cassiar Mines & Metals Inc. and Aluminum of Korea Ltd., a Hyundai Group company, signed a memorandum of understanding in early July for development of the Cassiar magnesium metal project in northern British Columbia.

Aluminum of Korea Ltd. can acquire a 35% interest in the project in conjunction with an initial \$25M financing, and ultimately may acquire a 65% interest by providing the additional project funding.

Aluminum of Korea, which is a major supplier of metal products to Hyundai Motor Co. and Kia Motor Co. in Korea, will be entitled to buy as much of the product as it requires, with the remainder to be sold in international markets.

The magnesium resource at Cassiar totals 20M mt of stored serpentine materials containing 8B lb of recoverable magnesium metal. The development program contemplates construction of a production facility in British Columbia with a capacity of 150M-200M lb/yr magnesium metal. Total capital cost of the facility will be in the order of \$600M.

TMIM

First production under the development plan is projected to occur in early 2003.—LW

NORTHWEST TERRITORIES

BHP Diamonds Inc. and Dia Met Minerals Ltd. completed construction of their diamond sorting and valuation facility at the Yellowknife airport in mid-February.

The facility is the first of its kind in North America. Government valuations for royalty purposes, which were previously conducted at the Ekati diamond mine, will now be carried out at the Yellowknife facility. Initial employment at the facility is expected to be about 15 people.—LW

BHP Diamonds Inc. and Dia Met Minerals Ltd. announced a Memorandum of Understanding (MOU) has been signed between BHP Diamonds and De Beers Centenary for the sale of a portion of the production of rough diamonds from the Ekati diamond mine.

The MOU provides for the negotiation on the sale of 35% of the run-of-mine production from the Ekati mine over a three-year period. The final arrangement will require appropriate approvals and is expected to be completed by mid-1999.

Regular sales to De Beers would begin shortly thereafter.

"With this arrangement in place, we will have implemented the final major component of our marketing program," said James R. Rothwell, president of BHP Diamonds. "We are currently selling our production through the BHP Diamonds' sales office in Antwerp. The market response has been very positive and we have certainly made a successful market entry. Once the De Beers agreement is in place, the remaining 65% of the production will continue

to be marketed in James E. Ecc "We are pleased Beers, the world's standing will lead production."

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W

Vancouver

TOS → Cassiar

The Re-development of Cassiar

William Dunn, the resident manager at the Cassiar Mine in northern British Columbia, gave a presentation at the "Re-development of Cassiar" for the May 25 Vancouver Branch luncheon.



William Dunn

The chrysotile-rich Cassiar Mine, which originally commenced operation in 1953, closed in 1992 due to an unsuccessful conversion from open-pit to an underground operation. In his discussion, Dunn highlighted the efforts of current owners, Cassiar Magnesium, Inc., to resolve past environmental issues and ensure the viability of the mine in

the future. With a mandate for environmental reclamation of asbestos-laden tailings and the townsite, Cassiar Magnesium already received an award for clean-up in 1995.

Among recent efforts by the new owners, Cassiar has built a pilot wet-plant to produce a short asbestos fibre product which has been distributed to prospective clients. As well, a section of the former dry mill, including the concentrator, milling circuit, air handling and packaging machinery, was rebuilt and commissioned in 1999 to achieve normal production in 2000. The three major ore sources at the site are the dry mill tails pile, talus slope

downhill from the original deposit and low-grade stockpile from the original operation. These resources are expected to yield 20 000 tonnes of fibre per year valued at over \$15 million. Major markets for the asbestos include building materials (i.e. mixed with concrete) and car parts, including break and clutch plates. There are no immediate plans to extract the subsurface orebody.

