

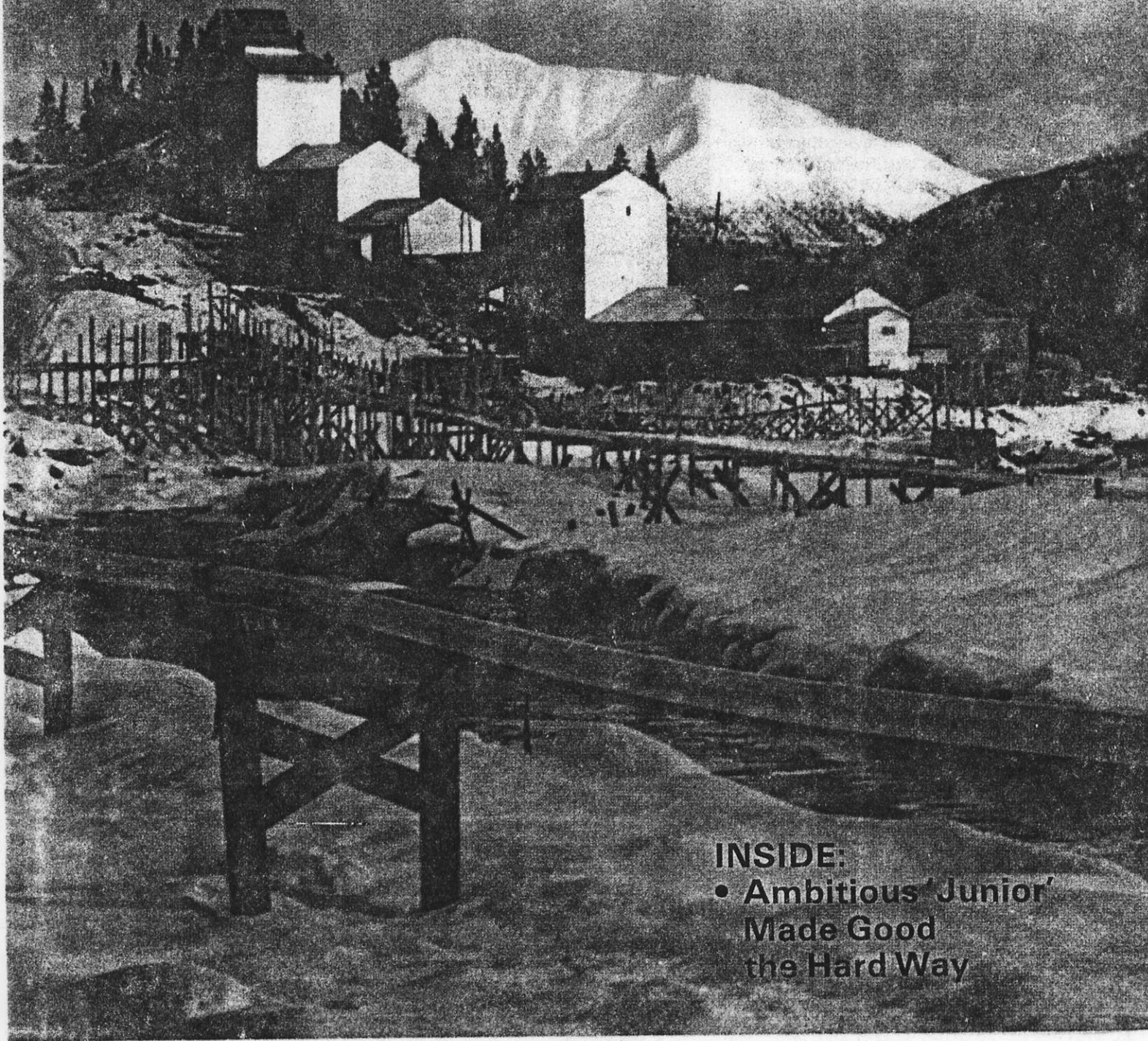
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PROSPECTING, EXPLORATION & MINE DEVELOPMENT

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# MINING REVIEW



**INSIDE:**

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## ERICKSON GOLD MINING

# Ambitious 'Junior' Made Good the Hard Way

by Fred Dawkins

Finding a viable mine property is hard enough. Getting that ore out of the ground is another proposition altogether — which is why the vast majority of "junior" exploration and development companies never progress that extra step into the big leagues of producing companies.

