

It's Lights, camera, action!!! for South Mine blaster Frank Martins. For more about Frank's shift in careers, see page 13.

INCO Triangle

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Poll shows public support for miners

A majority of Canadians feel that keeping Canada's mining industry healthy should be a high priority for government.

A recent Decima Research survey commissioned by the Canadian Mineral Industry Federation revealed that 93 per cent of Canadians recognize government as a major player in creating a favorable investment climate.

At the same time, however, those surveyed say current government regulations and policies are actually discouraging needed mineral exploration and investment in the sector.

"Without some encouragement to explore for mineral deposits in Canada, our proven reserves will simply continue to decline," said Keep Mining in Canada campaign ambassador and Noble Peak Resources president Maureen Jensen. "In spite of our rich mineral endowment, Canada is now perceived by mining investors as an increasingly difficult place to do business."

Said Teck Exploration vice-president Wayne Spilsbury: "The Noble Peak Resources president said non-profit taxes are increasing, environmental assessment and approvals processes are onerous and unpredictable, the regulatory framework is complicated and land access is decreasing for exploration and development."

Highlights of the poll include:

- 82 per cent of Canadians believe it is important that the federal government create a climate for investment in mining in Canada.

- 41 per cent of Canadians are aware that mining investment is declining in Canada.

- If government does not take action soon, 64 per cent feel that the mining industry will leave Canada and move its future investment to other parts of the world.

- There is near-unanimity (93 per cent) in the belief that it is important that Canadian mining companies invest in future mines by exploring for minerals in Canada rather

than in other countries.

- 95 per cent of those surveyed want to see government taking a coordinated approach to the approvals process for new mines.

The survey was commissioned by the "Keep Mining in Canada" campaign, a national initiative launched by the industry in September to tackle the issue of declining mineral exploration and investment in mining in Canada.

As part of the campaign, the industry has proposed a Ten Point Plan of joint government and industry actions to ensure mining's long-term future in Canada.

The 10-point plan includes:

Industry Action

- Participate in a multi-stakeholder process (the Whitehorse Mining Initiative) to develop a new vision for the future of mining in Canada.

- Implement a new, verifiable Environmental Management System for the mining industry.

- Participate in a new Mining Human Resources Sector Council to promote a highly skilled and productive workforce and safe workplaces.

- Support technology development programs to advance environmental protection, competitiveness and safety.

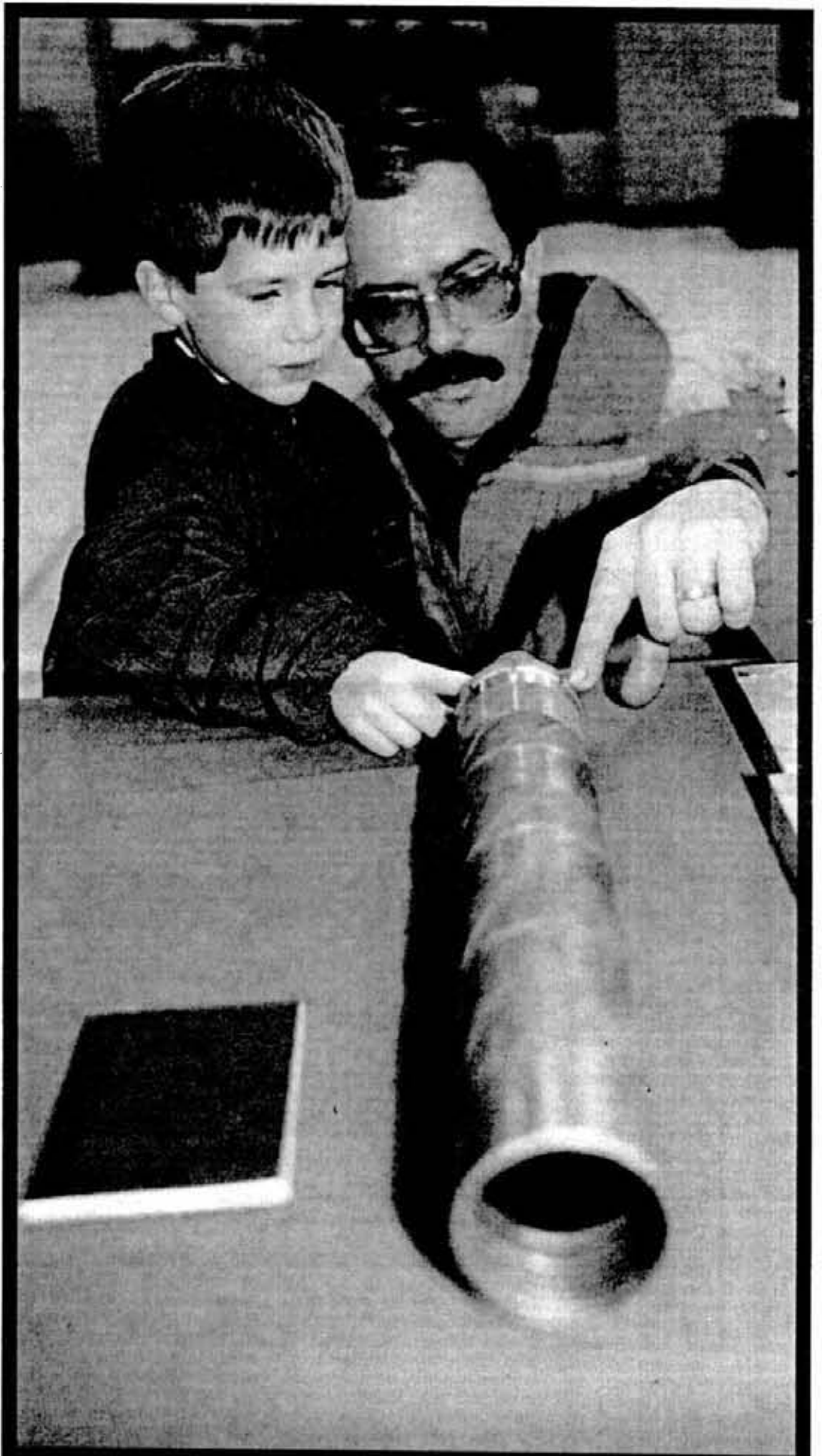
- Establish the Canadian Mineral Industry Federation to better coordinate mining industry initiatives.

Government Action

- Establish processes for land use planning to ensure both the protection of Canada's natural heritage and access for mineral resource development.

- Streamline federal-provincial environmental regulations to avoid costly duplications and delays.

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Five-year-old James Derro gets a firsthand look at a drill core with his dad, James, a Falconbridge ground control technologist. The Derros were two of many who attended an information session/open house held by Inco on the Victor development. For more stories, pictures see pages 8 and 9.

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13 Inco's famous kids

Government, industry cooperation required for success

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- Respect mineral property rights to reduce uncertainty and restore investor confidence.

- Change tax laws on mine reclamation funding to encourage investment in new mines.

- Launch a national initiative to build the necessary infrastructure for Northern Canada's economic self-reliance.

A Backgrounder on the Ten Point Plan

Industry Action:

The Whitehorse Mining Initiative

Finding solutions to the many issues facing Canada's mining industry requires input and participation from a number of important stakeholders including government, industry, labor, aboriginal groups, environmental groups and others. Concern about the deteriorating investment climate for mining and lower levels of mine exploration and development prompted the industry and Canada's mines ministers to initiate a multi-stakeholder initiative with the objective of developing cooperative solutions. Following the establishment of the Whitehorse Mining Initiative at the 1992 Mine Ministers' Conference held in the Yukon, working groups have been formed to address land access, workforce/workplace/communications, environmental, financial and aboriginal issues. The mining industry continues to take a strong leadership role in support of this important initiative.

Implementing a New Environmental Management System

It is not sufficient for Canada's mining industry to simply respond to government regulations for environmental performance. The Mining Association of Canada was the first national mining body to adopt an Environmental Policy. Canadian mining companies also played a lead role in forming the International Council on Metals and the Environment to focus on environmental, health and safety issues related to mining. The industry is completing a set of guidelines on Exploration; Design and Construction; Mining and Processing; Reclamation and Closure; and Environmental Emergency Prevention and Response; and is preparing a verifiable guideline on Environmental Management Systems. These guidelines will be brought forward for input from the partners of the Whitehorse Mining Initiative.

A New Mining Human Resources Section Council

One of the keys to Canada's competitive world position for attracting mining investment is its ability to maintain a highly skilled, productive and safe workforce. On August 25, 1993, The Mining Association of Canada, in conjunction with the federal department of Human Resources

and Labor, the United Steelworkers of America and the Canadian Institute of Mining, Metallurgy and Petroleum, released a comprehensive report on the current and future skills requirements for the Canadian mining sector. Key among the report's 19 recommendations was a call for the creation of a Mining Human Resources Sector Council to further improve training and human resources development in the industry. The mining industry strongly supports the creation of the Council and is committed to working with its partners on the broad agenda of issues covered by the recommendations of the human resource study report.

Support for Technology Development

Technological innovation is critical to our mining industry's ability to compete with low-cost producers in foreign countries. Only through greater efficiency and productivity can Canadian producers offset the challenges inherent in Canada's harsh weather, long distances, high wage rates, declining access to promising deposits, government-imposed taxes and charges,

Establishment of the Canadian Mineral Industry Federation

Mining is largely regulated at the provincial level in Canada, but many of the key issues facing the industry are national in nature. The coordination of industry actions on environmental, financial, workforce and other public policy issues has become increasingly important in promoting a positive investment climate for mining in Canada. Governments have also encouraged the industry to take on a larger role in raising

future. New mines cannot be opened to replace those currently operating without the ability to search for and discover new deposits. When governments designate land areas for single use purposes without considering their potential for mineral exploration and development, they deter mining investment and place future mining jobs in jeopardy. To encourage new investment in Canadian mining projects, governments must initiate processes of integrated resource planning that will ensure both the protection of Canada's natural heritage and access for

New impetus is needed for the establishment of a clear, streamlined federal-provincial approach to environmental regulation, assessment and permitting in Canada.

Respecting Mineral Property Rights

Security of land tenure is of vital importance to the mineral sector. In performing exploration activities, mining companies earn the right to mine deposits under appropriate conditions and standards set by governments. Mine exploration and development is a long and capital-intensive activity. This makes the certainty of mineral tenure a critical requirement for companies considering investments in new mining projects. Increasingly, however, political decisions on land use designation threaten to remove land from further development even after large investments are made for exploration and study. The uncertainty caused by such decisions undercuts our ability to attract the future investment Canada needs to maintain jobs in its mining industry. Governments can greatly enhance investor confidence by committing to reducing uncertainty and restoring investor confidence by respecting mineral property rights in Canada.

A "First Step Solution" on Mine Reclamation Taxation

Many provinces now require mining companies to pre-plan for mine reclamation and to set aside money in reclamation trust funds over several years. While mining companies strongly support the need for reclamation plans to safeguard the environment, the industry is calling for Tax Act changes because current requirements drain investment capital resources precisely when they are most needed to start up new mining enterprises.