Cassiar Magnesium's long-term focus is on the production of magnesium metal. Serpentine at the mine contains 24% magnesium, is present in a virtually inexhaustible quantity, and can be economically transported to a location where electrical power costs are competitive. Dunn highlighted current initiatives including an agreement with Aluminum Corporation of Korea to investigate magnesium production and the licensing of the Noranda technology being implemented at the Magnola Project in Danville, Quebec. This process uses a molten bath similar to aluminum refining methods. The abundance of magnesium will likely ensure a viable future for the Cassiar Mine and surrounding community.

Bill Dunn is currently the resident manager at Cassiar Mine. His mine engineering and supervisory experience originated with companies such as Afton Mines and Fording Coal. Prior to joining Cassiar, Dunn also worked for Curragh Mines, Royal Oak Mines and United Keno Hill Mines as chief engineer, superintendent and manager, respectively. Dunn's presentation was an excellent conclusion to the 1999-2000 Branch luncheon series. The CIM Vancouver Branch looks forward to resuming the series in September.

Los Andes branch

The Los Andes Branch shared a booth with CIM National and CIM Tradex at EXPOMIN. It was very successful for both parties. The Branch made a lot of contacts, passed out information about CIM activities and attracted a substantial amount of interest in the CIM Los Andes activities by passing out brochures and by hosting a mining seminar on Friday, May 12, at the Salon de Plenarios at FISA fairgrounds jointly with the Canadian Embassy, who sponsored a cocktail following the event.

The seminar featured two guest speakers: Sherry Noble, vice-president and group leader, Engineering and Professional Services, Export Development Corporation, EDC, who spoke about "Canada's EDC: a Commitment to Mining Finance in Latin America"; and Maureen Jensen, director, mining services, Toronto Stock Exchange, who spoke about "Mining and the TSE: Building on Success."

Jensen's talk is part of the CIM Distinguished Lecturers series this year.



joint venture exploration agreements around the Grasberg deposit.

FMCC's 86%-owned Grasberg operation is currently being expanded to an ore milling rate of 118,000 t/d, to yield an annual 500,000 t copper and 1.5 Moz gold. However, the partners are now to commence immediately a feasibility study which is expected to result in an expansion of the mining and milling capacity of Block A (where the existing operations are located) to between 175,000 and 200,000 t/d of ore. Confirmation of this 50% expansion is expected before end 1995.

Pacific Arc in gold project in Myanmar

Australian explorer Pacific Arc Exploration has signed a production sharing contract with the Myanmar Government's No. 2 Mining Enterprise for alluvial gold exploration and development centred around the village of Mansi, 450 km north of Mandalay, Myanmar's second city. Two main areas of alluvial gold occurrences, each with a different primary source, were identified in a reconnaissance field trip. After preliminary qualitative panning, a site was selected and mapped in preparation for a quantitative bulk sampling programme.

LFT acquires more ground in the Philippines

London Fiduciary Trust plc has recently acquired an option on the 486 ha Spondonis property in the Philippines. The property, which contains many high grade gold vein structures, is in the far northeast of the island of Mindanao, about 100 km north of the company's operating Masara gold mine.

Many of the known veins are currently being worked by small miners and preliminary exploration of these structures is producing highly encouraging results from sampling; of the small miners' adits. The results include 8 m grading 39.8 g/t gold, 1.5 m grading 54.7 g/t, 1.25 m grading 42 g/t, 1.7 m grading 25.3 g/t and 1.7 m grading 17.1 g/t.

Delta acquires Malita prospect, Philippines

Delta Gold Mining Corp.'s wholly-owned subsidiary, Plantation Mining Corp., has reached an agreement to acquire a 90% interest in the Malita copper-gold property in Davao del Sur

Province in the Philippines. The property, comprising a total of 4,250 ha, is covered by a Mineral Production Sharing Agreement (MPSA) filed with the government by the vendor of the property, Little Baguio Mining Corp., a Philippine company. The project site is readily accessible by road and 100 km south of Davao City, the commercial centre of Mindanao.

At least five primary targets have been identified, characterised by bornite and chalcopyrite mineralisation in quartz vein stockworks and breccias.

