

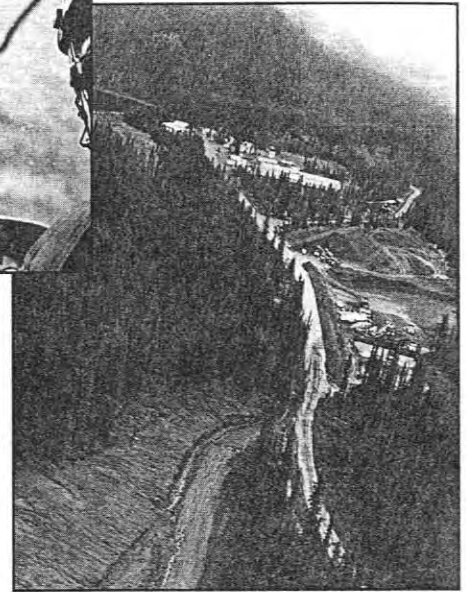
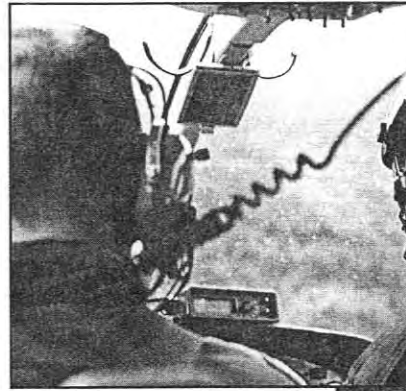
Kemess South

Property File

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Canada's Largest Gold Mine Development The Kemess South Project



Destination ...
Kemess South,
Located 300 km
North of Mackenzie,
British Columbia.