But there *are* exceptions to the rule. A few brave juniors have taken that extra step by financing their properties all the way to production. Virtually all are gold producers, since that high-priced metal is the only one offering an attractive enough return to entice lenders into backing a small, unproven company. With today's intense market interest in gold, that option is becoming more attractive for small companies all the time.

The case of Erickson Gold Mining Corp., however, is special. The mine, located 20 km southeast of Cassiar in northern British Columbia, was the only property of any kind in Canada to go into production in 1978. It fits the description of a gold property developed through to production by a junior firm — but back when the project was first developed, the price of gold was hovering way down around \$100 an ounce. In other words it was far from an easy sell. Yet today the Erickson property is a producing, profitable operation.

The Erickson mine is a joint venture, shared 50/50 by Agnes & Jennie Mining Co. Ltd. and Nu-Energy Development Corp., with North Vancouver-based Agnes & Jennie holding the mine management contract. Since production officially started in April of 1979, the mine has operated year-round, milling an average of about 100 tons per day at 0.65 ounces of gold per ton and a similar



amount of silver. Recovery has averaged over 96%. Expansion of the mill is now under way.

As Agnes & Jennie president Kristian Ross (the joint venture's chief executive officer) told a seminar audience at the recent B.C. & Yukon Chamber of Mines annual meeting, bringing the property into production without the involvement of a major company took a lot of

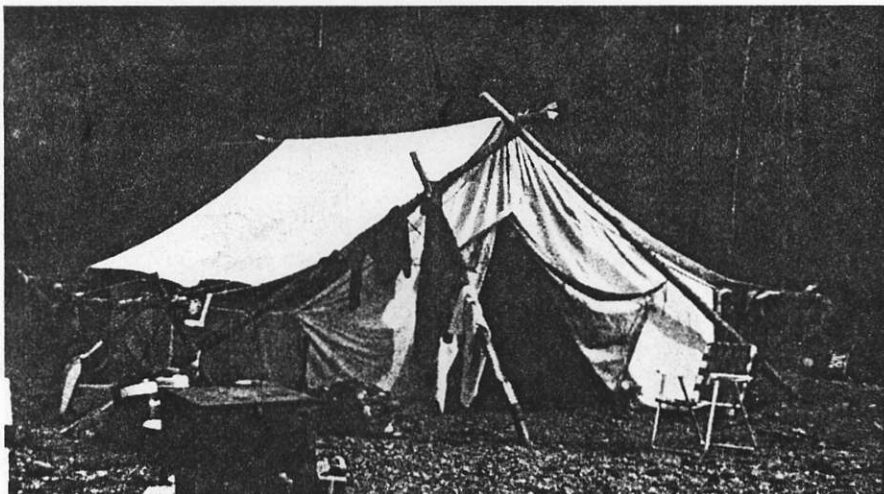
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*Above: The first drilling at Erickson, in the spring of 1975: expecting only to indicate the presence of the vein with this technique, Agnes & Jennie hit 90 feet of 2.44 oz./ton gold in their first attempt.*

*Right: Erickson CEO Kristian Ross (president of Agnes & Jennie Mining), speaking at the B.C./Yukon Chamber of Mines annual meeting. "The single most important ingredient . . . is your belief and commitment to the project."*



## Erickson Gold Mining



Home sweet home at the Erickson site, spring '75. "The first year, we lived in a tent," says Ross.

hard work, determination — and perhaps most of all, faith.