NORTH AMERICA

Teck takes stake in Voisey Bay, Labrador

Teck Corp. has taken a stake in the Voisey Bay nickel-copper-cobalt discovery in Labrador, Canada, by purchasing a 10.4% stake in Diamond Fields Resources Inc. Teck's investment, the first by a major mining company, is through an agreed purchase of 3 million treasury shares in Diamond Fields resources for a total consideration of \$C108 million. Teck will pay \$C84.4 million in cash, and one million class B common shares for the stake.

The first indication of the potential at Voisey Bay was shown by a hole drilled in October 1994 which returned a 71 m intersection grading 2.2 % Ni, 1.5% Cu and 0.12% Co. Following this discovery a much larger target was defined from which a series of drill holes, now numbering over 80, have returned quite spectacular intersections. Disseminated and massive sulphide ore has been encountered at shallow (around 16m) depth, with the highest grades running fairly consistently at 3.7% Ni, 2.4% Cu and 0.13% Co over widths of 70 m or more.

Absolut and Tanqueray stake near Voisey Bay

Last year, Tanqueray Resources spun off a special dividend to its shareholders in the form of shares in a new company, Absolut Resources. Absolut has been engaged in a large staking exercise around the Voisey Bay discovery in Labrador and is the second largest landholder. It has also acquired an additional 138,141 ha near Minipi Lake in southern Labrador, where mafic and ultra-mafic intrusive bodies are believed to be similar to the lithological unit hosting the Voisey Bay discovery.

Tanqueray has also staked ground totalling 42,482 ha near

Minipi Lake, covering a circular magnetic anomaly.

Noranda plans Mg-from-asbestos plant

Noranda Inc., in conjunction with the provincial authorities in Quebec, plans to build a \$C25 million plant in Thetford Mines to process residue from old asbestos mines. The Magnola project is expected to be on line by 1997. The plant will use a new process developed by Noranda technology to convert tailings from the old asbestos workings into magnesium. The project is expected to produce 58,000 t/y of magnesium for export.

The project is to be financed by Noranda Inc. 52%, Société Générale de Financement 16%, SNC-Lavalin 16%, and Aisin Seiki, a Japanese auto-parts manufacturer affiliated with Toyota.

SOUTH AMERICA

Increased reserves at Yanacocha, Peru

Minera Yanacocha expects to increase reserves at the Peru's largest gold mine this year and will decide in October whether to incorporate a third deposit into the mining operations. Yanacocha, 600 km north of Lima, poured its first gold in August 1993 and last year recovered 304,550 oz, some 41% higher than forecast. This year, production from the Yanacocha joint venture is expected to exceed official projections of 450,000 oz, as the operations are expanded.

To date, some 4 Moz of gold in reserves have been proved within two deposits (Carachugo and Maqui Maqui) on the Yanacocha concession and drilling began at two new targets in January. Some \$10 million will now be spent on a 65,000 m drilling programme on the Cerro Yanacocha and San José orebodies, where preliminary results have indicated deposits of similar grade and size to Carachugo and Maqui Maqui, sufficient to justify another operation.

Inco/Korea Zinc joint-venture in Brazil

Inco Ltd has entered into a joint venture agreement with Korea Zinc Co. to conduct a \$US6 million detailed engineering study to develop a nickel project in Brazil. The project is planned to include a plant designed to have an annual production capacity of 40 Mlb of nickel in matte. Initial feed will be provided from the Barro Alto mineral deposit in the

State of Goias, about 150 km northwest of Brasilia. This deposit includes 36 Mt of proven and probable lateritic ore reserves grading 1.9% nickel.

Cambior studying La Granja, Peru

Cambior Inc. is due to complete a feasibility study of La Granja, a copper deposit in northern Peru, by the end of 1996 and could begin developing the deposit by 1997, with the intention of bringing it to production in 1999. The company expects to complete the pre-feasibility study this year, after spending \$10.5 million on drilling and exploration. Cambior acquired a five-year option on the property from the state in March 1994 with an offer to spend \$25 million on exploration.