Canada's mining industry is calling for an immediate initiative from the federal government as a sign of its willingness to encourage investment and support mining in Canada. The industry has put forward a "First Step Solution" proposal for federal income tax changes in the 1994 federal budget that would permit payments into mandated reclamation funds to be tax deductible as incurred and tax on the earnings to be deferred until the funds are withdrawn for reclamation work (akin to an RRSP).

Improving Infrastructure in Northern Canada

A solid infrastructure of roads, ports, power and other supports is vital to a trading nation like Canada. With the appropriate infrastructure, areas such as the Slave province in the Northwest Territories have the potential to become world leaders in mineral production and the source of valuable new jobs, investment and exports for Canada.

The mining industry is calling on governments to support the launching of a national initiative to build the infrastructure needed to gain these benefits and promote northern economic self-reliance.



"The state-of-the-art Creighton control room keeps track — among many other things — of people working alone underground. The safety feature is just one of many high-tech safety, environmental and production techniques developed by Inco."



Workmen lay brick inside the quench chamber for No. 2 Flash Furnace, part of Inco's \$600 million Sulphur Dioxide Abatement Project which applies the latest technology to meet Inco's environmental goals. Environmental, safety and production enhancements have changed the face of Canadian mining.

and fast-changing regulatory climate. Through the Mining Industry Technology Council of Canada, the industry promotes information sharing and cooperative research on common goals, including remote control, robotics, safer mine design and advanced environmental protection. Larger firms in the industry are actively working to increase the involvement of small and medium-sized companies in technology development and technology transfer. The industry is committed to working with governments, consultants, equipment suppliers, etc., to enhance the rate of technological advancements in Canada and capture business opportunities for Canadian technology elsewhere.

awareness of the importance of mining across Canada. On September 12, 1993, the Canadian mining industry held the first meeting of the Canadian Mineral Industry Federation (CMIF). A first initiative of the CMIF is the sponsorship of the "Keep Mining in Canada/Les Mines, Une Industrie a Appuyer" campaign to promote awareness of mining issues through community-based initiatives, advertising and media relations.

Government Action:

Establishing Processes for Land Use Planning

Access to land for exploration and development is critical to the mining industry's

mineral resource development.

Streamlining Federal-Provincial Environmental Regulations

Two of the most important considerations for companies considering new mining opportunities are the speed and certainty of environmental assessment and permitting processes and a fair and predictable regulatory framework. Including exploration efforts, it can now take 10 years to open a mine in Canada. Variations between federal and provincial processes, duplication and overlap, indeterminate time frames and a constantly changing regulatory framework create costly delay, uncertainty and frustration.

Precious cargo for North Mine

About 28 children and seven adults from the Pioneer Clubs at All Nations Church were taken on a grand tour at North Mine recently.

Equipped with hardhats with headbands adjusted down to the smallest size, safety glasses and most importantly flashlights, the tykes headed around the mine site as mine superintendent Leo Vienneau gave them a brief description of what they were looking at.

Gerry Arcand said he enjoyed learning about the explosives used underground. "It was great learning about mining!"

Gerry is no stranger when it comes to mine sites. "I've been at mines at least 10 times at the Big Nickel and at Levack where my dad (Wayne) works. He's a ventilation engineer there."

Ashley Smith was equally excited. "It's neat getting the tour. I liked going learning about all the stuff they have here" said Ashley. Her mother, Benita, works in Copper Cliff training and her father, Jason, in maintenance in Copper Cliff.

Leo, who helps teach at the church, said they like to take the children to a variety of places including outings for pizza and touring the firehall.

"Many of the children's parents work in mining so we organized this trip to North Mine."

Fraser Manning had the best vantage from his father, Brian's shoulders.

"I think it's good for the kids to see this," said Brian. "Mining is an important part of our community."



Youngsters show their enthusiasm with a wave.



Fraser Manning has the best seat at North Mine on the shoulders of his dad, Brian Manning.

The Nickel Rap

Yo, this is Nickel here and this ain't no fable
I am comin' directly from the periodic table.
My atomic number is twenty-eight,
And fifty-eight point six nine is my atomic weight.
For short they call me 'Ni' and I really don't care.
The reason's 'cause only two letters fit in the square.

I'm a greyish-white metal that resists corrosion,
Heavy and durable, sometimes mined by explosion.
I can be mixed with other metals to make stainless steel.
Which is used in storage tanks and pots and pans for your meal.

Canada's rich in Nickel especially 'round Sudbury,
But I'm not made of money, money's made of me!
Yeah you heard me right, no, it ain't no bickie,
Canada's loonies, dimes and quarters are all made of pure Nickel!

Canada's a major 'Ni' producer in the world, it's a fact.
More than 189 million kilograms in '87 to be exact.
The largest deposits of me in the world abide.
In the Sudbury basin, about seventy-four kilometres wide.
A meteorite's the reason, geologists believed,
For all of my deposits, which Canada has received.

In 1883 I made my first Canadian appearance from the dust,
And still I'm the twenty-fourth most abundant element in the Earth's crust.
This is the story of me, a little Nickel rock,
But now I have to hand my little rhyme to Mister Bloch.

This poem was written by Eric David of Northern Secondary School in Toronto.
Thanks to teacher Peter Bloch, Eric's teacher, for sending this in.

Crusherman Rick Landry took time out to explain a diagram of the main drifts to the children when they stopped in at the refuge station.

Mine designers best ever

Responses from delegates described the recent International Congress on Mine Design as outstanding.

"Over the last 25 years, this has been the best organized and the highest technical content international meeting I have attended," said Dr. A. Abu Hassan from the Jordan Phosphate Mines Co. Ltd., Amman, Jordan. Other commendations came from as far afield as Queensland as the 689 registrants, from 24 countries, returned home.

The 22 registrants on the week-long field trip visited Inco's Creighton Mine and Neutrino Observatory in Sudbury as well as Hemlo Gold Mines in Marathon, Noranda's GECO Division in Manitouwadge and the Dome Mine in Timmins.

More than 100 papers dealing with all facets of mine design were presented during the 11 technical sessions. Two students, Edward Pieterse from Laurentian University and U.H. Khan from McGill Uni-

versity, were recognized for submitting the best papers in the student competition. Both of these papers have been included in the 1,046 page volume of Proceedings, "Innovative Mine Design for the 21st Century".

A spectacular trade show included radio-controlled mining equipment demonstrations and displays of everything from rock bolts and explosives parameters to the latest in computer programs for mine design.

MAKING *Change*



Cathy Desgagnes gets her tools from the locker for a day's work underground at Creighton Mine. The industrial mechanic became the first female to graduate from the mechanic apprenticeship program this past year.

Career shift turns shopkeeper into Inco's first female mechanical graduate

Cathy Desgagnes couldn't be happier with her decision to work as an industrial mechanic.

In the past year, the 32-year-old reached a milestone by becoming the first female to complete the mechanical apprentice program at Inco. Now she's working underground at Creighton Mine repairing and maintaining stationary equipment.

Cathy's career path took quite a turn about four years ago. "At the time when I was looking for work, Canada Employment was pushing people into the trades," she said. "There was a real shortage of work so I thought I would try it."

And so her second career began. Cathy, who had taken a college recreation course and managed a sporting goods store in Timmins, found herself back in school. This time she was taking the millwright course at Northern College.

Her three-year apprenticeship required a lot of moving around. "I had about eight different placements," she said. "It makes it hard when you're moving from job to job. It seems that you just get to know the guys you're working with and you're off somewhere else." During her apprenticeship at Inco, Cathy worked at a number of jobs



Cathy Desgagnes on the business end of a wrench.

from matte processing to hoist inspection.

It is the variety of work that she enjoys the most about her job at Creighton Mine. "They rotate people on a three-month basis here so you could be working on the crusher then a picking belt."

This has its advantages and disadvantages, according to Cathy. "You're not doing the same job all the time." On the other hand, she explained, some people take the attitude that they are only there for three months so they don't take care of their work station, then you have to come in and start all over."

Cathy said she wouldn't hesitate to encourage her daughter, Lee-Ann Carriere, 8, to look at all career options including non-traditional jobs. Right now, Cathy doesn't know if her daughter understands what her mother does.

"She knows I work at Inco, underground, but that's about it. I'd like to take her and show her where I work."

The future looks pretty bright for Cathy. "I feel that I have some job security now. Whatever is happening with Inco there will always be lots of work for mechanics."

Since Cathy graduated, Pierrette Lalonde Chinn has followed and Lynn Descary is working at Stobie Mine on her apprenticeship.

MAKING Change

Stobie tonnage teamwork sets new Inco record

Just a good day, explains Stobie's finest. Stobie miners tend to understate. Sure, everything was going particularly smoothly. There was lots of muck to be had, the well-tuned equipment was not only running without mechanical problems, but it was available as the crew needed it.

Yet there was more to it. To set a one-shift record for mucking requires more than good equipment and lots of available ore.

Scooptram operator John Goddard slips the hidden ingredient into the conversation as an afterthought.

"As a team," says John, "we're the best."

Affectionately dubbed the "Muck Monsters," under head Muck Monster foreman Don Chevrier, the crew hauled over 5,000 tons of ore out of Stobie stopes during a single eight-hour shift. It's a new Stobie record, and as far as anyone knows, a record that stands for all Division mines.

The crew regularly hauls well over 3,000 tons a shift. The new record beats the pre-

vious record of 4,300 tons, set by the same crew.

"None of the guys were consciously thinking about setting records," said production miner Raymond Brunette. "It just kind of happened. But we had a feeling that day that everything was going smoothly, better than usual."

All agree that things have changed at the mine over the past few years. "There's more of a feeling of family, much more teamwork going on today," said Arnold Chabot. "Stobie was always a good place to work, but it's getting even better."

Emulsion loader Mike Kenny said new techniques, equipment and the new empowerment philosophy that gives miners input into how their jobs should be done are factors in the production improvements and in the general increase in morale.

A good example, he said, is new blasting techniques that have reduced secondary blasting. Chunks of ore created by the blasting should ideally be small enough to be removed by scoops. Chunks too large

must be blasted a second time, creating a delay in the mucking operation.

The Stobie miners shy away

from claiming any special kind of credit for their achievement.

"We're lucky here at

Stobie," said John. "We have the best equipment here and it's up to us to keep it in good condition."



Stobie's "Muck Monsters," from left (front) Gerald Walsh, John Goddard, Mike Kenny, Don Chevrier, (rear) Arnold Chabot, J.P. Pretz, Raymond Brunette, Roland Lalonde, Marcel Demore and Keith King.

Sometimes, mining is for the birds

Area ospreys are getting a little help building their nests from Inco.

This fall, Decommissioning and Reclamation department employees built two osprey platforms that were erected during the last week of September with the help of a power department crew.

"It's been a worthwhile project," said John Lemon, senior analyst at Central Processing Technology. An avid birdwatcher since he was a teenager, John has studied the ospreys' migration patterns and offered his opinion about where the nests should be located.

"It is a nice experiment to see what happens — whether the birds will nest or not," he said. "It is pretty hit and miss to try and pick some general areas that they will find suitable."

