

Although gold-oriented, base metal projects comprise a portion of its property portfolio. Granges was one of the first companies to successfully combine equally strong financial and exploration teams. Today it's as

the Granges team have been involved in the discovery of at least three other mines. Muzylowski has been truly deserving of the name "mine-finder" and is the driving force of a company that intends to keep a

operation, one of the largest in the Southwest United States. We plan to mine some 5 million tons per year and produce somewhere in the neighbourhood of 80,000 ounces and up from that corporation. These numbers comes into our consolidated statements because we do own a majority of Hycroft Resources.

money, you can't rush these things. We take a systematic approach; as an example we staked Tartan Lake in 1979 and knew there was gold in 1980 when we first drilled some holes with gold values. Our feasibility study was completed at the end of 1986. So that took six years and we're only two years into the 'Mishi' Project. As far as infrastructure is concerned, this property is only 30 miles from Wawa and there is a road. The Magnacon people are driving from town and if we establish an operation there as well, roads and power will be easy to access.

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NWP - In terms of gold production next year what numbers are you projecting?

Muzylowski - From producing some 4000 ounces last year, in 1988 we'll be somewhere in the 100,000 ounce class as a company. That's a tremendous jump and we consider 1987 as our transition year....the year we moved from being primarily an exploration company into becoming a significant producer. In subsequent years there's potential for further growth as our exploration successes have not ceased by any means.

✓ NWP - What are the remaining two projects? ~~AAPOOSE~~ (M) Davidson

Muzylowski - Another interesting project is in central British Columbia where we staked ground in 1975. We've been dealing with a geochem anomaly; there were some gold and silver and zinc and lead values in an area that was completely covered in overburden. We've been digging holes trying to establish the location of this anomaly - we were really worried that it was transported - and this year was the first time we hit an ore intersection. The Capoose Lake property, which is owned 75% by Granges, is located about 100 miles from Vanderhoof. We've been plugging away there for twelve years. Cominco has 25% and has been partners with us since Day One. We're drilling there now and have several holes with very significant gold and silver values, but the gold and

GOLD FINDER - NW Prop. - G's
NWP - What other projects does Granges view as having production potential?

Muzylowski - We currently have four prospects that we feel might be economic. We are doing some engineering studies on the Windflower Discovery near Revelstoke, B.C., and are discussing an underground exploration program. We have 60% of this project and are the operator. Because B.C.'s geology is sometimes not as predictable as other parts of the country, we have to ensure the orebody is continuous, even

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Tartan Lake Drilling Underway.

Goldbrae Developments Ltd. is pleased to report exploration results of up to .395 oz./ton gold in channel samples on its Tartan Lake Property and a 5 week diamond drill program is now underway.

The property is located 5 miles E of Flin Flon, Manitoba and 2 miles S of the new Granges/Abermin gold mines.

Further Exploration at Stump Lake.

Additional exploration is currently occurring on the company's Stump Lake Property in preparation for diamond drilling. Located 30 km south of Kamloops, Goldbrae presently holds 84 claims and has an option to earn an interest in a further 35 claims.

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silver aren't mixed together. There is a gold zone and a silver zone. In one of the holes we had 196 feet that intersected 2.4 ounces of silver per ton and a little gold. Another hole reported 20.6 ft. of .41 ounces gold in a parallel zone. And it's a very large geochem anomaly; the rocks are rhyolite breccias, intensely altered...there's a real major system here. We've drilled a lot of shallow holes and quite a number have had very interesting values and quite a number had ore grade values. We tried to drill a second tier on this thing but the drill, being a small exploration rig, wouldn't do it. I'd like to be drilling there now, but we'll have to wait until we can find a big rig. Those are great numbers, and we can drive right up there - the only infrastructure that's lacking is power. That would be a capital item, but if we have a significant deposit of .3 or .4 gold, it would more than make up for that.

NWP - What's the fourth project?

Muzylowski - A company called International Curator had picked up some land in the Juneau area of Alaska and needed financing. We agreed to finance International Curator and now control the company and finance its exploration programs. So far, we've been quite encouraged. We have three rigs up at the Jualin Gold Property, which is located on tidewater within the extended city limits of Juneau, and we have been hitting ore grade material and are now waiting for assays. Like everyone else, we're behind in assays; four, five week waits are becoming normal, making it difficult to plan a program. But geologically, it looks O.K. and we plan to spend about \$1 million this year. We hope to have a pretty good handle on this project by November and by then we should know whether we'll be going underground in the spring.