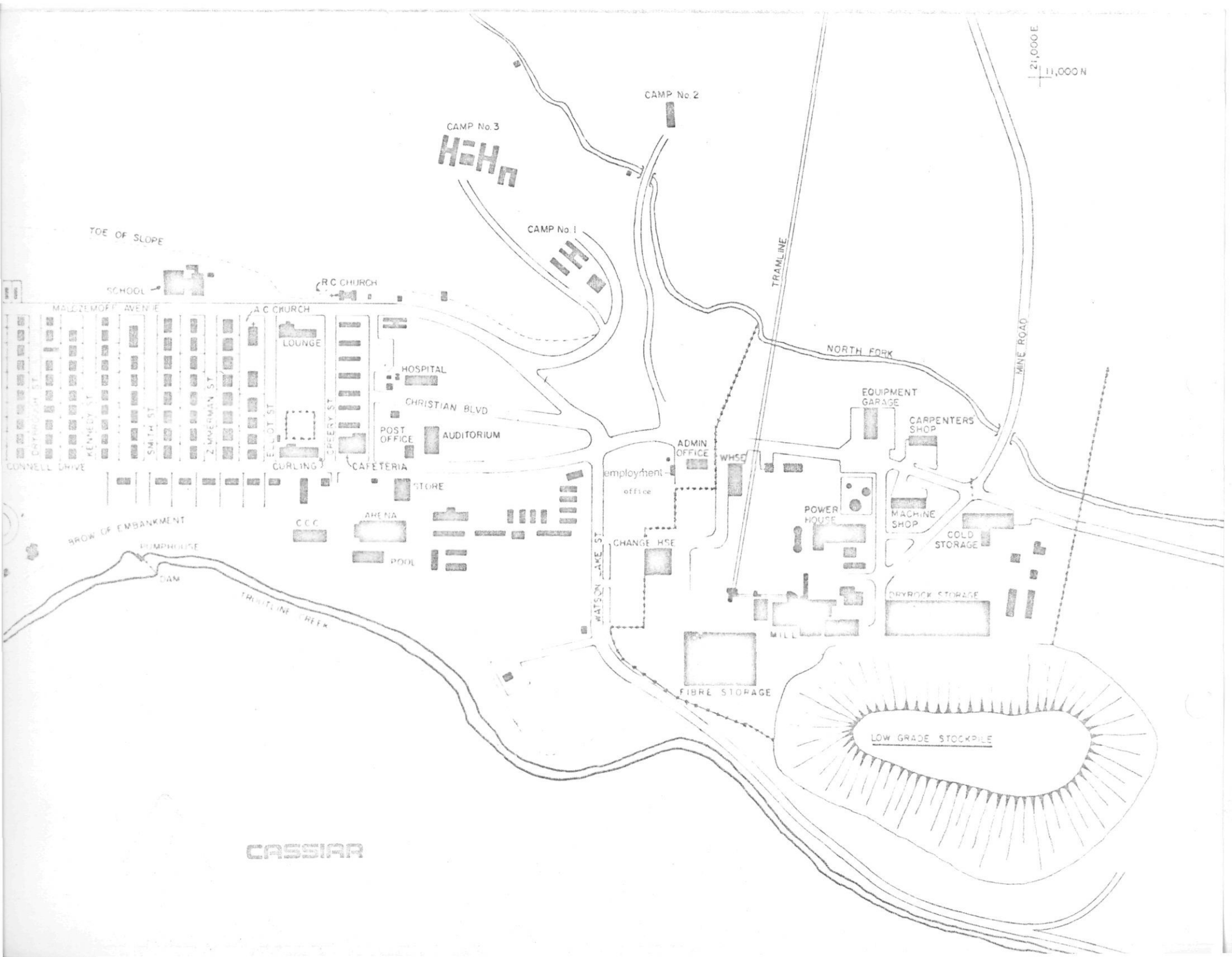
The project, located 640 km north of Lima in Cajamarca department, was originally considered a copper-gold site, but subsequent work has shown the gold to be uneconomic. Cambior has since decided to develop La Granja as a copper mine, using either SX-EW of flotation as the treatment process. Following expenditure of \$5 million and drilling of 7,000 m, Cambior has established a reserve of 212 Mt grading 0.9% copper. Once in operation, the mine could produce 40,000 t/d of ore, equivalent to between 50,000 t/y and 60,000 t/y of fine copper.