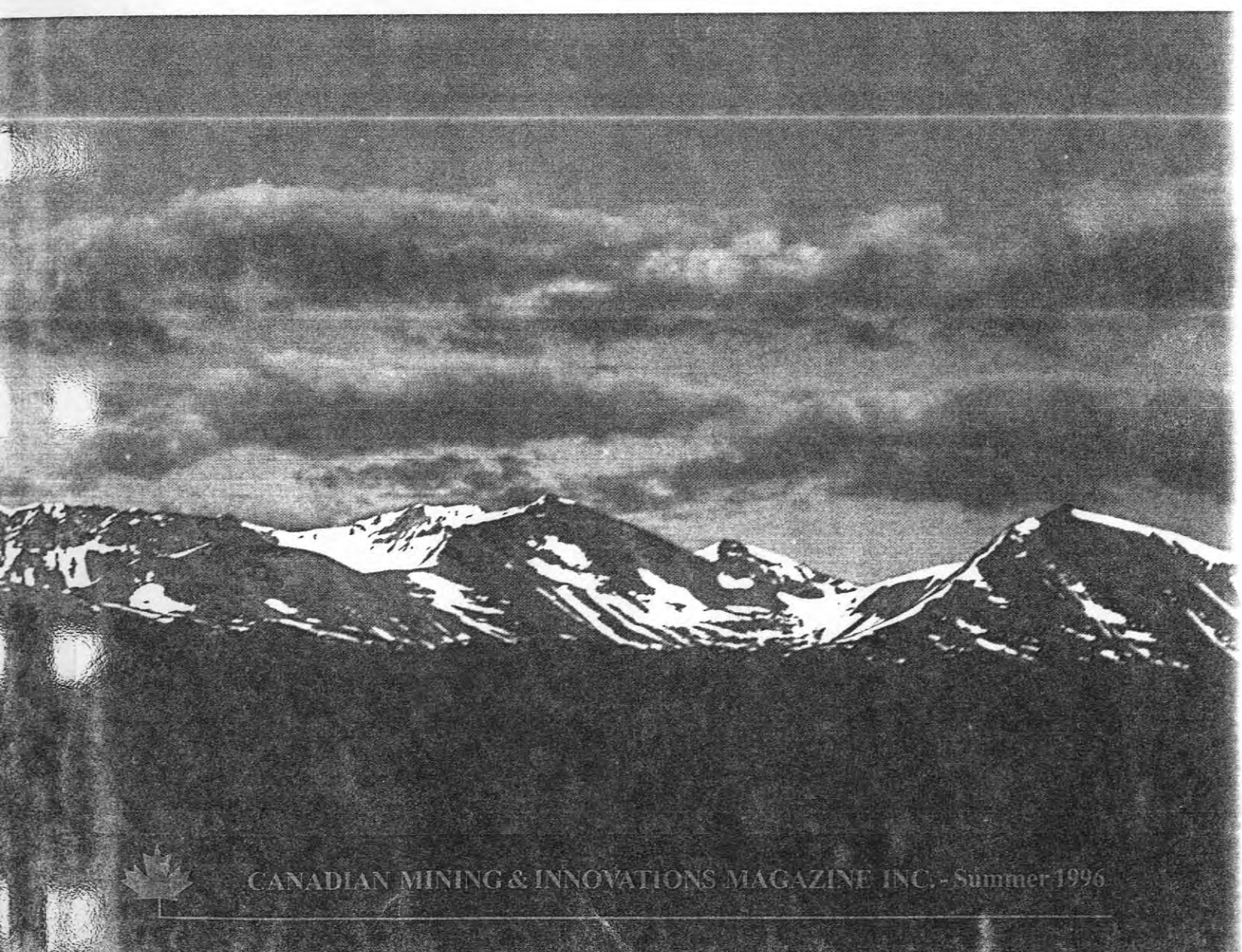


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The northern Ontario town of Timmins was not a happy place to be in the autumn of 1962.

The mine that helped save Timmins 7

Kidd Creek celebrates its 30th birthday, and CM&IM celebrates alongside the 1500 employees with reminiscences from the four previous general managers. Ray Clarke, Bart Thomson, Mike Amsden, and Warren Holmes speak candidly. Also today's co-general managers Alan Hayward of Kidd Creek mine and Brent Chertow of the metallurgical site.

A million ounce pinnacle for Royal Oak Mines Inc. 22

The Kemess South project

- Vice-president of investor relations, Graham Eacott for Royal Oak Mines Inc.
- Project manager, Chan Patel, Kemess South
- President and CEO of Royal Oak Mines Inc., Peggy Witte, all proudly indicate the magnitude of this gold/copper open pit operation and what it means to Royal Oak Mines and the province of British Columbia, Canada.
- Initial capital costs of \$390 million
- creating 310 full-time, well paying mining jobs

The Sierra Madre's Lost Silver and Gold Mines 38

Part III
The final installment

CANADIAN MINING & INNOVATIONS MAGAZINE INC.

The Mining Magazine for a Changing Industry

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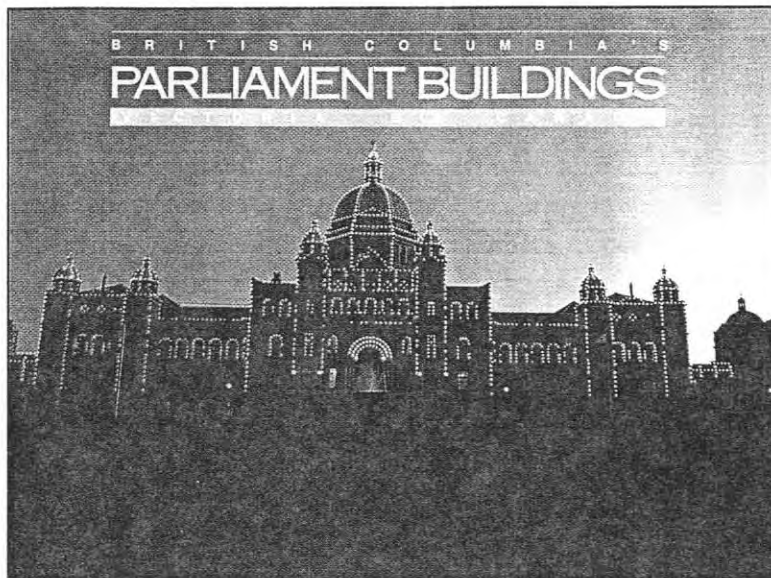
Nick Krakana

The Cover

To capture the many moods of the Canadian Rocky Mountains, one must be like the wind, having a chopper pilot as his chauffeur on one of his many trips into Kemess, Graham Eacott, vice-president of investor relations Royal Oak Mines Inc., captured the many misty moods of the Canadian Rocky Mountains. This is where the Kemess South project is located, in the heart of British Columbia, Canada.

(cover and story photos courtesy of Royal Oak Mines Inc.)

Kemess South Gold/ Copper Mine Approved by B.C. Province



The following is a news release from the Environmental Assessment office dated April 29, 1996.

VICTORIA - A \$390 million gold/copper mine project in north central B.C. has been approved under the province's Environmental Assessment Act, Environment, Lands and Parks Minister Moe Sihota and Employment and

Investment Minister Dan Miller announced today.

Both ministers have signed a project approval certificate which gives Royal Oak Mines Inc. provincial approval to develop a large gold/copper deposit located approximately 300 kilometres northwest of Mackenzie. Royal Oak Mines Inc. reached an agreement in August 1995 to acquire all the shares of El Condor Resources Ltd.

and St. Philips Resources Inc., the proponents of the project.

"Approval of the Kemess South project is based on a sound and thorough environmental assessment," said Sihota. "This project has gone through an extensive review by the Kemess South Project Committee, consisting of representatives from provincial and federal government agencies."