Two sites were chosen, behind the Copper Refinery and on the shores of Kelly Lake. Grounds supervisor Mike Peters said the areas were chosen because they were on Inco

property and ospreys have been sighted there.

The Wildlife Management Committee, comprised of Inco employees like John, chose the areas. Mike said more nests may be erected next year possibly on the Vermillion River.

Winston Vaillancourt and Claude Blais of Decommissioning and Reclamation helped build the nests out of wire mesh and cedar boards. Mike estimated the cost of the platforms at about \$25 each.

Line foreman Ron O'Shell got his department involved in the project by sending out a crew of four to put up the poles for the platforms. "It is the first time we've ever been involved in something like this," he said.

Ever since DDT usage was outlawed the osprey population is growing again, explained John.

"With the fish population and lake water improving we're seeing more ospreys. They are like huge environmental monitors."



Leader Winston Vaillancourt cuts wire for one of the osprey platforms in the shop at Decommissioning and Reclamation. Two platforms were made this fall and erected on Inco property.

MAKING Change

Copper Refinery crews skim \$5 million off costs

by Kim Mayo

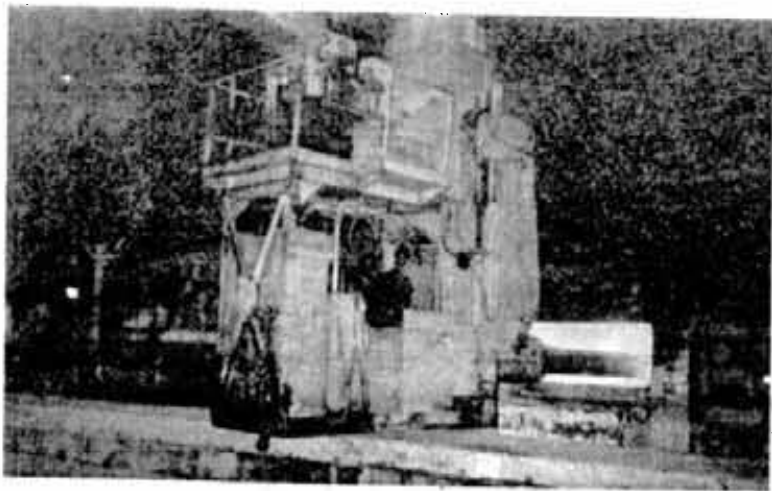
Copper Refinery anode furnace crews were the prime contributors in a slag skimming procedure change that will create one-time savings of over \$5 million and ongoing monthly savings of about \$29,000.

Changing the furnace skimming procedure from manual to mechanical has also made this part of the plant operation much safer and more rewarding. Furnace crews are no longer subjected to prolonged periods of heat or the physical stress of skimming manually. This is expected to result in significantly less injuries.

The crews' experience, knowledge and innovative ideas were credited as the catalyst for the changes.

The heat from the furnaces is debilitating and the men would have to spell each other frequently. There were many injuries because of the strain on the crew members' backs, shoulders and arms, and from burns.

The crews skimming manually would fill five or six slag pots on average per furnace cycle. Pulling slag into the pots meant pulling copper also. Each slag pot would only contain approximately 20 per cent slag, the other 80 per cent would be copper. When the slag pots were cooled and emptied the slag would be chipped away leaving approximately 1.98 tons of copper or metallics called buttons from each slag pot. These buttons would have to be shipped back to the Copper Cliff Smelter



Bill MacDonald skimming mechanically: A two-fold improvement.

The manual skimming procedure had remained virtually unchanged since the 1930s. It was a physically demanding job that was done every furnace cycle. A hot metal car filled with blister copper from the Copper Cliff Smelter would be dumped into the furnace to bring the level of copper up to a specific height. Once the temperature of the furnace reached 2,160°F, it was time to skim. A crew member would pick up a rabble that weighs approximately 75 lbs. and is 16 ft. long — it resembles a garden hoe — place it through a 3 foot by 3 foot opening in the furnace, the skim bay door, and pull the slag floating on top of the copper out and into a slag pot. This was very strenuous work, sometimes requiring two men pulling on the rabble because of the size of the slag. When the slag pieces were just too large for the crew to pull out or, after a shutdown when there was an over abundance of slag in the furnace, a charge crane would be used. The charge crane has a 20 foot boom that is two-foot wide and can withstand the heat from the furnaces. The boom, with a scraper attachment, would enter the furnace from the charge door. At the same time as the crew member was pulling on the rabble, other crew members would use blow pipes or lances, 3/4 in. diameter by 22-foot long, inserted through openings on the side of the furnace, to blow compressed air into the copper bath creating a wave effect. This would help push the slag towards the skim bay door where the rabble could reach it. Between eight and 10 blow pipes were required per furnace cycle.

to be melted down again. The anode furnaces do not burn hot enough to melt the buttons.

Primarily as a safety initiative, it was decided to explore the possibility of skimming mechanically. A four-wheeled, remote control operated unit with a boom for the scraper was experimented with. The machine worked but there were a few major deficiencies which ultimately led to the current skimming procedure of using the charge crane. Because the charge crane had been used before for pulling out large pieces of slag the crews felt quite comfortable working with it. The charge crane has the ability to turn almost 360° which enables the boom to retrieve the slag from all angles inside the furnace. Some modifications to the scraper were made. The scraper is now attached to the boom with chains instead of a bracket. This allows the scraper to have a floating motion when the crane is backing the boom out of the furnace. The front blade on the scraper was also extended.

Modifications were made to the furnace also. The door sill plate had to be made thicker and stronger. The brick at the door sill was changed. It is the same brick that the furnace is lined with but is longer and was installed at an angle to create a gentle slope for the scraper as it pulls the slag out of the furnace. New slag pots were fabricated, they are larger and lined with the same brick as the furnaces. These slag pots are preheated before using and sprayed with a coating of bone ash or barite so the slag does not stick to them. One new slag pot will hold the



Anode furnace crews have "skimmed" millions of dollars off operation costs. Crew members are (top picture) Maxie McGann, Bill MacDonald, Frank Spaziani; (middle) Joe Loon, Roger Houle, Fred Grottoli; (Bottom) Ray Morin, Charlie Myre and Joe Couvrette. Not available when the pictures were taken were crew members Guy McLaughlin and John DaSilva.

same amount of slag as five or six old pots, approximately 7,000 pounds.

Now when the furnace crews start the skimming procedure they hook a log pole to a hoist which they direct into the furnace through the skim bay door. The moisture in the log creates agitation in the copper bath which stirs up any slag off the bottom of the furnace. The charge crane enters the furnace through the charge door and pulls only the slag from the furnace not the copper.

After initial startup, the crew was usually faced with a grueling six hours of manual skimming, but mechanically, it is

now skimmed in under an hour. The crews proudly point out that the furnaces have never been cleaner. The heat of the furnaces penetrates the copper bath more efficiently now and the improvement is twofold. In the first place, the slag formed on the bottom of the furnace is breaking away maintaining the furnace capacity, and secondly, there is also a possibility of using less gas to maintain the furnace temperature.

Blow pipes are only used occasionally now if some slag gets hung up along the charge door side of the furnace, and fewer slag pots will be needed now that the newer slag pots are made

much larger. The old copper slag pots will be recycled or sold.

Once inventory is gone, the procedure of sending copper buttons back to the Smelter for melting down will have been eliminated.

Anode furnace crew members are Ray Morin, Joe Couvrette, Charlie Myre, Bill MacDonald, Maxie McGann, John DaSilva, Guy McLaughlin, Joe Loon and Roger Houle.

Those involved in the commissioning of mechanical skimming are tapper Eddy Langlois, plant technologist Bob Roberti, production assistant Bill Hannon and foreman Bon Brickett.

MAKING *Change*



Auto mechanic Frank Nuxoll fixes a sticker to a used battery for recycling.

Port's auto shop on board with Inco's environmental efforts

The auto shop at the Port Colborne Refinery is only a small part of Inco's commitment to reducing, re-using and recycling yet it is still as important as all other efforts to help the environment.

"It's one of those things," said auto mechanic Dave Hunt. "It grows on you. We're not aware of it anymore. It's something that's part of the work."

Inco has a substantial waste reduction program and every department practises at least one of the three Rs. Recently, employees were asked what steps they would like to take to reduce waste and the suggestions were numerous.

"It costs us money to recycle (oil filters) but there's a certain attitude that we're not harming the environment," said refinery environmental control supervisor Dave Reed. "I think it makes the employees feel better that they're helping the environment."

Talk to some of the guys around the refinery's auto shop and you will see that



Auto mechanic Dave Hunt empties oil from a used oil filter.

Inco employees do care about the environment and do feel good about their efforts.

"Everybody feels this way about recycling," auto mechanic Frank Nuxoll says. "It's re-using materials."

Frank discovered the refinery's supplier of batteries would pick up the used ones and recycle everything from the plastic casing to the acid inside.

The refinery's auto shop also recycles used oil filters, dumping out the oil and putting the remains in a blue box-like bin which is picked up periodically. Metal, such as bearings, is taken to the scrap metal bin and used paper is put into blue boxes.

"Everybody's had that awareness and it's around the whole plant," said Frank. "You used to see people throwing cigarette boxes on the ground but now people throw them in the garbage."

Many Inco employees also practice the 3 Rs away from the refinery.

"I like to recycle every-

thing," said Dave. "I'm one of those people at home, I've got one of those composters from the city and I use it all the time. Even before that I used one."

The refinery's recycling program not only makes people feel good about helping the environment, it's become good for business.

The company tries to cut down on its waste by purchasing items in bulk where they can be loaded into smaller reusable container and then the bulk containers can be sent back to the manufacturer to be used again. Buying in bulk is less expensive and re-using containers means only materials are purchased, not the container.

Inco is trying to "close the loop" when it comes to recycling. It is company policy to try — where economically viable — to purchase recycled materials.

"If people just end up recycling and don't end up buying anything recycled, then it doesn't do any good to recycle," said Dave Reed.



Hannu Virtanen of Inco Exploration and Technical Services in Copper Cliff explains Victor's shaft plans to Jorma and Bruna Nordman of Sudbury.