Echo Bay and Canarc to explore in Guyana

Earlier this year, Canarc Resource Corp. entered into a strategic alliance with Echo Bay Mines Ltd, to explore for and, if successful, develop to production, large scale gold deposits on one of Canarc's properties. It was recently announced that Echo Bay Mines has selected the Baramina property in northwest Guyana for further exploration and development work. Baramina is a 5,500 ha property close to the Venezuelan border the the region had provided work for artisanal miners for nearly 100 years. Canarc's work to date has defined seven gold targets on an 8 km west-northwest trend, which is located in a structural zone along a regional granite-greenstone contact.

The Millionaire prospect in the far east of the property has returned assays of 2.3 g/t over a 51 m width in saprolite and 11.5 g/t gold over 40 m in quartz tailings from an old stamp mill. To the west, artisanal miners are estimated to have produced 14,000 oz from 28,000 t of saprolite with a grade of 17 g/t. □

21,000 E
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CASSIAR

Codelco blueprint

Continued from p.17

The expansion at Radomiro Tomic will broaden treatment facilities and increase daily extraction of ore and waste by 50% to 300,000 t. Codelco's director of development, Juan Enrique Morales, said this week that a maximum of US\$50 million would be invested this year, noting that this figure is included in the total US\$450 million investment approved by the government for 1999. When construction reaches its peak in 2000, around 1,500 people will be directly involved and a further 750 people indirectly. Mr Morales said that basic engineering is already complete and that the expansion is based on a copper price of US\$0.70/lb and an exchange rate of ChP450/US\$.

Radomiro Tomic is Codelco's newest division. It started up in March 1998 and was the first Codelco project undertaken under an engineering, procurement, construction and management contract. The project was completed in a record time of 22.5 months and the total investment was US\$683 million. Optimisation of the facilities enabled the original scheduled annual output of 150,000 t to be raised by 20%.

Less positive, for Codelco, are problems at its Andina division, which late last year completed a US\$370 million expansion designed to raise output by 110,000 t/y. Two months ago, the company reported that it anticipated that Andina would produce 250,000 t of copper in concentrates in 1999, but output is now expected to be lower because of power problems. A lightning strike hit one of its principal power lines at the end of May, and a subsequent "technical glitch" caused the line to go down again and took 30 days to fix. Most recently, electrical problems temporarily paralysed the Andina expansion area and cut weekly production by about 50%. Andina produces about 700 t/d of copper in concentrates and consumes 73 MW of energy. It receives its power from two sources - Electrica Santiago and Hidroelectrica Guardia Vieja.

The power situation at El Teniente division is also described as delicate because of a water scarcity caused by Chile's worst drought this century. The division, which is expected to produce close to 350,000 t of contained copper in 1999, consumes 160 MW of energy. It generates 40% of its requirement from its own hydroelectric schemes on the Cachapoal and Pangal Rivers, and purchases the remainder from Endesa-Chile and Colbun. Water is also crucial for the concentrator and smelter at El Teniente. Codelco's executive president, Marcos Lima, says that the drought is not expected to affect El Teniente's 1999 production.