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Message
from the



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ROYAL OAK MINES: KEMESS SOUTH GOLD/COPPER MINE PROJECT

On behalf of the Government of Canada, I offer my congratulations to Royal Oak Mines Inc. on the approval of its Kemess South gold/copper mine project north of Smithers, B.C.

The project's construction phase will create some 550 jobs and when the mine begins production, there will be 350 more jobs for Canadians. In addition, Royal Oak will inject investments totalling \$390 million into the region's economy. This new activity will spark more opportunities for job creation and economic growth.

Kemess South is the largest gold development project in Canada. During its 16-year life span, the Kemess South mine will produce an average of some 213,000 ounces of gold and approximately 58 million pounds of copper per year.

I am delighted that Royal Oak Mines Inc. is proceeding with the development of this remarkable gold and copper deposit in B.C. Congratulations once again, and all the best for the success of this venture to Royal Oak, its workers, local communities and the regional economy.

The Honourable A. Anne McLellan

Canada

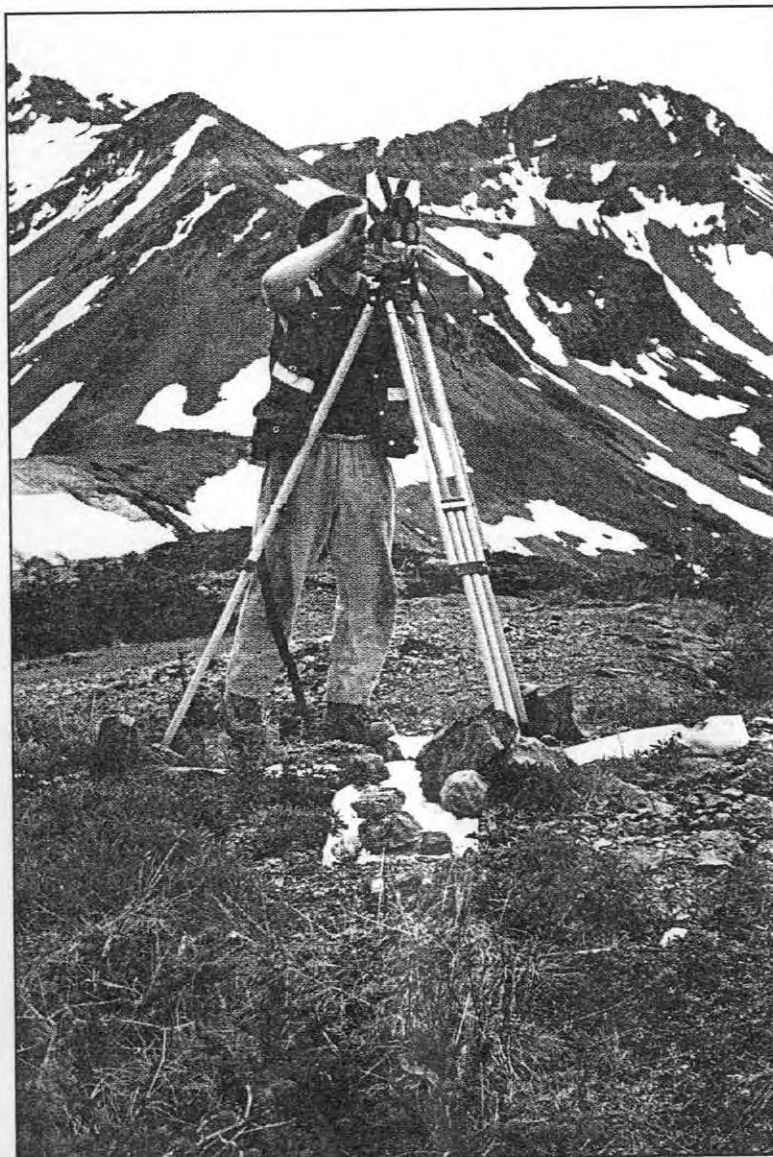


The mountain range at Kemess, British Columbia Canada.