"For my money," he said, "the single most important ingredient in any project, next to nature, is your belief and commitment to the project. One just has to be careful to look through tinted — but not fully rose-coloured glasses."

In a later interview with *Mining Review*, Ross admitted that the decision to follow through right to production was not an easy one. The risks and obstacles were pretty obvious.

"It's somewhat unusual for a company like ours to go into production by ourselves," he said. "If you aren't an operator you have to convince the backers that you have the expertise to become one, so it's important to have the people you'll need to carry the whole project through, early in the game. You have to be a little ahead of yourselves in your personnel."

"To finance, you need the right mix of size, grade and payback potential. A company with ten mines and 'x' million in annual production is much more likely to be allowed a longer payback period, because the risk to the lender is less." With a small company, the numbers have to be just right.

Ross revealed that before the mine was developed to production, Erickson had been approached twice by a major with "extremely good deals. But we decided we had an opportunity to start a new Cana-

dian mining company so we went for it."

"It's an economic decision as well as a philosophical decision," he added. "When you've first established that the project is economically viable, then it becomes a philosophical decision as to whether it's worth it to you to create more ongoing opportunities."

Most companies in Erickson's position decide the risks are too high, and making a deal with a major is preferable. The fact is, a money-making mine is a rare thing. As Ross put it, "Many don't pay off — and such errors are not limited to the juniors. It's an extremely risky thing, and the temptation to dilute that risk by making a deal is always strong."

But the partners in the Erickson venture were confident they had both the right people and the right property to make their project work. Although it was far from easy, they have since been proven correct.

Ross's company, Agnes & Jennie Mining, started exploratory drilling on the property in 1975. The initial ore body — known as the Jennie vein — outcrops only intermittently over 60 feet in Erickson Creek, and Cominco had already tried unsuccessfully to find it back in the 1930s. But Agnes & Jennie ignored the current wisdom and sunk six percussion holes and three diamond drill holes, before bringing in Nu-Energy Development in the summer of '76.

Drilling continued, with the first underground exploration conducted in the winter of '77. Results were promising enough to prompt an extension of the claims. Drilling and underground work were stepped up, leading to the final pre-production underground development in spring 1978.

During this period, raising enough capital on the Vancouver Stock Exchange was difficult. After Nu-Energy had joined the venture, they launched a 40¢ underwriting to finance the exploration. But even though the early assay results were good, and consultants' reports recommended further work, investor interest was hard to scrape up.

"It was virtually impossible to give the stocks away," recalled Ross, "because gold had gone from \$100 to \$200 and back to \$100 again. Even with an incredibly good first drill, we couldn't get much interest from the market."

As he noted in his talk to the Chamber of Mines meeting, a relatively underfinanced junior company developing a vein-type deposit, after initial work, can orient its exploration program in one of two basic ways: either try to detail the big picture, or try to develop in sufficient detail enough ore to pay for production with an indication of the bigger picture. The first option offers less initial risk, but it takes longer and results in greater shareholder dilution.

The Erickson joint venture took the second approach. Ultimately this choice gained the operation two years of production. Added Ross, "We have now found one and possibly two new parallel systems within our current mine workings. Our ongoing ... program has indicated we are at the beginning of a long production run at Erickson."

In addition to keeping the existing shareholders happy, said Ross, the choice of the "low-ball" development approach also saved the company a lot on start-up costs. And as it turned out, the earlier start was timed perfectly with the rapid rise in gold prices.

## Erickson Gold Mining

According to Ross, four basic questions had to be answered before the decision was made to develop the property to production: what was the apparent gross value per ton, the total costs per ton, the initial capital and operating costs per ton, and finally, was there enough profitably-recoverable metal to satisfy the first three questions?

When the answers to those questions came out positive, the joint venture next decided whether or not to "go it alone" with bank financing rather than making a deal with a mine-operating company. In retrospect, said Ross, the issue was not actually as straightforward as it then seemed. It would have been much simpler and easier on all concerned if a deal had been negotiated.