However, next February the company expects to award the rights to build and

operate a major new hydroelectrical project close to El Teniente, with a minimum capacity to generate 300 MW. The project will include the two existing generators - Pangal and Coya - which have a combined 60 MW capacity, plus the construction of two new facilities - Cortaderal and Corrales - which would have a combined capacity of 240 MW. These have yet to be constructed. The auction for the project comes after the failure of a deal with Andrade Gutierrez of Brazil which was to have built the Cortaderal facility. □

Cygnets go-ahead

Despite the problems at Tara (this issue, p.17), Outokumpu has positive news on the nickel front, announcing this week that it has decided to proceed with the mining of the Cygnets orebody at its Black Swan nickel mine located 50 km northeast of Kalgoorlie in Western Australia. The investment will amount to A\$13 million and production is scheduled to begin in February 2000. The present life of the Black Swan mine is projected to last until the March quarter of 2002.

The Cygnets orebody has a mineable reserve of 744,000 t at an average grade of 2.3% Ni. This is in addition to the Silver Swan massive orebody which comprises a proven and probable reserve of 270,000 t at 9.0% Ni. Current production from the mine amounts to 13,000 t/y of nickel in concentrates. Combined ore production from Silver Swan and Cygnets will be 450,000 t, averaging 4.5% Ni, which should yield 18,000 t/y of nickel in concentrate.

According to Eero Laatio, president of Outokumpu Mining, the Cygnets concentrates will be an important source of additional feed for Outokumpu's Harjavalta nickel plant in Finland. The existing processing plant at Black Swan will be upgrad-

ed to cope with the increased production by relocating Outokumpu's nickel plant at Forrestania where mining is scheduled to cease next month. Forrestania has been producing around 8,000 t/y of nickel. □

Cassiar partner

Toronto-based Cassiar Mines and Metals Inc. (CMM), formerly Minroc Mines Inc., has signed a memorandum of understanding with Aluminum of Korea Ltd (AoK), part of the Hyundai Group, in respect of the development of the Cassiar magnesium project in northern British Columbia. AoK is the major supplier of metal products to Hyundai Motor Co. and Kia Motor Co.

Under the terms of the MoU, AoK can acquire a 35% interest in the Cassiar project in conjunction with an initial US\$25 million financing, and ultimately may acquire a 65% interest by providing further funding. It will be entitled to purchase as much magnesium product as it requires, with the balance to be made available for sale on the international market. CMM believes the project has the potential to produce up to 90,000 t/y of the metal.

The project is located at the former Cassiar asbestos mine which, until closure in 1992, had produced high-quality chrysotile fibre over a period of 38 years. The magnesium will be recovered from some 20 Mt of cleaned serpentinite recovered from the fibre operations (MJ, June 26, 1998, p.487) and the total recoverable magnesium metal in this material is estimated at around 3.6 Mt.

The Cassiar development programme envisages the construction of a magnesium metal production facility with an annual capacity of 150-200 Mlb (70,000-90,000 t). The capital cost of such a facility would be of the order of US\$600 million, and initial metal production is projected for late 2003. Development would be in stages, and CMM says that the first stage will be the completion next year of a US\$25 million bankable feasibility study. □

Museum pieces

Plans are afoot by the Clinton Administration to ban public use of much of the federal land in six western US states in order to placate environmental voters ahead of next year's presidential election. According to *The Washington Times*, Interior Secretary Bruce Babbitt is using his regulatory authority to halt mining, grazing, logging, and exploration for oil and gas. Senator Frank Murkowski, Alaska Republican and chairman of the Energy and Natural Resources Committee, believes that there will be "a significant move to usurp Congressional authority" over the next 18 months.