Kemess South is Cited as the Largest mine development in Canada

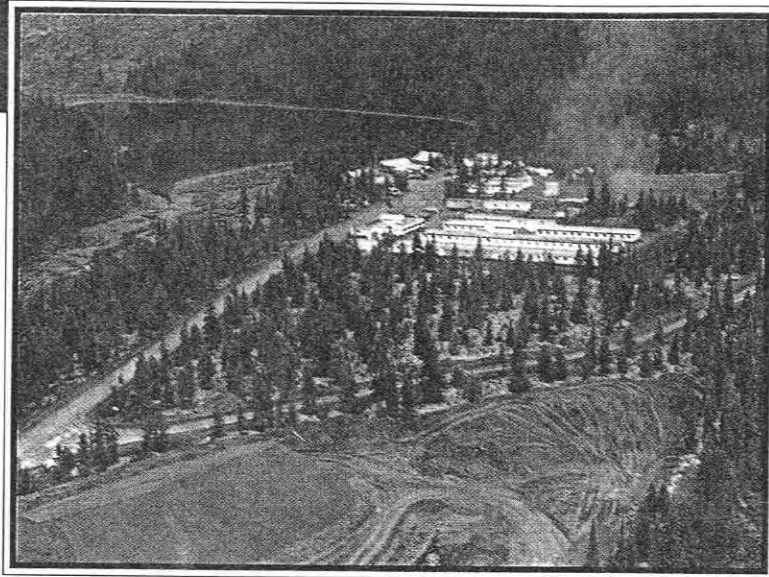
A Royal Oak Mines Inc. project

- Capital Cost \$390 Million
- Creating 310 full time well paying mining jobs
- Milling 50,000 tons per day
- Average annual production of 250,000 ounces of gold, and 60 million pounds of copper
- Mineral inventory is 6.0 million ounces of gold, and 1.6 billion pounds of copper



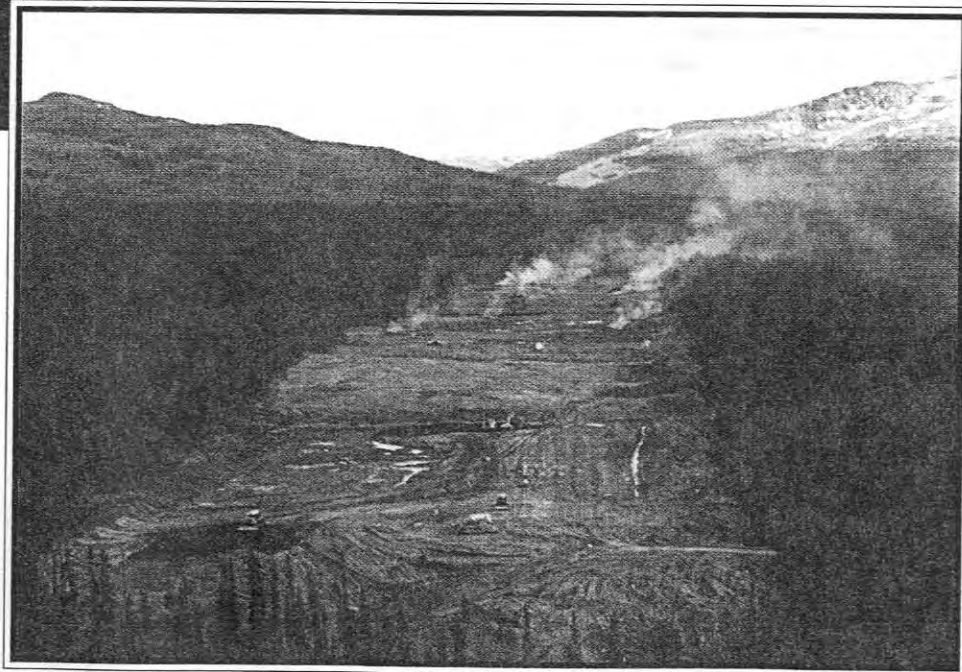
Surveying at Kemess South July - 96 (surveyor is Pierre Lalane)

**Temporary camp at
Kemess Lake.**



Royal Oak Mines Inc. formerly of Vancouver and now based in Kirkland, Washington, is poised to become a major Canadian - and world - gold producer, with a stated goal of more than one million-ounces of gold production by the end of the decade.

**Air strip
construction
July 1996.**



Kemess South targets 1998 production date

Just months after construction began on the Kemess South Project in north-central British Columbia, Royal Oak Mines' vice-president of investor relations, Graham Eacott, is categorical about the implications of the gold/copper open pit mine. Mr. Eacott spoke with *Canadian Mining & Innovations Magazine* by phone from the corporate office in Kirkland, Washington.

By Ilana Simon

"These are very exciting times for Royal Oak. Kemess South (and other development projects) will take the company to senior tier production," he said. "By the year 2,000 we will be a producer of a million ounces of gold."

Kemess South Project will see a high production rate averaging



250,000 ounces of gold and 60,000,000 pounds of copper annually. The 16-year mining life of the project, based on mineable reserves, coupled with the low mining costs associated with a large open-pit operation create a profitable climate for Royal Oak.

"We'll benefit from the economy of scale," Eacott said. "This is the larg-

est mining development project in Canada at the moment and is a significant project for both Royal Oak and the province of British Columbia."