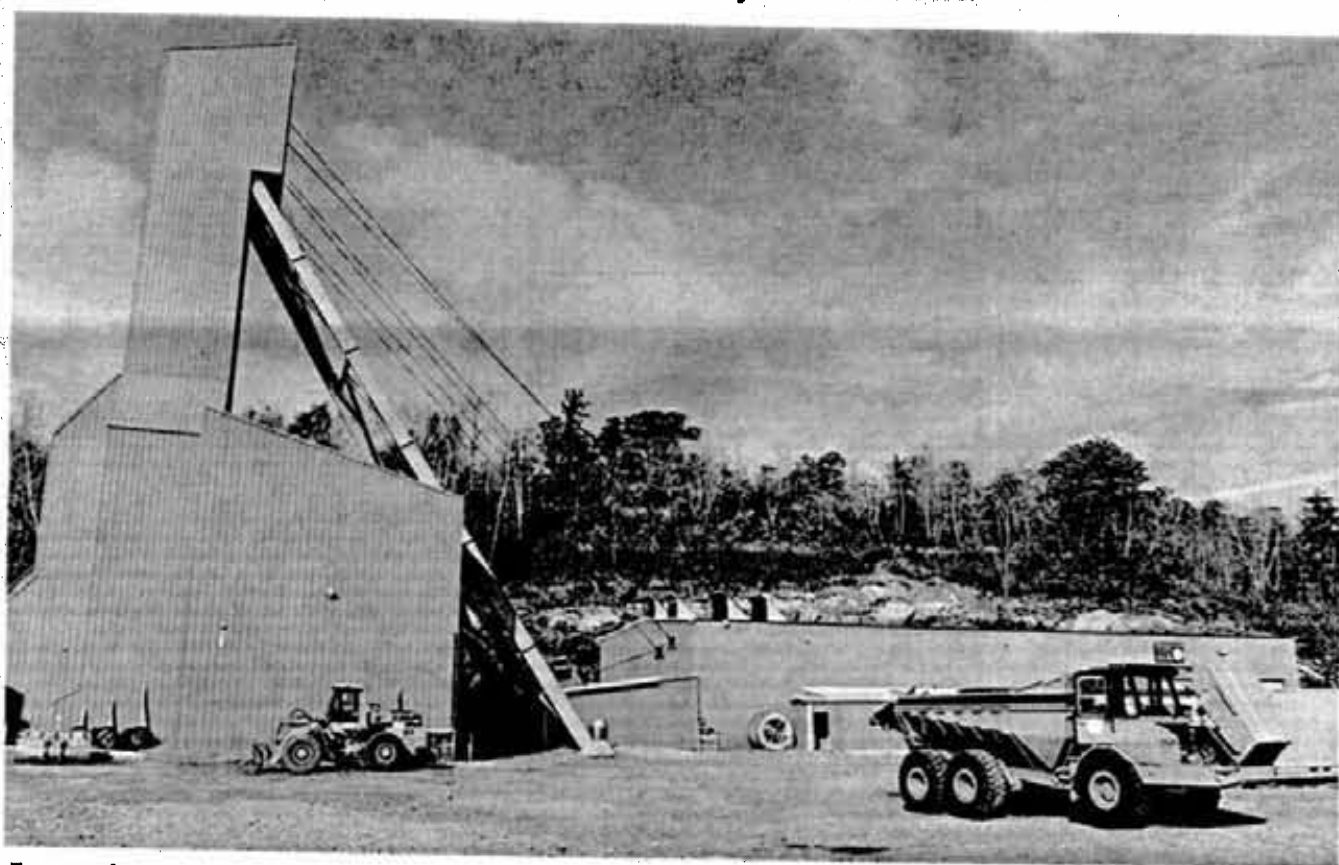
Dan Bouillon of the Ontario Division's Safety, Health and Environment department responds to the environmental concerns of Hanmer resident Scott Halladay.



Barrie Satchelle of Inco Exploration and Technical Services screened by Bonnie Halbert.



The 3-D model shows a detailed diagram of the mineral deposits at Victor. Senior geologist Sudbury basin exploration, Gord Morrison explains the image to Paul Binney.



For environmental aesthetics, the shaft at Victor will resemble this smaller, 'sinking' headframe.

Victor: What's in a name

The Victor ore body may hold the answer to Inco's fortunes in the 21st century but it also has rich associations to a fabled past.

The Victor property, which is in the public commentary phase before any advanced exploration drilling can proceed, quite likely was named after a giant in the history of metallurgy.

While absolute historical proof is elusive on the origin of the Victor name for the property, two of Inco's historical pundits reckon it was named after the founder of the Hybinette electrolytic process for refining ores.

Both archivist Ron Orasi and history writer Marty McAllister point to the Norwegian metallurgist, Victor Hybinette, as the most logical

source of the name.

"It has to be Victor Hybinette," Orasi argues. "He was on the board of directors of the British American Nickel Corporation, Limited (the comma is correct), which owned the Victor and Blue Lake properties at the time."

McAllister cited the 1917 Royal Ontario Nickel Commission report which makes several mentions of the negotiations by the British American company four years earlier to acquire the exclusive North American rights to the then revolutionary Hybinette process.

A strong British-Canadian company controlled by the British government, British American acquired some 17,500 acres of land in the Sudbury district in 1913 from

the Dominion Nickel Copper Co. The Murray, Elsie, Gertrude, Whistle, Wildcat, Nickel Lake and Victor properties were included in the land deal.

In 1917, British American had just broken ground for the construction of large smelting and refining works near Sudbury to produce refined nickel. The Royal Commission described British American's operations as unique in the history of the nickel industry in that mining, smelting and refining of its ores would all be performed in the Sudbury region.

The Hybinette electrolytic process was in use in its inventor's home country of Norway for several years on nickel-copper ores far inferior in grade to those in Sudbury. It

was first employed in America at the North American Lead Company in Missouri with a lead-copper-nickel property. Electrolytic refining, for the purists, called for fewer chemicals, led to smaller losses of copper and nickel and was excellent for precious metals recovery.

In 1921, British American became a casualty of the depression and closed down its mining, smelting and refining operations. Four years later, Inco acquired most of British American's assets and properties, including the Victor land and the rights to the Hybinette electrolytic nickel refining process.

The company did diamond drilling on the site in 1942, 1955 and 1959. In January, 1960, Inco began to develop

the Victor Mine to bring it into production. April 13, 1960 is on record as the day the first ore was shipped from Victor.

The mine was in production just that one year.

In 1926, the Stanley process, which was a combination of the Orford and Hybinette refining processes, was introduced at Port Colborne on a commercial scale.

In its original form, the Hybinette process lived on at Falconbridge's Kristiansand refinery in Norway until 1976.

Thrice a millionaire and a hard drinker who once boasted he'd lived in Canada for three months before he realized martinis were not a soft drinker, Victor Hybinette died in 1937. He was 70 and lives on today as a colorful character in mining's grand history.



as the 3-D model of Victor's mineral deposits being

The Victor Dream Lives On

Story by Jerry Rogers

On a rain-swept October evening, on the night after the Liberal Party swept to stunning success in the federal election, it seemed oddly appropriate that the fate of the proposed exploration program at Inco's Victor property should be decided in a community hall above the Garson Arena.

And before the toughest critics: the residents and cottage owners who would have to live with a mining property next door. Albeit three kilometres due west of their beloved Lake Wahnapiatae shoreline.

As young hockey players skirmished on the ice below, more than 100 residents, mining industry onlookers and provincial Northern Development and Mines observers gave critical scrutiny to Inco's plans. The advanced exploration drilling would take up to six years and 60 million of hard-to-find exploration dollars to assess whether Victor really would live up to its potential and become an Inco mine in the 21st century.

On whatever issue — increased road traffic, water runoff, noise, dust, property values, aesthetics, recreational land use — their views were diverse, informed, probing, and, given the mood of the country, outwardly skeptical.

Susan Cardinal, a federal government employee who, interestingly, was one of the first females in the 1970s to work at an Inco plant, seemed to capture the residents' concerns.

"We're a little selfish. That's our little piece of wilderness out there," she said, as she toured Inco's booths highlighting geological, engineering and environmental aspects of the program. "Most of us have made our living off Inco in one way or another. I want Inco here in Sudbury. I want Inco to make money. I don't mind Inco being there if you're doing it right, if you're conscientious and you're looking after our interests."

Great concerns. Understandable, too, to Bill Dawson, senior mining engineer with Inco Exploration and Technical Services and chairman of an Inco Task Force spearheading the dream to bring Victor on stream.

The task force, an Inco first in bringing together players from the Ontario and Manitoba Divisions, IETS and corporate Inco, aims to make Victor an environmental model of its kind. Because Victor is a new mining venture in Ontario, a closure plan accompanied Inco's proposal to the provincial government last spring.

How the public views Victor is vital to getting the okay to proceed.

Bill, a young Newfoundlander who joined Inco at Snow Lake, Manitoba in 1988, had high hopes for the public ses-

sion. Every public issue had to be meticulously studied and addressed.

"An integral part of the closure plan is public input. We have to go to the public before any approvals. So the public input stage has to be successfully completed," Bill said in the weeks leading up to the meeting with the residents.

Going into the session, which was designed to be an informal open house rather than a town hall meeting with formal speakers, the Inco team felt confident with the work scoped out for the underground exploration.

"There's probably \$1 million worth of engineering and conceptual design and detail from Thompson that can be applied directly to Victor. The proposed shaft at Victor, for instance, is similar to the 1D shaft currently being sunk at Thompson," Dawson explained.

"From the start, it was crucial to the success to have a strong team of geological and engineering personnel. Which really is why the task force is so important. This is the first time on any project that Toronto, Ontario, IETS, Manitoba and IETS engineering have all been working for the common good for the team. It was a fantastic experience."

Drawing from such diverse talents and experience, the team examined the project from every angle, constantly keeping in mind the principle that the company is committed to developing, operating and closing the project in a safe and environmentally responsible manner.

In a briefing just before the public session, Hannu Virtanen, the senior IETS geologist who created the closure plan for Victor, checked off environmental concerns with Bill.

"We're three kilometres away (from Lake Wahnapiatae). We'll be out of sight. It won't be noisy. We'll have our compressors housed in a sound-proof building and we'll build sound barriers, if necessary, to ensure there's no disturbance," Hannu pointed out. "Similarly, we're planning steps to minimize the aesthetics problem from the air. We'll remove as little vegetation as possible. We'll cover only three or four hectares and we'll use the natural topography as much as we can."

There was also a host of other environmental initiatives. Water for drinking and for underground drilling and development will come from nearby Blue Lake. A settling pond will take care of discharge water and site runoff. Topsoil will be stored for reclamation. And if the exploration program shows there's not enough tonnage or high enough grades to justify a mine, then the site will be returned as near as possible to its pristine state.

The information session drew an audience that was respectful, demanding



Senior mining engineer Bill Dawson stands on a slope that could be the site of a new Inco mine in the next decade.

The Victor Team

Though a host of players were on the team that first tapped into Victor's incredible potential in 1989, the drive to develop an underground program has nine key players.

Experts all, they are drawn from the Ontario and Manitoba Divisions, Inco Exploration and Technical Services (IETS) and the Inco corporate office.

They are:

Claudio Barsotti, executive vice-president of Inco Limited and IETS president;

Bill Dawson, senior mining engineer and chairman of the Victor Task Force;

Geoff Fong, senior project engineer with the Ontario Division's Mines Technical Services;

Dwayne Kroll, divisional supervisor for the Manitoba Division's T-3 Mine;

Bob Martindale, IETS' manager of exploration for the Sudbury Basin;

Gord Morrison, senior project geologist with IETS in Sudbury;

Joe Stachulak, chief ventilation engineer with Mines Technical Services;

Brian Thompson, supervisor, technical services with Mines Technical Services;

Hannu Virtanen, senior IETS geologist.

If the program gets the provincial government's go ahead, the exploration will be headed by a Sudbury Basin IETS team led by Morrison and project engineer Wayne Garland.