LEADING INDICATORS

	July 7	Change on week	High-Low (%)	Year's Max/Min
Share Indices				
FT Ordinary	4,148	3.4	100	4,148-2,913
US Dow Jones	11,187	2.0	100	11,187-7,742
FT Gold Mines	840	-5.1	24	1,278-702
Australian All Mining	662	6.2	97	666-520
South African Gold	852	-5.7	14	1,311-780
Toronto Met/Min	3,815	0.4	100	3,815-2,596
Nikkei Dow	17,959	2.4	100	17,959-13,071
Hang Seng	14,257	5.4	100	14,257-6,859
James Capel Indices	July 7			
(100 on 1/1/89 except*)				
Global Base Metal	157	2.3	100	157-93
Global Diversified Mining	162	6.9	100	162-94
Global Gold Ex S.Africa	65	-4.2	22	93-56
Global Gold	57	-4.5	20	83-51
Global Mining	123	3.2	100	123-78
Smaller Mining Companies	50	1.7	90	51-40
North American Base Metal	203	0.6	99	204-122
North American Gold	72	-5.6	19	108-64
Latin American Mining*	198	4.5	88	209-120
Latin American (Ex CVRD)*	149	6.2	100	149-90
Other Metals/Minerals	136	1.4	100	136-91
Global Coal Mining	196	2.5	92	203-116
*100 on 1.1.90				
†Rebased by Mining Journal				
Commodity Prices	July 7			
Gold (London)	\$258.20	-1.1	0	\$297-\$258.20
Copper (LME)	\$1,652.00	2.5	87	\$1,696-1,361
Aluminium (U.S. prod.)	\$1.50c	0.0	93	62-55
Brent Blend (dated)	\$18.39	8.1	100	\$18.42-9.44

society do the same thing. Testing assumptions against scientific knowledge, Mr Davis argues, is the only way progress can be made.

In a second keynote address to the conference, Dr Jane Plant of the British Geological Survey pointed out that, directly and indirectly, minerals (including oil and gas) contribute 16% of the UK's GDP, greater than the contribution from the agricultural sector and disturbing far less ground. In England, only 0.7% of the total land area has planning permissions for surface mineral workings. Nevertheless, concern about the environmental impact of mineral extraction continues to grow. Dr Plant highlighted some of the areas that are being examined in life-cycle analysis, from resource assessment and exploration through the extraction and processing stages to recycling and land remediation.

On recycling, she noted that the UK produces about 80 Mt/y of commercial, domestic and industrial waste, of which about 70% is disposed of in landfill sites. In addition, mining and quarrying generate about 130 Mt of waste and the agricultural sector about 250 Mt. New technologies are needed to increase the amount of material recycled and by-products recovered, and to reduce the environmental impact.

The UK government's solution is a proposed environmental tax on aggregates as recompense for surface damage, a proposal that has won strong support from the lobby group Friends of the Earth which believes that an aggregates tax, in conjunction with the landfill tax that has already been introduced, would encourage greater recycling of construction waste and hence reduce the amount of primary aggregates extracted. The quarrying industry has warned of substantial job losses if the proposed tax is introduced and doubts that the measure would necessarily increase recycling - it would simply drive up the costs of its products for the consumer.

Minerals '98 has provided a good launching pad for the UK minerals industry and the Professionals Conference has successfully addressed the key Foresight issues. But it was very much a case of 'preaching to the converted'. As a next step, efforts should be renewed to engage the environmental groups in dialogue - there may need to be accommodation on both sides. □

Cassiar's magnesium potential

The former asbestos mine in northern British Columbia operated by Cassiar Mining Corp. has major potential as a source of magnesium metal, according to the results of a preliminary assessment carried out by Kilborn/SNC Lavalin Engineers on behalf of the new owner Minroc Mines Inc. (formerly Mineral Resources Inc.).

Following a meeting last week with British Columbia's Deputy Premier and Minister of Energy and Mines, Dan Miller, Minroc's chairman and chief executive, Clifford Frame, said that the company intended to pursue a C\$400-800 million magnesium project at the mine site, adding that the preliminary assessment indicated that the mine's reclamation pile has magnesium in sufficient quantities to allow production for 40 to 100 years. He said that the concentration of magnesium was comparable to that of Noranda's 52%-owned Magnola project in Quebec, where a pilot plant at Valleyfield has been using a proprietary process to recover magnesium metal from asbestos tailings. The decision for a commercial-scale plant there is expected shortly.