Mineable reserves at Kemess South amount to 4.1-million ounces of gold and 1 billion pounds of copper. The total mineral inventory is

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6.0-million ounces of gold.

By becoming a senior tier producer of gold, Eacott forecasts that Royal Oak will catch the interest of respected financial institutions and investors.

"Stocks of senior tier producers tend to receive premium ratings," he said.

As well, Eacott stressed that Royal Oak's cash costs will be reduced considerably by Kemess. "The open-pit mining and processing of the concentrates will cost less than in other operations so the Company's profitability increases," Eacott added.

Magnitude of mine creates challenges

The capital cost of the Kemess South project is estimated at \$390-million, including the necessary infrastructure.

The deposit will be mined at an average rate of 108,000 tons per

day at an estimated cost of C\$1.56 per ton of ore. Milling at the rate of 50,000 tons per day will cost approximately C\$1.81 per ton of ore. Total cash costs, including administration, freight, smelting and refining, are estimated at C\$6.01 per ton of ore.

During the construction phase, the average work force will be 350 peaking at 450 to 500 persons.

When the mine begins operation in April, 1998, approximately 310 jobs will be created, according to Eacott.

"A project of this magnitude also creates opportunities within the company for career advancement," he added.

While virtually any mine tends to be in a remote location, the logistics of constructing Kemess South came with its own set of challenges.

Chief among them is the 320 km power line that must be constructed from Kennedy substation to Kemess South. Teshmont Consultants Inc. of Winnipeg is providing the engineering, design and construction management for the power line.

Other logistical elements of the project include infrastructure such as roads to

move supplies and equipment in and concentrate out. Some \$35 million in heavy equipment must be transported to Kemess South via provincial highways and remote roads. All of the equipment will be assembled on site.

But Eacott says the location of Kemess South is not a problem. "It's not as far north as some of our other mines so the severity of the winters will not be as harsh."

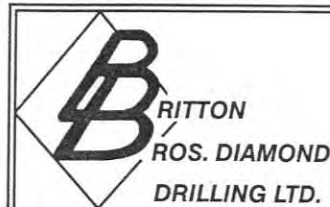
Once the mine is operational, Eacott said the copper concentrate will be sent down to Vancouver and shipped overseas to Japanese or Korean smelters.

Modern smelting techniques are employed in Japan, and much of the copper concentrate from around the world ends up in Japanese smelters.

"Once the concentrate is smelted and refined, Royal Oak will receive payment for copper and contained gold," he said, adding it is more cost-effective to ship the copper concentrate to Asian locations than to rail it cross country to Quebec smelters and future operation cash flow.

Economic Incentives

Royal Oak Mine's source of capital for Kemess South project is a combination of government funding, debt and funds from the Company's treasury.



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Kemess important to Royal Oak

A \$49-million settlement was awarded Royal Oak by the B.C. government with respect to the Windy Craggy property (a Royal Oak Mines copper reserve which was designated a World Heritage Site).

Compensation includes a \$29-million pay out to Royal Oak Mines over two years and \$20-million in matched exploration.

"Kemess South was made a very attractive project with the compensation and the contribution of the government by way of an economic assistance package," Eacott said. "Kemess South is a robust project. The return on investment would be much lower without that kind of help."

The B.C. government's \$117-million economic assistance package includes:

*\$50-million to develop on- and off-

site mine infrastructure for Kemess. The Company will pay the B.C. government a royalty of 4.8 percent on all copper extracted from the Kemess South property.

*\$49-million payable over three years to cover the cost of constructing a 200-mile power line from the Kennedy substation to Kemess.

*\$14-million payable over 14 years for emergency health facilities, airport facilities and for developing and maintaining the connector road.

*\$4-million payable over 2 years to facilitate recruitment, selection, relocation, mobility, training, upgrading and safety training for personnel working on Kemess.

As the largest project that Royal Oak is developing, Eacott notes that Kemess is important to Royal Oak's future.