They were members of the original team that also counted Maurizio Napoli, Joe Roque, Bob Martindale, Bonnie Halbert, Scott Jeffrey, Everett Makela, Caesar Battocchio, Don Reid, Andy Bite, Dennis Low and Ron Johnson.

and knowledgeable.

People like James Derro, a Garson resident, a cottager on Lake Wahnapiatae and ground control technologist with another mining company. He wanted to be satisfied on environmental issues.

"Having a presentation like this goes a long way to alleviating people's fears," he said. "Mining's part of our livelihood and we have to maintain it. But you have to realize that we've got so many cottages around Lake Wahnapiatae."

Steve McGregor, a former Frood miner who retired two years ago with 33 years' service, said his first thought was waste water containment. "When I heard they were wanting to open a shaft, I was interested. When you have a cottage on the lake, you want to protect it. But from what they're saying, it looks pretty good."

Steve MacLelland, a shaft hoistman with an independent mining firm, was enthusiastic about Victor's potential for the Sudbury economy, adding that "I just hope it goes quickly. I've been able to stay and work around here (all my life)."

Others focused their attention on the winding West Bay Road, school bus traffic and the need for improved maintenance during the several months when equipment and supplies would be trucked

to Victor before underground exploration could start.

Although a rail line a short distance from Victor is the answer for ore transportation should Victor develop into a mine, the team studied two routes into the site. One was over the West Bay Road. The other was a little used, gravel road skirting the Sudbury Airport, passing through what the provincial natural resources ministry considered sensitive 'kettle lake' country, and crossing a dilapidated railway bridge.

The Victor team preferred the paved, shorter West Bay Road that needed no major upgrading.

In light of the single outstanding issue that came out of the public session — the road access to Victor — the team went back for another, intensive look at the routes.

"We had to get people's thoughts about the project. I don't think anybody's questioning the potential of the Victor property. But people have real concerns," Bill said later. "What we're hoping to do now is find a solution that will satisfy our needs so that we can go ahead with the underground exploration while addressing the concerns that residents shared with us. That's our challenge."



Bill Dawson drew a rapt audience at the informal open house in Garson on the advanced underground exploration program proposed for the Victor property.

How Others View Victor

"It's great. It's about time. We need more exploration. We need to develop new mines. It's going to be good for my community. Over time, it will certainly create employment."

— Nickel Centre Mayor Stan Hayduk

"The Victor Exploration Project is very good news for the Sudbury Region. It's extremely encouraging to see Inco Limited make this kind of R and D investment in our community given the current economic times. The project will provide some much needed employment opportunities locally and the capital investment will certainly be felt rippling through the economy."

— Karen Shaw, Sudbury and District Chamber of Commerce President

"I think it's just great that Inco is doing some capital expenditures and right now there seems to be no end in sight for Inco's ore bodies in Sudbury. They seem to continue to grow. Everybody (in Sudbury) is looking for confidence today. I think this is a vote of confidence in the Sudbury area. It's also a recognition that while nickel prices are low they can't stay there forever."

— Bill Goring, president of the Sudbury Regional Development Corporation

"Inco's announcement to spend \$60 million in additional exploration work by sinking a new shaft at the Victor site is a positive shot in the arm for the Sudbury Region."

"More local research, development of new products and exploration work will help secure the economic future of our Region and our corporate community must be encouraged to continue this practice on a regular basis."

— Tom Davies, Chair of The Regional Municipality of Sudbury

The Facts On Victor

Where	The Victor site is five kilometres northwest of the Sudbury Airport on a rocky, rugged terrain. Lake Wahnapiatae is three kilometres west. You can get there by two routes: by the West Bay Road or via a little used gravel road skirting the airport.
What	In 1990, geologists with Inco Exploration and Technical Services, using deep diamond drilling and borehole geo-physics, discovered two massive sulphide zones at a depth of 8,000 to 8,800 feet below the surface of the Victor property. But to determine the size of the Victor mineral deposit, geologists need an advanced exploration program which involves sinking a 6,000-foot shaft, developing 10,000 feet of lateral drifts and completing approximately 270,000 feet of underground drilling.
Why	Famous Ontario Division mines such as Frood, Levuck, Little Stobie and McCreedy West are nearing the end of their lifespan. Victor, if it becomes a working mine, will help replace ore from these mines.
How Much	The exploration program is expected to take six years and cost \$60 million. Forty skilled people would be employed.
When	If the project gains government approval, work could start as early as the summer of 1994.



FOR YOUR HEALTH

From the Occupational Medicine Dept.

This is the third of three parts on how you can have energy to live life to the fullest and prevent illness by what you THINK, DO AND EAT.

Food is the fuel for our body. If we eat poorly then we are putting low octane gas in our gas tank and our body and mind will run, but not as well as it could. If we eat properly then we will have lots of pep and our mind and body will be running on all eight cylinders.

All the functions of the body, including thinking, are from chemical reactions. We need to have the right minerals, vitamins, acids, fluids, oxygen, etc. to make these chemicals. These come from our food, water and air. If we don't have the right types and amounts then we do not work as efficiently.

Food not only gives us energy but makes it possible for our body to repair itself. If we do not eat properly over a period of time we will get sick. Many illness are caused or made worse by poor nutrition.

EATING PROPERLY HAS 3 MAIN ASPECTS

1. What you eat.
2. When you eat it.
3. How much you eat

1. WHAT YOU EAT

Canada's Food Guide recommends that every day you eat at least: * two servings of VEGETABLES including yellow and green ones * three servings of fresh FRUIT * three to five wheat products such as cereal, bread, pasta and rice * two of dairy products such as milk, cheese and yogurt * two three ounce servings of meat, poultry or fish * Drink lots of water. Up to eight glasses a day is recommended

Eating according to Canada's Food Guide will help you get and stay healthy and energetic now and in the future by ensuring that you have the right materials to repair your body and to make the 100 to 200 chemicals that are necessary for all the functions of the body.

Recommended eating to decrease the chances of heart problems, cancer, diabetes, sleep disorders are all very similar. It is recommended that there be an emphasis on high fibre foods such as: fruits and vegetables and a decrease of fats, fatty meats, fried foods, sugar and caffeine.

FAT INCREASES YOUR HEALTH RISK AND IS ALSO ONE OF THE BIG ENERGY ROBBERS.

A little fat every day is necessary for good health. It is best to get it from vegetable oils or their products. Try not to eat fried foods or foods with a lot of butter, oil, fat or cream added.

SUGAR, CAKES, CANDIES, TARTS and ICE CREAM, ARE OTHER ENERGY ROBBERS

The level of blood sugar produced by all the foods you eat is usually an indicator of energy. Sugar, candies, cakes etc. get into the blood stream quickly and provide quick energy for a short time. Then your pancreas starts pouring in insulin to bring the sugar level back to normal. The sugar level then drops down below normal before the insulin stops being produced, and we have less blood sugar and less energy. Sugar also has very little nutrition. Other foods take longer to digest and become blood sugar but they are released gradually giving us more energy over a long period of time.

Most desserts and candies are a combination of the main energy robbers as well as being

ENERGY. YOU CAN INCREASE IT BY WHEN AND WHAT YOU EAT

high in calories and low in nutrition. Do yourself a favor and try to get into the habit of having fruit for dessert and increase your energy and decrease your calories.

WHEN YOU EAT makes a difference in your energy.

There's a saying that you should eat:

BREAKFAST like a king, LUNCH like a prince and SUPPER like a poor man.

Many of us skip breakfast and may not have much lunch and then eat everything that isn't nailed down for supper. Since food is the fuel of the body this type of eating style is like driving your car all day on empty and then filling it up just before you put it in the garage. When you get up you have already been on an eight to 10 hour fast, depending on whether you snacked before you went to bed. So by morning you're running on empty.

"But what if I'm not hungry in the morning?" Try eating a lighter supper and don't snack after supper so that you will be hungry in the morning. Plan to eat nutritious foods that you like. They don't have to be breakfast foods.

HOW MUCH YOU EAT and HOW MUCH YOU EAT AT ONE TIME affects your energy

A full stomach usually leaves you sluggish because your body's attention is on digesting your food and not on keeping you alert.

Grazing is the latest trend. This means eating several smaller nutritious meals and snacks often.

Alcohol and some allergies to food can also rob you of your energy so when you're feeling tired for no apparent reason think about what you ate or drank in the past hour or so.

DO YOU TEND TO EAT THE WRONG FOODS AT THE WRONG TIMES?

Answer the following questions and find out

True/False

I never eat breakfast.

I usually have a large supper.

I think a meal isn't complete without dessert.

I usually have a donut or something sweet in the morning.

I usually snack after supper.

I like to eat foods that are fried rather than baked or broiled.

I never drink three glasses of water a day.

I eat lots of meat.

I seldom eat two vegetables a day.

I seldom eat three fruit a day.

I usually skip lunch.

I eat junk food such as chips, candies, chocolate bars most days.

If you answered "No" to most of the questions then you already have some good habits for energy.

If you answered "Yes" to most of the above then do a little experiment with yourself for a week.

1. Take note of how you feel at the end of your work day and how much energy you have when you are at home.

2. Change some of your habits so that you eat similar to the suggestions in this article.

3. At the end of the week assess how you feel at the end of your work day and how much energy you have. If you have been eating properly you should have more energy more of the time.



Laboratory News

Inco wins league championship



League winners, Inco's version of the "Jays."

Maybe it was the lucky bench or the hunter's moon or the frozen but faithful fans — we may never know what helped to turn the tide. Regardless our boys in blue — Inco that is not the Jays — captured the victory in the Sheridan Park Fastball League Championship.

Having defeated IMAX in a three game semi-final playoff round the boys were facing Duracell in the third and final do-or-die game.