At Cassiar, the magnesium metal would be extracted from cleaned serpentine recovered from the fibre operations, and Mr Frame said that detailed tests on the Cassiar serpentine for the production of magnesium metal will proceed simultaneously with reclamation activities. SNC Lavalin (which has a 16% interest in Magnola) is working with Minroc on financing the expansion of the reclaim work.

Meanwhile, Minroc is retreating the asbestos tailings at Cassiar using a wet milling technique and, in the process, is rehabilitating the site. The chairman confirmed earlier reports that the company will make its first shipment of chrysotile fibre from Cassiar next month. The goal is to produce 4,000 t this year and to re-establish traditional market areas. Production is scheduled to rise steadily over the next two years to reach a maximum of 50,000 t/y and this expansion will require capital investment estimated at not more than C\$22.9 million. A five-year marketing agreement for the chrysotile has been made with Kakiuchi Co. Ltd which had a marketing arrangement with the previous owners. □

Management under fire at Achinsk . . .

The Achinsk Alumina Combine in the Krasnoyarsk region of Siberia provides approximately 25% of Russia's total alumina production. In December 1996, it owed the equivalent of around US\$290 million and was facing bankruptcy proceedings, and a local arbitration court placed it under the administration of Alfa-Eko, the trading arm of the Alfa banking group.

The 18-month period of administration expired on June 8 and a meeting of creditors was planned for June 19. According to Reuters, this meeting has now been postponed until July 15, to allow the two main creditor groups to settle their differences. Alfa-Eko leads one of the creditor groups and the Tanako financial-industrial group leads the other.

A spokesman for the former has said that Alfa-Eko wishes to continue with the administration and the group is apparently supported by the local authorities - the Achinsk City Council is applying to the regional arbitration court to extend Alfa's management for a further year, the maximum period the court can authorise, and application has also been made to Krasnoyarsk's new regional governor, Aleaxander Lebed, asking him to extend Alfa-Eko's management for a further eight years. However, Tanako is dissatisfied with Alfa-Eko's management. It claims that the rescue plan has not been fulfilled and that the combine is facing extreme difficulties with its raw materials base. Tanako is seeking a new manager and management plan that can be presented to Krasnoyarsk Aluminium, one of Achinsk's main customers (which also owns 17% of Tanako).

Krasnoyarsk Aluminium has begun refusing to purchase alumina from Achinsk claiming that it is above the market price. The annual alumina requirement for its 750,000 t/y capacity smelter is about 1.7 Mt and previously it derived around 300,000 t/y from the Achinsk refinery. Achinsk has normally relied on Krasnoyarsk to purchase about 50% of its annual output and is now having to redistribute its production amongst other Russian smelters at Bratsk, Sayansk and Novokuznetsk.

Alfa-Eko, which has recently filed a suit with a local arbitration court against Krasnoyarsk's refusal to take its alumina, concedes that the rescue plan for Achinsk has not been fulfilled in every detail but argues that, most importantly, the plant is operating, employees are receiving salaries and taxes are being paid.

. . . Russian smelters look to Ukraine

Meanwhile, Krasnoyarsk Aluminium is one of a number of Russian aluminium smelters that are considering the creation of a consortium to bid for a 31% stake in AT Mykolayivski Hlinozemny Zavod (MHZ), operator of the 1 Mt/y Mykolayiv alumina refinery in the Ukraine. The Ukrainian Government intends to retain a 26% stake in the refinery for three years, and company employees are entitled to 30.97% of the shares and management to a 5% stake.

Approximately 3.5% of the shares have already been sold for privatisation certificates and in April Ukraine's privatisation agency, the State Property Fund, revealed that it had devised a plan with MHZ whereby 17% and 13% of the plant's shares will be offered in two tenders, with a further 2% to be sold on local stock exchanges. MHZ alumina has traditionally been sold to Russian consumers and meets about 20% of Russia's total alumina needs. □