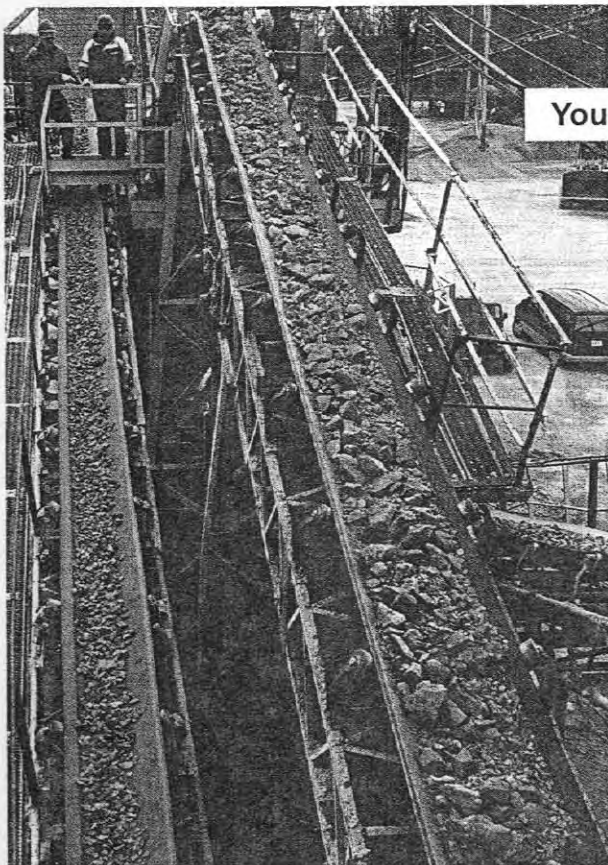
While Kemess South's average

annual gold production is estimated at 250,000 ounces (plus 60-million pounds of copper), Colomac in the Northwest Territories produces 134,000 ounces of gold per annum. Pamour in Timmins, Ontario, Hope Brook in Newfoundland and Giant in Northwest Territories each currently produce between 80,000 and 100,000 ounces of gold annually.

Furthermore, Eacott is confident Kemess mine will last beyond the estimated 16-year mine life because of Kemess North.

"More exploration is required in Kemess North," he said. "The ore there is mineralized material and must be upgraded to the mineable category."

The total mineral inventory for Kemess North is 1.9-million ounces of gold and 623-million pounds of copper.



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Chan Patel is the project manager in charge of bringing the Kemess South property into production and he spoke with Canadian Mining & Innovations Magazine by phone from Royal Oak's corporate office in Kirkland, Washington.



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Patel stated that "Royal Oak officials are more than a little pleased that the copper content at Kemess South - nearly a billion pounds of it in the ground - is so prodigious that it's likely the value of the copper received from smelters in the Far East will pay most of the bills attendant with keeping the mine in production until its 4.1 million-ounces of gold have been extracted from the property just south of the Toodoggone mining region."

Patel said the copper

concentrate planned for Pacific Rim barium, mercury or indium.



Tent camp at Kemess - July 96

shipment will be exceptionally clean, without impurities such as arsenic,

"And because it's so clean, its that much more marketable," he said. "Most American and Canadian plants have been designed to isolate various impurities, so for us it makes better economic sense to send the concentrate to Pacific Rim smelters."

Shipping the concentrate overseas is also cost-effective because it bypassed Canada's comparatively high cost rail system, which would be required to take the concentrate to eastern

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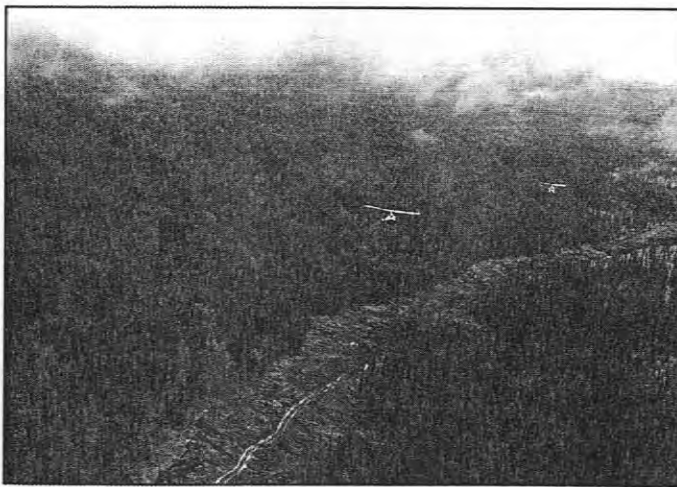
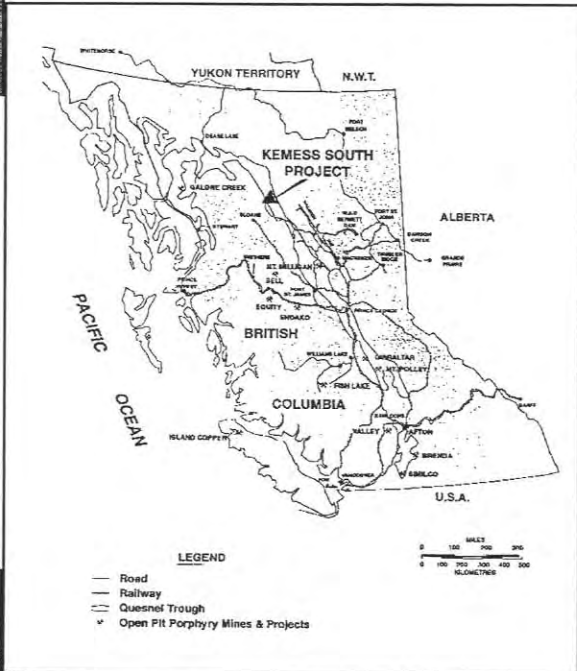
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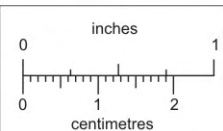
A breathtaking helicopter ride in, mining analysts from San Francisco, Chicago, Vancouver, and Toronto came to view the early stages at Kemess South in the heart of British Columbia, Canada. (photos courtesy Royal Oak Mines)