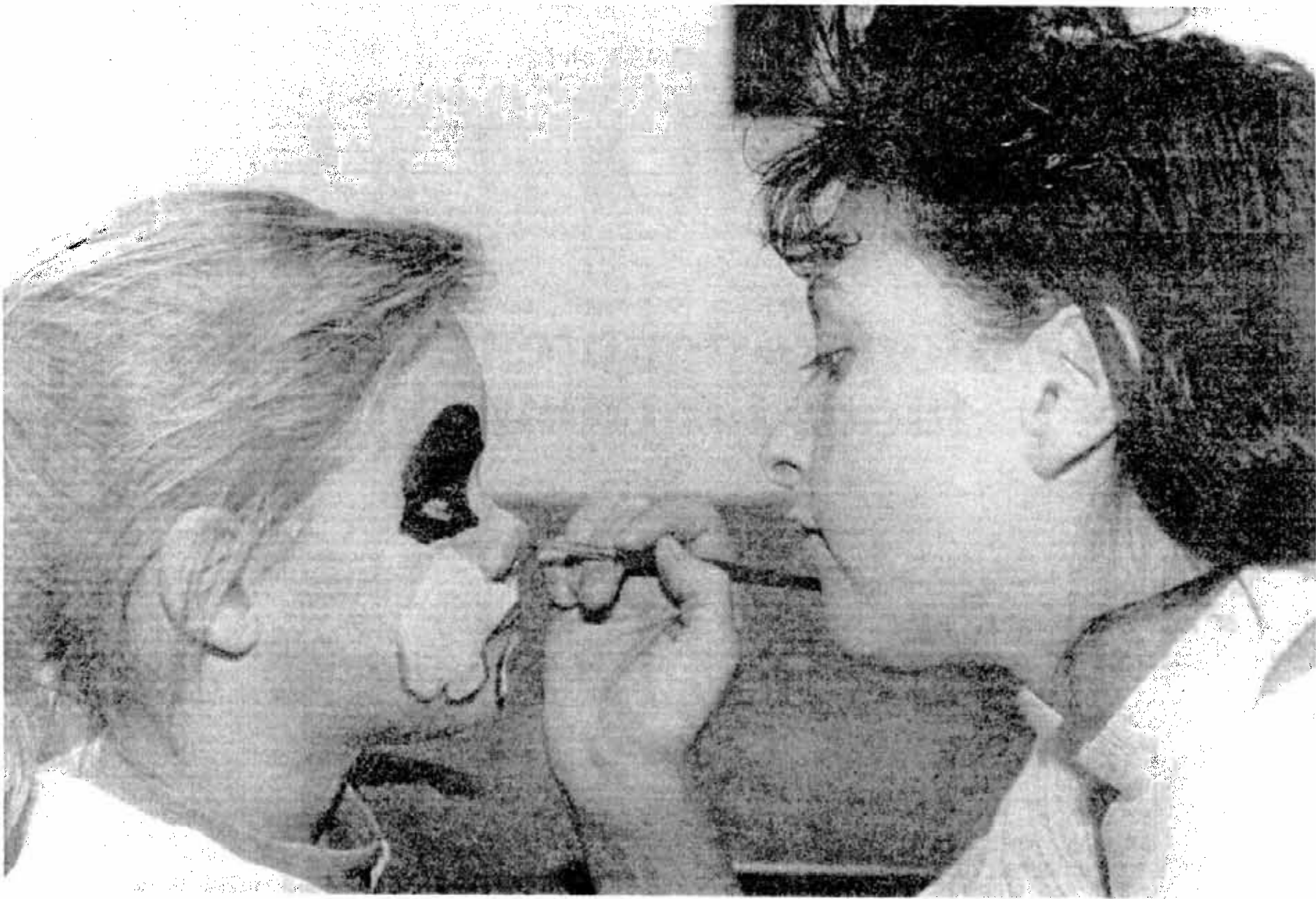
It was the bottom of the sixth inning and Inco was down 5 to 2. Their bats had just not been working very well up to that point. Then Randy Shaubel started things off with a base hit and there was no looking back. Four runners were in with only one out and they were able to finish the inning at a 7 to 5 score.

There was one tense moment in the seventh when a

Duracell runner made it home but relief pitcher/closer Grant Wilson held them to that single run and the boys closed out at 7 to 6.

Players, fans and Archie the mascot went wild. After all, this was the first time since 1979 that Inco had won the league championship. In fact, this was the first time since 1985 that Inco even had a team in the league. Some of the players — Gary Bradley Bruce Conard Pat Iamarino and Randy Shaubel — were also on that 1976 team, so it was not clear whether this victory tasted sweeter for the "oldtimers" or the young rookies.

Or maybe it was the lucky date that did it. The last time Inco won was also September 29th, the same day as pitcher Gary Bradley's birthday. After 17 years the trophy has finally come home!



Viviane Rouleau, 7, has her face painted by Lina Arseneault. There was fun for the whole family.



Dennis Campeau, an electrowinning chemical assistant operator showed his children where he places his tag on the board. Dennis took Patrick, 4, Veronica, 8, Christopher, 6, Cora, 4, and Madonna, 10 on the tour.



C. J. Rice had to look way up at Less Watt. The five-year-old visited with his uncle John Rice who works in Instrumentation.

There was something for the whole family at the fun day.

Good turnout for Copper Refinery Funday

Family Fun Day at the Copper Refinery proved to be a resounding success, said Keith Clarka member of the organizing committee. "We estimate between 650 to 750 people showed up," said Keith. "At any given time during the event

there were about 200 or more going through the plant." This year's event was different he explained. "In the past, people just went through the plant, had a hamburger and left. This time they came and stayed." Instead of the usual tour, a variety of activities were

planned for the whole family to take part in. A horse-drawn wagon made its way around the plant in the midst of the colorful fall leaves. Outside the temperatures were brisk but families quickly warmed up indoors. Children cuddled up to Less Watt and Sudbury Wolves'

mascot, Howler, and hot roastbeef sandwiches hit the spot. Volunteers like electrician Gerry Lagrue braved the cold waters of the dunk tank to entertain the crowds and raise money. Proceeds from the tank went to the Copper Refinery Athletic Association

for their Christmas party. Current employees and their families were invited to the Fun Day, explained Keith. "What we were trying to show people is that they have one family at home and one at the plant. We wanted to get the two families together!"

in touch

Inco pensioners donate time as well as funds for campaign

Inco pensioner Norm Lessard has a lot to smile about these days. The United Way/Centraide Campaign he helped organize at Frood-Stobie Complex went over the top.

"We're about 127 percent over our target," he said. "This year we have raised to date \$28,605 and as the campaign winds down we're hoping to hit \$29,000."

While other areas are having difficulty meeting their goals, Norm used his five years of campaign experience to make the mark. Despite the sluggish economy and recent news of the eight-week shutdown, Norm and his canvassers went out this year with the goal of increasing participation.

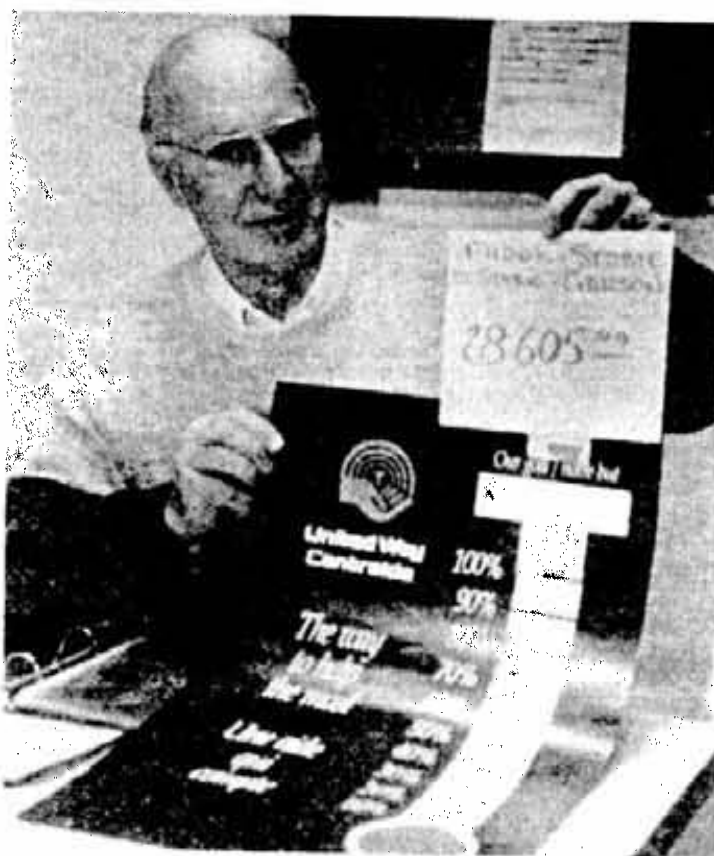
About 55 per cent of the 900 people at Frood-Stobie Complex participated, up over last year's rate of 38 per cent.

"We were looking for donations of \$10 and \$20 or anything that people could afford," he said. "Small donations, that's where the dol-

lars are."

Norm and his team started meeting last May with the United Way to discuss their strategy. "We try to learn from our past mistakes and correct them."

During the past two years there has been downsizing, explained Norm, and this year there were a lot of rumors about the shutdown. "We knew something was coming," he said. "Right up until the day of the announcement contributions were coming in slowly. As soon as the news was out that's when the contributions



The United Way campaign at the Frood-Stobie Complex went over the top thanks to the help of people like pensioner Norm Lessard.

skyrocketed."

Norm attributes the successful campaign to experienced canvassers, preparedness and the increased participation.

The retired general foreman for all mines training said he enjoys the challenge the campaign presents each year. "When I see the figures go above the target that's when I start gleaming."

One of the perks of Norm's job is returning to Stobie where he has the chance to see his friends many of whom he met dur-

ing his 31 years at Inco. "When I first came to Inco I started here, then I worked at Creighton and returned here before I retired. Now I'm back again."

Brian King, co-chairman of the Inco-Steelworkers United Way campaign said pensioners have always played a large part. "Traditionally over the years the pensioners have donated several thousand dollars to the campaign as well as volunteering their time."

In 1990, pensioners gave \$11,700, followed by \$12,500 in 1991 and last year increased the amount to \$14,700. "Hopefully they will exceed that figure again," said Brian.

The campaign officially ended October 31 and the final figures are being tabulated. "Despite the announcement of the shutdown the campaign is still going strong," Brian said during the last few days of the drive. More than 40,000 people receive help from United Way's member agencies in the Sudbury region.

In Memoriam

NAME	AGE	DIED	YEARS SERVICE
Butler, Alan	61	Oct. 4/93	34
Doyle, Francis	75	Oct. 25/93	25
Dufrense, Lucien	71	Oct. 20/93	43
Faddock, Steve	88	Oct. 9/9	35
Ferguson, Ross	73	Sept. 12/93	21
Fongemy, Fernand	57	Oct. 5/93	30
Fortin, Rene	74	Oct. 27/93	35
Fulin, Raymond	51	Oct. 18/93	23
Grooms, Ross	84	Oct. 8/93	31
Hall, Allan	72	Sept. 30/93	31
Harvey, William	78	Oct. 16/93	29
Jennings, John	93	Nov. 4/93	41
Kohlsmith, Elsworth	72	Oct. 8/93	32
Kraujalis, Pranas	82	Sept. 1/93	23
Lalonde, George	60	Nov. 5/93	25

NAME	AGE	DIED	YEARS SERVICE
Lapierre, William	79	Oct. 27/93	43
Liliom, Mihaly	55	Oct. 6/93	29
Liana, Matti	79	Oct. 1/93	22
Mazerolle, Raymond	53	Oct. 24/93	28
MacDonnell, Kathleen	77	Oct. 26/93	20
McCann, Clarence	64	Oct. 28/93	32
McDonald, John	75	Nov. 7/93	31
Near, Edward	68	Oct. 13/93	39
Noji, Bonifacy	78	Oct. 21/93	21
Patterson, Lloyd	70	Oct. 19/93	30
Samson, Yvan	46	Aug. 12/93	18
Surins, Vladis	72	Oct. 11/93	33
Thurlow, Kelly	61	Oct. 7/93	36
Whalen, Mary	103	Oct. 3/93	20

Inco kids go from Triangle to Maclean's

Though they didn't make the cover of Maclean's magazine, several children of Inco employees are just as excited about making the back page.

Some of the parents had a tough time trying to track down the issue which featured their children in an ad by the Mining Association of Canada. 'Keep Mining In Canada' was the message of the full-page ad which appeared on newstands September 27.