Muzylowski - We've been drilling on the Alberts Lake Prospect in the Tartan Lake area. There's some tonnage there but the grade isn't as good as Tartan Lake, and the metallurgy is not as good. We've outlined a higher grade core but we haven't done any economic or engineering studies on it yet. If metal prices hold, there's a possibility that this could be a little producer - and available to feed the mill we've put in at Tartan Lake.

NWP - What would you estimate Granges is spending on its various Canadian projects in the 1987 flow through season?

Muzylowski - It's in the range of \$13 million. We're one of the real swingers in the exploration business.

NWP - How do you feel the changes in flow through planned to go in effect in 1988 will affect Granges?

Muzylowski - I think we've been ideally located in the 'flow through window'. Before it began we were spending \$1.2 million a year, on a joint venture basis. We went up to about \$4 million in 1984, and then in '85 and '86, our expenditures jumped dramatically. Last year we spent \$12 million; this year it's about \$13 million. Our transition to a production company is also dramatically on the rise this year. Last year we had a 20% interest in the Trout Lake gold/copper mine; this year we have three other mines in production, all of which we are the majority owners and operators. In 1988, our profits will go from \$2 million to something in the range of 10 times that. So after next year we really will be using our exploration expenditures for our own deductions. We were in the right place at the right time. It was a good thing that the Canadian Government had such a great tax policy. I really don't like to see them change it

We don't prioritize yet, although we may have our favourites. We still look at every one systematically. That's because way back...I think it was about 1959 when I was an eager young exploration geologist...map in front of me, I went to the chief and said, 'We should only test this one here and this one here, the rest is all crap'. One of the ones I said was crap turned out to be an orebody. This was a lesson I learned early. You cannot put signatures on orebodies. Each orebody is an individual, it has its own mineralogy, its own chemistry...you can't even predict how it's going to mill. Because each ore deposit has its own idiosyncrasies and a character of its own, how can you put a rule that you've learned from one type of orebody to another? It just doesn't work and I never made that mistake again. To return to this incident, fortunately the chief was smarter than I. He said, "You may be right, but let's find out anyway." It was fortunate that I was not in charge of the overall project at the time because we probably would have missed it - just because I thought I was clever. That's when Mother Nature taught me a very basic lesson that she's been around much longer than people - and there's no human that can ever acquire enough knowledge to unravel all her mysteries in one lifetime.

NWP - You sound like you still have a strong affinity for the exploration side of the industry..

Muzylowski - I do. The most exciting part of our business is exploration. To discover buried treasure is an experience unparalleled in my lifetime and I've had that experience many times - 15 mines that are being developed, are in production or have already been depleted. The last one is as thrilling as the first one; and even the ones that 'nearly make it' are exciting.

NWP - Talking about making the transi-

min (50-50) officially opened the Tartan Lake Mine this summer at 250 tons per day with plans to reach 550 tons per day by year end. How is that operation running now?

Muzylowski - Tartan Lake is a very mechanized and compact operation with a modularized mill that was assembled elsewhere and brought to site. Like any new mining operation, we've had tune-in problems with the mill. It's now running well with production and recoveries increasing all the time. We're still not absolutely where we want to be; we wanted to be in the range of 92% overall recovery and we're somewhere around 85% right now. The chemistry on that property is rather unique - there's a little copper in the ore. In any circuit when you're trying to do it with a simplified method, the way this one is, any little adjustment you make somewhere in the circuit causes a reaction all the way through, so this involved a lot of trial and error.

NWP - Operating heap leach mines is another new frontier and you're taking on a large-scale project with the Lewis and Crofoot Mines in Nevada. How are these projects coming along?

Muzylowski - I've learned a lot about heap leaching, mainly that it's not cut and dried. People who only drill a few holes and think they can heap leach it are in for a rude awakening. We've drilled 1300 or 1400 holes on the Lewis/Crofoot Project...more than any other project in my life. But we found you had to test all parts of the ore and test particularly its leachability. This one had a problem in that we had some refractory ore. We drilled all these holes and calculated 15 million tons right off. We did some metallurgical tests and found out that the figure was 6, not 15! Economically we were worried, but we knew the potential was there and we kept drilling and got