Access road and tailings route. Kemess will be a fly in mine for all its workers, a 6000 foot runway will service the site.



The mill site

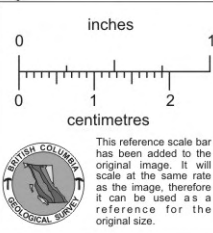


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EIMCO is at Kemess

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1986	Installed the first personal computer based semi-autogenous expert control system
1987	Installed the first personal computer based expert control system for multiple ball mill grinding circuits
1991	Installed the first object-oriented expert control system for multiple ball mill grinding circuits
1992	Installed the first plant-wide expert control strategy
1994	Commissioned a new concentrator with plant-wide supervisory control
1995	Installed the first intelligent adaptive expert control system



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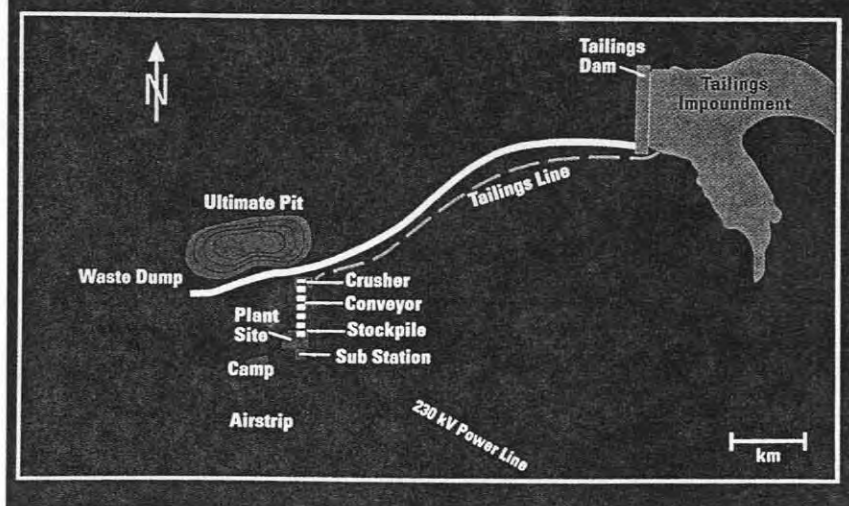
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Kemess South Project Site Layout



Dozer clears for
airstrip

Royal Oak Mines is a Trail Blazer in B.C.



Burning brush at the airstrip, Kemess, July 1996.



By Ilana Simon

Peggy Witte, chairman, president and CEO of Royal Oak Mines spoke with Canadian Mining & Innovations Magazine about the implications of Kemess South project to Royal Oak Mines, British Columbia and the Canadian Mining Industry.

What does Kemess South project mean for Royal Oak Mines?

Witte: Kemess South project is a major cornerstone project for our company. It will decrease our cash costs and produce a brand new 16-year long-life mine. It was something the company needed. Kemess is a great project for our company. It's right in our backyard and not in the Third World with Third World problems.

We built our foundation on buying old operations and turning the operations around. Now we're starting new Royal Oak ventures. Kemess is the first of four operations over the next four years that are going to be built and will take us to the million-ounce gold producer class. The other new mines being developed are Matachewan in Kirkland Lake Ontario, Red Mountain project in B.C. and Dupont project in Northwestern Ontario. We're not buying old, tired mines but building brand new long-life mines.

How will Kemess South affect the state of mining in Canada?

Witte: Kemess is one of the largest projects right now in Canada and it is a crucial project to Canada. The mining industry as a whole is watching the B.C. government and

the project closely to see if it's successful and whether we run into problems with permitting. Kemess is a very major project to be permitted in B.C. There was a mass exodus out of B.C. in 1990-91 because of government permitting policies. Now the eyes of the industry are on us and my colleagues are scrutinizing how our relationship goes with the B.C. government and the success of the mine.

Why do you think the B.C. government gave the green light to Kemess South and not to Windy Craggy?

Witte: There were environmental concerns with Windy Craggy from day one. It was an uphill battle in a sensitive area. Kemess is more benign. It's not sitting on park land, the rock is not acid producing and we're using conventional mining techniques. It's like night and day. The location of Windy Craggy made it difficult for exploration and there were complicated metallurgical and environmental concerns.