Said Ross at the seminar, "It (going it alone) requires continuous total personal involvement. Fortunately we have managed to attract highly skilled people to work with us. In our case we felt this project contained the special criteria necessary to support the start of a new Canadian mining company, with ability from prospecting and geology, on through construction and production. We chose to take advantage of this opportunity, and have never regretted it.

"Of course if the initial project had been beyond a certain size and scope we couldn't have done without the financial resources of a major company. Obviously we couldn't have borrowed one or two hundred million dollars the first time out."

Even so, convincing a bank to back the project was far from easy. Although Ross stressed that he isn't bitter about it, it's clear the experience was an eye-opener.

The first step for the joint venture was the preparation of a detailed, specific Formal Project Evaluation, outlining such nitty-gritties as the percentage of recovery expected, and the percentage of that recovery which would be paid for (and when) by the various smelters. Armed with those figures, the Erickson people went out to try to convince a bank (and its mining engineer) that the

project was a good risk. They quickly found that bankers don't deal in potential, they deal in guaranteed payback with a comfortable margin for error. For a first-time producer, the project has to be very attractive before a bank will touch it, simply because the company hasn't yet established a track record.

Such a company should never assume it has its financing until the formal documents are signed, warned Ross. For that reason, it is advisable to talk to several banks at once to save time. The Erickson group did, "and were more amused than discouraged by some of their responses."

Erickson finally did get its financing, from the Royal Bank of Canada. Obviously the bank believed in the economics of the project, because the mine itself was the only significant security for the capital loan. Ross notes that one of the few points Erickson had in its favour in its application for a loan was the fact that the company chairman is his father, David Ross, one of the founders of Lornex and Afton Mines. As it turned out, Erickson paid off that loan just six months after the official start of production.

That wasn't the end of the problems, though. The group had expected its money to come through three months earlier than it did, so the Project Evaluation had been prepared assuming summertime construction. However, work didn't start until September. Fortunately, thanks to a gutsy, dedicated effort on the part of the whole crew, the job was done in three months — on time and on budget, which Ross called "an amazing feat". Indeed it was; much of the nail-pounding took place in 40-below weather.

The Erickson group also learned the hard way that you need to provide a lot of lead time to ensure equipment is ordered and delivered on time, and you can't take every supplier's promises at face value. Still, the company scrounged and bought used equipment wherever feasible (ie. the ore cars), while splurging on new underground production drills, generators and electrical compressors, and through

mixing and matching managed to make the mine operational for a relatively-smooth December '78 start-up.

Now the mine is in the midst of expanding its milling capacity with the addition of a 200 TPD ball mill and related equipment, to achieve an eventual 300 TPD capacity.

In Ross's view the Erickson property has tremendous potential: "It's like we've only turned a few pages in a great thick book. With what we've learned regarding the geology of the area, the chances are very good that we'll be in operation for a long time. It looks more and more like what we always thought — that we're in a major gold province."

The mining and milling techniques used at the Erickson mine are fairly simple. The first production entry is 1,450 feet (450 m) above the mill, shops and crew housing. The mine is being developed on track by a series of progressively lower adits. Modified shrinkage stope is the mining system used, with stable ground conditions allowing a minimum of timbering and no need for pumping seepage. As for the milling process, no cyanide or mercury is involved, which combined with the relatively small size of the operation makes for a minimum of environmental problems too.

With the Erickson mine cruising along nicely, the group is participating with Esso Resources on a project adjacent to the Jennie mine. Ross noted that working with Esso's top-notch geological people has helped the company unravel the complex geology of the Erickson gold province.

That brings us back to a point Ross emphasizes — that having the right people, the right blend of practical skills, is vital to the success of a project like the Erickson mine.

"There aren't any non-essential personnel at Erickson," he told the Chamber of Mines meeting. "Every person is a key person."

And the bottom line is that Erickson Gold Mining Corp. has successfully joined the ranks of the all-Canadian producers. □