Instrument technician Dave Smith had to go to great lengths to find a copy. "Our inlaws in Lampman, Saskatchewan have a subscription so they sent us their copy."

Dave said his son, Quentin, 13, was kind of impressed by the whole thing.

Wayne Leavoy almost didn't get the issue. "I was able to get the last copy off the shelf," said the team leader of value added products at the Nickel Refinery.

"When I brought it home I asked Paul to look through it. At first he didn't see his picture but when I told him to look at the back page a big smile came over his face."

The 13-year-old called his grandparents in Toronto and Midland to tell them about the picture. "I'm sure he'll cherish the magazine for years to come," said Wayne.

Senior analyst Seija Binmore figured that the stores must have brought in extra

copies because on the first day she went looking she couldn't find any then the next time there were stacks.

Her 13-year-old twins, Mark and David were impressed. "I bought them each a copy and one for their dad in Toronto," she said. "Of course their grandparents had to have a copy too."

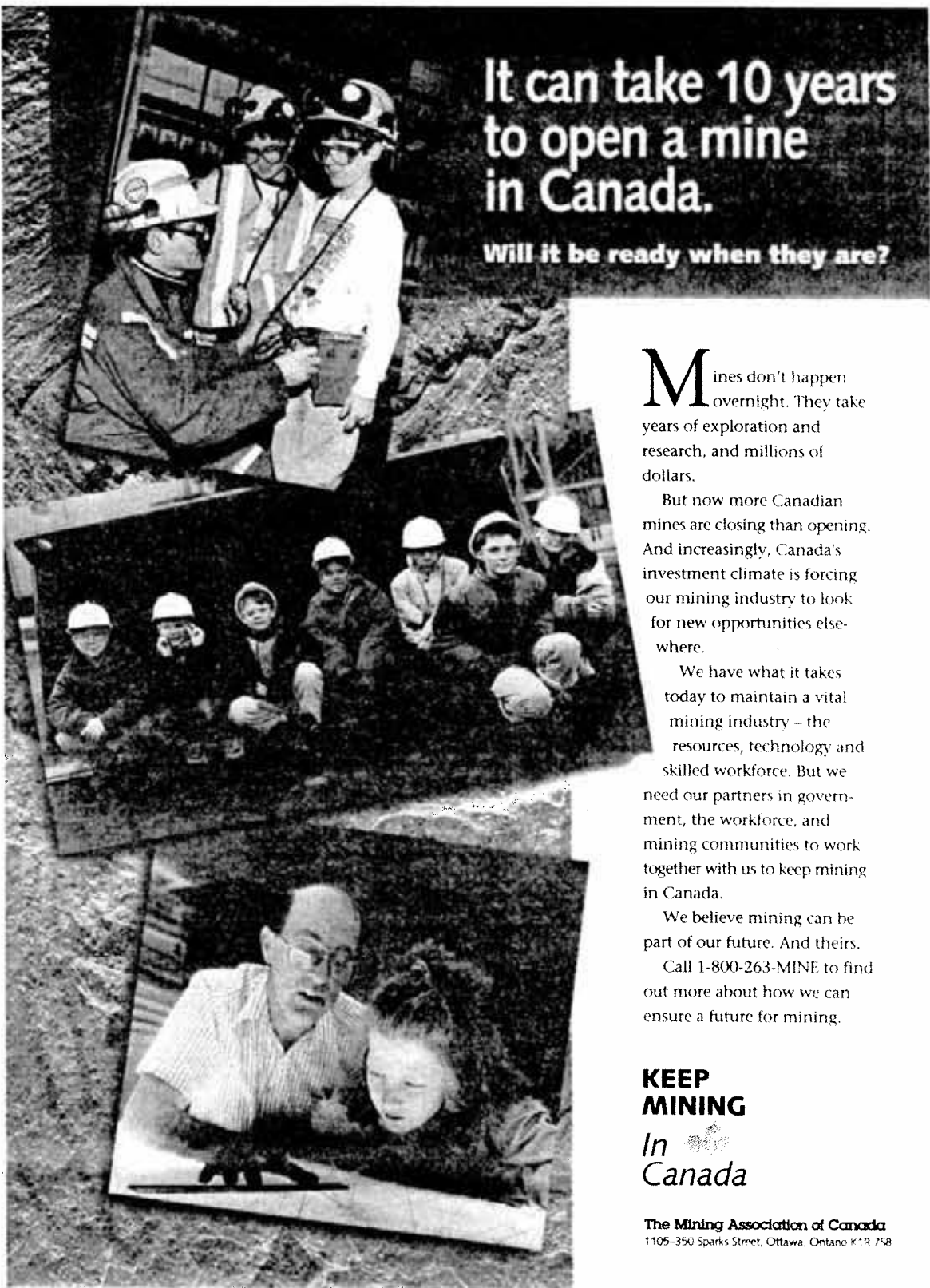
Leo Duguay, Nickel Refinery maintenance foreman was happy to see his son, Eric, 13, in the photograph.

"His grandparents here in Sudbury were showing the ad to everyone they had camped with this past summer," said Leo. "Eric's two older brothers teased him a bit saying, 'What are you doing in a big national publication.'"

Leo said he was pleased with the whole job shadowing program. "I was one of the guys who approached management about it. They put together a nice package for the kids and the message to stay in school really came through."

The children were photographed during a visit to their parents' workplace. They originally appeared in the Inco Triangle before being part of the ad. Also in the photograph were Steven, son of utilities operator Jerry Bisson, and Trevor, son of maintenance mechanic Russell Fowler.

Leo summed up his thoughts saying, "the magazine will be a good keepsake to look back on."



It can take 10 years to open a mine in Canada.

Will it be ready when they are?

Mines don't happen overnight. They take years of exploration and research, and millions of dollars.

But now more Canadian mines are closing than opening. And increasingly, Canada's investment climate is forcing our mining industry to look for new opportunities elsewhere.

We have what it takes today to maintain a vital mining industry - the resources, technology and skilled workforce. But we need our partners in government, the workforce, and mining communities to work together with us to keep mining in Canada.

We believe mining can be part of our future. And theirs.

Call 1-800-263-MINE to find out more about how we can ensure a future for mining.

KEEP MINING
In  Canada

The Mining Association of Canada
1105-350 Sparks Street, Ottawa, Ontario K1R 7S8

This Mining Association of Canada advertisement, featuring photos of sons and daughters of Inco employees from the March, 1993 Triangle, ran in the inside back cover of Maclean's magazine.

Actor or miner, it's been a blast both ways



Theatre Cambrian is bringing the spirit of Joe Hill back to life as the cast sings his songs in the play 'The Man Who Never Died'. From left to right are: Mary Heidman, Simon Gauthier, Howie Hoseas, K.C. Evans, Dave Hamilton and Ron Grigg.

When Frank Martins heard that Theatre Cambrian was producing a play about Joe Hill's life, the South Mine blaster answered the call to act.

Frank will be performing a couple of small roles including a Portuguese union member and a juror. "I'm extremely pleased to be in the play," he said.

Though he may not have the lead role in the play The Man Who Never Died that doesn't bother Frank, who believes "no play can be made with all big roles."

Frank, who speaks Portuguese, said he thought it was quite a coincidence that he would play a Portuguese union member. "I never dreamed I would play the part of a Portuguese man speaking in English."

To add to the irony, Frank said that Jamie Bourget, the play's director, taught him English 24 years ago on his arrival in Canada. It was the contents of the play that drew Frank. "I knew of Joe Hill's life story and I believe that the issues pre-

sented are still valid today."

Frank said there is still a need for unity of workers, a theme brought out in the play.

"I hope people will come out to see the play and learn some of the history of the union movement," he said.

The story is a re-enactment of murder charges brought against Hill, through to his trial and ultimately his execution. The audience will see Hill as a working man, an organizer, a poet and a singer who represented the spirit of labor.

The cast of 30 have been rehearsing their parts since late August for the upcoming performance. The play was scheduled to run from November 13 to 27 at the Mine Mill Hall.

Some of the other performers include Dave Hamilton, whose father Arthur worked at Clarabelle Mill; Mary Heidman, daughter of retired Froid miner, Carl; Ron Grigg, son of Ron Grigg Sr., retired carpenter at Creighton; Howie Hoseas, whose father Helfried (Joe) retired from the Smelter; and Simon Gauthier, grandson of Inco retiree Jerry Sikatowsky.



HERITAGE T H R E A D S

by Marty McAllister

It's always a treat when one story inspires another.

Like my September column, when I related some new insights on the life and times of Hiram Hixon - first manager of the Mond smelter at Victoria Mines and vacationer extraordinaire at Fairbanks Lake. It was one of those that a writer just feels instinctively good about.

The tie that binds

The same day that issue arrived in the mail, I received a call from an old friend and Crean Hill co-worker, John Passi. Now there was a guy who could tie rope. You see, John was a rigger... a very good rigger. One time, when I had to devise a way of towing an eight-by-16 foot raft with an old cedar-strip boat, John came to my rescue. I think he knew it would take far too long to teach me how to make my own tow-rope, so he made it. About fifteen feet from the raft end, he magically created a perfect 'Y', and then wove the clevises on the three ends. When connected to the boat and the raft, that rope towed as straight and true as one could ever imagine. What a work of art!

So it was a delight when John called, 20-odd years later, and even moreso when he told me of the memories my column had inspired.

It seems that when John was 16 years old, in 1928, he was given the task of driving a party of people from the train station at Worthington to Fairbanks Lake. It was a mere triviality that he had no driver's permit at the time; he could drive, and an old Buick touring car was available. And, as far as the local folks were concerned, Hiram Hixon was to be given every courtesy.

That was fine with young John.

"I had never seen so much luggage in my life," John laughs. "We had to put three people in the front seat, because there was only room left for one in the back."

Although the road to the lake was pretty rough, the trip was a pleasant one: "Mr. Hixon was very friendly... and generous. He gave me three dollars for my trouble and that was a lot of money in those days!"

Once a Mond boy, always ...

Then John threw me a curve: "The mine it wasn't the Victoria. It was

What a tangled web

the Mond."

Well, there's a fine howdya do. I had known that the townsite, located near the mine which was two miles from the Victoria smelter and the village of Victoria Mines, was called Mond. But the mine itself? I had always called it the Victoria, and so did all the 'official' sources like the 1917 report of the Ontario Nickel Commission, government maps, and so on. But John wouldn't fib about something like that, so I did a little browsing.

Well, it seems we're both right.

Official sources don't pay much attention to the names given to places and things by local folks. After all, they only live there. You have to find something written or drawn by them or their descendants to get to the bottom of it all.

I turned to the booklet **Industrial Communities of The Sudbury Basin**... for the umpteenth time. In it, there is an essay on Mond and Victoria, prepared by W.H. Makinen. Sure enough, the locals who contributed memories and sketches seemed just as likely to call the mine Mond as Victoria.

So, the next time you hear someone talking about the Mond mine (which may not be soon), you needn't argue that it was really called Victoria. Actually, if John had his way, the name should be changed to Mond... period. Sounds like a job for a committee.