Kemess project, on the other hand, was permitted expediently without undue costs and Windy Craggy proved to be an asset. We could have fought for eight years (over Windy Craggy) and gone to the Supreme Court of Canada but we settled with the B.C. government on a compensation package. Now we can do what we need to do and develop mines.

Did the B.C. government's \$49-million compensation settlement for Windy Craggy and \$117-million economic assistance package for Kemess South enable you to forge ahead?

Witte: The Windy Craggy compensation package alone didn't allow us to forge ahead with Kemess. But the whole combination of compensation, an economically viable package for the infrastructure of Kemess, and settling all issues surrounding permitting of Kemess helped. I believe the government honoured its commitment to the people of B.C. Mining projects produce employment at \$22 per hour not \$6 per hour like most tourism jobs.

At the end of the day, the deal was good for the government, good for Royal Oak shareholders. It was win-win for everybody.

What do you see for the future of mining in British Columbia?

Witte: B.C. is a very wealthy province with a great deal

of mining assets. The exploration potential is enormous. The future of mining in B.C. is rosy if the industry sees Kemess South as a successful project.

On the other hand, if things ever went wrong with our relationship with the government or we had problems with the environmental fringe, it could chase the rest of the mining industry away even further.

What kind of benefits will follow for the company once Kemess South is operational in April, 1998 and what does the future hold for Royal Oak Mines?

Witte: Kemess South will take us to a different tier of gold producers. We will be producing copper at US48 cents/pound and gold at US\$189 per ounce. By the year 2000, we will be producing over 1-million ounces of gold and 60,000,000 pounds of copper.



As a million-ounce producer of gold, our shares will trade at higher multiples and our stock price could double on the stock market. It will affect all shareholders including myself with my 3 million shares.

As well, Royal Oak Mines will be a major creator of jobs in the Canadian mining industry over the next four to five years. We currently have 1,400 employees and by the year 2,000 will employ in excess of 2,500 employees.

We have allocated \$12-million to Canadian exploration and have over 100 exploration properties in Canada. Exploration will be focused on our major camps across the country.

It's an exciting time for Royal Oak Mines. I'm being run off my feet but it's exciting to be busy. I take my hat off to the B.C. government. Our relationship has been good and solid. I'm very excited about being in B.C. and I hope Kemess South will become a model project.

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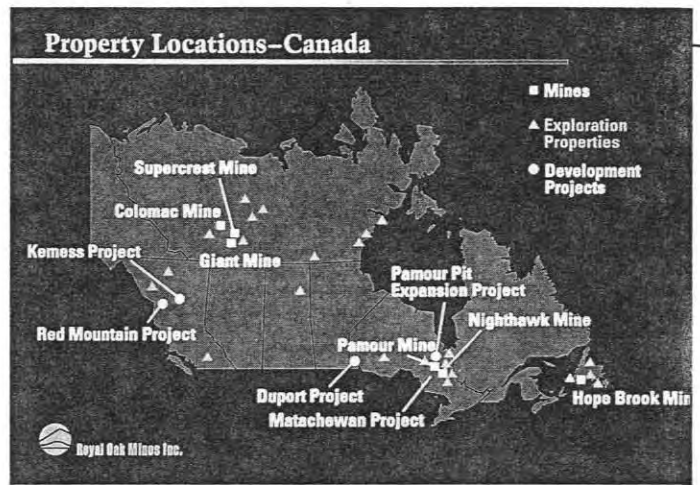
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An Overview of Royal Oak Mines Inc. Canadian Operations



Royal Oak Mines currently employs 1,400 people at its mining operations located in Hope Brook, Newfoundland; Pamour and Nighthawk Lake in Timmins, Ontario; Colomac and Giant in Northwest Territories.

The mines are scheduled to produce a total of 415,000 ounces of gold at a cost of US \$315 per ounce in 1996.

Royal Oak's new projects include Kemess South and Red Mountain in B.C., Matabechewan and Pamour expansion in Ontario, and Dupont in Northwestern Ontario.

Matabechewan will produce 100,000 ounces of gold per year at a cash cost of US\$227 per ounce. Ore will

be mined from a combination open pit and underground mine on the old Matabechewan Consolidated Mines/Young Davidson property, located about 80 miles east of Timmins.

At Pamour, Royal Oak is currently drilling a very large open pit gold reserve that will likely end up being several million-ounces by the time it is finished, according to Witte.

Details of the major expansion at Timmins will be made public by year end.

"Royal Oak has enjoyed extremely good exploration success in the Timmins area," Witte said. "Timmins camp will run neck and neck with the cash flow generating capabilities of Kemess."



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