For further information

That booklet, by the way, can be read in the Mary Shantz Room at the Civic Square branch of the Sudbury Public Library. It's well worth the trip. In it, you'll find stories of Copper Cliff, Victoria (or Mond) and Coniston - including the following snippet about the old Mond (Victoria) bucket line that I talked about in my column.

"... occasionally individuals hopped a ride on it to and from Victoria Mines thus saving themselves a good half-hour walk. The buckets also carried mail orders from Eatons and Simpsons and groceries from Sudbury, which arrived via the C.P.R. at Victoria Mines (the village, not the mine)."

I hope this scholarly exposé will clear up any confusion there may have been over the matter. And, John, any time you think of another local fact that needs verification... let's go tie knots or something.

Just kidding; thanks for the fun.



Mustafa Fezzani, Tony McCloskey and Rick Adams watch the action at the plate where batter Kurt Cushnie and catcher Jim Barnett are under the watchful eye of umpire Scott Campbell.

Lab oldtimers trounce cocky youngsters

S heridan Park's Old Timers remain undefeated as the Spry Young Fellows lick their wounds.

As happens at so many get-togethers talk got around to "remember when." A few of the fellows at this year's picnic got talking about when Inco used to have a ball game instead of volleyball at the annual staff picnic. As happens, there also was some bragging going on about how good the guys used

to be. Well some of the new kids on the block just couldn't believe the Oldtimers were as good as they said they were and decided to call their bluff. The challenge was out and a game was organized between the Experienced Old Timers and the Spry Young Fellows.

It looked at first like it was going to be a close game and despite the barbs and taunts being bandied about it was a pretty friendly game. I mean

have you ever seen two teams share the same bench? But then in the sixth inning the wheels fell off for the young fellows. I won't go into details because it really wasn't a pretty sight but let's just say the invincible Old Timers have the bragging rights for the rest of the year.

It was great fun, the fans enjoying the game as much as the players, and I have a feeling that there will definitely be a rematch next year.

AMPCO report, a monthly newsletter published by the Association of Major Power Consumers in Ontario, features the text of a Triangle story (August 1993, page 1) about teamwork resulting in the slashing of Inco's shutdown energy bill.

"Energy conservation is an integral part of Inco's culture," states the preamble to the article. "In the following article, John LeMay, a former AMPCO chairman, describes some key reasons for his company's success in managing energy consumption."

John is Inco's assistant manager of Central Maintenance and Utilities.

FRIDAY LECTURE SERIES

A series of informative Friday afternoon lectures has been held this year at the J. Roy Gordon Research Laboratory, covering a wide range of subjects.

Some of the topics that have been presented are: "Information Systems," by Lucille Green, supervisor, Information and Office Services; "Hydrometallurgy and the Environment", by Bruce Conard, director, Process Research; "Nickel Foam Technology", by Gerry Glaum, group leader, Carbonyl Technology; "Non-Ferrous Bath Smelting", by Carlos Diaz, section head, Pyrometallurgy; "Selected Projects of the Computer Services Department", by Harry Lum et al., IETS; "Oxygen Flash Converting for Production of Copper," by Gregori Victorovich, group leader, Pyrometallurgy; "Analytical Methods Involving High Performance Liquid Chromatography", by Bruce Love, Chemist-3, Hydrometallurgy; "Impact of SO₂ Abatement on Milling in Ontario Division", by Ric Stratton-Crawley, section head, Mineral Processing; "Goro Laterites - A Look at What the Future Might Hold", by Maurice Solar, IETS; and "Operation of Inco's CRED Plant", by Norm Nissen, research chemist, Hydrometallurgy.



Lab teams juggling the ball.



Chefs John Schwab and Brad Smith serve up a burger.



Ric Stratton-Crawley: Down for the count.



Nelly Goddard and Bruce Love admire their prize.

Lab directors' picnic: Dunking for success

It was a hot, humid day in mid-July and the smell of barbecuing hamburgers and sausages was starting to waft through the air. It was time again for the annual Directors' Picnic at Sherican Park and it looked like it was going to be another good one.

This year, organizing of the picnic was in the hands of the Laboratory Services group. Everyone had been

assigned a job under the very capable direction of Ed Merk, supervisor, Lab Services and it was all coming together like clockwork. A blue and white tent that looked very festive was luckily not needed for rain but provided much needed shade to retirees and staff alike. Food tables were loaded to the groaning point, the pop was on ice and the prize table was piled higher than ever. It was definitely

going to be a good day.

Following on last year's huge success, a dunk tank was once again in place. The unfortunate "dunkee" volunteers this year were: Ric (Those-White-Pants-Will-Never-Come-Clean-Again) Stratton-Crawley; John (Bet-You-Can't-Hit-Me) Brennan; Jane (Just Ducky) Marquardsen; Carlos (Por-Favor-Noreen) Diaz; Harry (Love-Those-Legs) Lum; Vic-

tor (Batteries-Not-Included) Ettel; and Steve (Backsplash) Baksa. At \$1 for three balls it was a great deal and combined with the raffle ticket sales quite a bit of money was raised for the Children's Christmas Party.

As in the past, a volleyball tournament was held with eight teams participating — victors being the team from Advanced Materials & Others. Consolation round

winners were from IETS. Also, as in the past, a balloon toss was scheduled. But this time, because of an over-abundance of balloons, it turned into a free-for-all with no one in the area being safe from attack. Just ask Ed Merk who probably received more than his fair share of direct hits.

Good food, good fun and good friends. All the ingredients for the perfect picnic.



Sudbury Hardrocks no 'miner' team

40 Years ago

Dig into your own jeans for travelling expenses. It was the beginning of the Northern Ontario Football Conference and the Sudbury Hardrocks, eventually to become the Sudbury Spartans, were the focus of attention. The team, formed the year before, did not yet have an organized league to play in and were just playing exhibition games that year. They beat Haileybury twice: 10-21p and 34-5 and lost to North Bay 7-6 and 30-0. Exclusively made up of men who lived in the Sudbury area and had mostly played in high school, the players played because they loved the game. "One thing about coaching a team like this," said coach Dom DeMarco, "is that everybody wants to play and there is no loafing in practice. All a coach has to do is show them the plays and they do the rest." Other feature stories that month were: "Slick Method For Installing New Airway." "Garson Takes Northern Title." (Soccer) "Inco's New Employment Offices Opened."

25 Years ago

"What is it that weighs 350 tons, has 24 wheels, is 62 feet long, runs on railroad tracks and has a heart of molten copper 2,100 degrees hot?" It was the 150 ton molten copper torpedo car, the pride and joy of the converter and transportation departments in Copper Cliff, with its fire bricks, chrome magnesium brick and one inch of asbestos which lined its 1-1/8 inch steel body plates. Two of the huge molten metal cars had been purchased to replace two 40 ton cars that were being retired from service. Two other 40 ton cars were to be retained in service. The new cars, with almost four times the capacity of the old 40 ton cars, could hold the complete contents of a converter, thereby releasing the converter for another charge.

The larger cars were needed to handle increased production from the Smelter, which had recently increased its production of blister copper to 13,000 tons per month. Hot metal transfer cars had been running between the smelter and the refinery since 1936; and because of the foresight of the Copper Cliff engineering department, who had designed an overpass over Highway 17 in 1938 with enough carrying capacity to hold much heavier loads, the overpass did not have to be rebuilt, or even reinforced, for the new traffic. Other feature stories that month were: "Laurentian Confers Honorary Doctorate On Henry S. Wingate." "Inco Mine Renamed To Honor Old-Time Prospector." (The Cryderman mine named after John T. Cryderman.) "Everything From Bolts To Billets." (Profile of the Stobie Warehouse.)

14 Years ago

When the population of High Falls decreased from 60 families to eight, the town ran out of men to man the voluntary fire brigade in 1979, so they did the only thing they could do - they recruited the female power of Inco employees for the fire brigade. The women were trained by Jack Hall and Fred Mansfield of Inco's fire prevention department. Schooled in the theory and application of the chemistry of a fire, the use of portable fire extinguishers, hose handling, breathing apparatuses, search and rescue techniques and the operation of the Wajax pumping equipment, the women responded with enthusiasm, even though this was the first time such an undertaking had been adopted. Said Jerry Cullain, manager of Central Utilities: "Although they have as yet not been required to respond to a fire, thanks to the ladies, our voluntary fire brigade is ready to cope with any situation that may arise." Other feature stories that month were: "Acid Rain: A Complex Issue." "Remembrance Day 1979."

INCOME ideas

by Susan LeMay, CMA

Seasonal Thoughts

Jingle Bells... Deck the Halls... 'Tis the season of gifts and giving, Peace on Earth, Goodwill to men - the season for family and friends. This is not the season for thinking of investments or other financial facts and factors. There is fun to be had, people to meet, traditions to share.

Christmas giving

In the tradition of the season, we share with those we don't even know as well as with those we love. Throughout the year, we share with others through our donations to charitable organizations and appeals. The opportunities for sharing increase during the Christmas season as Food Banks, the Lions' Club Christmas Telethon, The Salvation Army, Catholic Charities and other organizations make a heroic effort to bring the gifts of Christmas to everyone. December also marks the end of the taxation year for individuals. It is time to ensure that we have made all the charitable donations we intend to make for the year. Donations must be made before the end of the year so we can claim a tax credit when we file our tax returns in

April. There is an opportunity to maximize the tax credit and so increase the amount available for donation to favoured charities.

Maximizing tax credits for charitable donations

Revenue Canada allows a tax credit for donations up to 20 per cent of net income. The rules for claiming credits for donations to registered charities are simple.

1. Always be sure to get an income tax receipt.
2. Be sure you keep these receipts and include them with your tax return.

How does this credit work? If you donate \$250 during the year, you will reduce your total income tax payable by approximately \$65. Your \$250 donation actually costs you \$185. An additional donation of \$250 in December, costs you only an additional \$138.

'Financially correct' Christmas gift suggestions

Currently, there is great concern with being 'correct'. Why not consider 'financially correct' Christmas gifts? Do all the

young children on your list own piggy banks? If they don't, this could be the gift to give. There are banks available that are decorative, banks that indicate the contents are being saved for a specific something. The choices are many. The idea is to help a child begin to plan for the financial future. Remember the Scottish superstition that you only give a wallet with money in it, so it will never be empty. It applies to piggy banks too. An older child might enjoy exploring the workings of investments and the stock market. I am often amazed at how much children can and do learn about such things. They are not afraid to ask the questions we think are 'too dumb'. If you are unsure about different investment options or the workings of the stock markets, you might make learning about them a joint activity and find that you have given a gift that keeps giving all year for both of you. For those of us who have not completed our Christmas shopping, we will all promise to be more organized next year, but in the meantime, the best advice is: Shop sanely. Avoid the traps of rushing out to buy what-

ever looks as if it will do just to be sure friends and family know we were thinking about them. 'Panic buying' leads to overspending and disappointment because we didn't find the perfect gift and the money spent wasn't worth it. Keep the spirit of the season. Peace on earth, goodwill to all doesn't cost anything except time. Take the time, the rest will follow.

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