

THE GOSSAN

A VOISEY'S BAY NICKEL COMPANY PUBLICATION

April 2005

ISSUE 07

WHAT'S A GOSSAN?

A gossan is a rust-coloured outcrop that can indicate sulphide deposits buried beneath the earth's surface. In 1993, prospectors exploring northern Labrador for diamonds spotted a gossan atop a hill near Voisey's Bay. Subsequent exploration revealed a number of nickel-bearing ore bodies in the area, ore bodies that are the foundation of the Voisey's Bay project. ▼

IN THIS ISSUE

Hydromet Demonstration Plant Construction Update	1
Recruitment Underway for Hydromet Demonstration Plant	2
A Closer Look at the Hydromet Demonstration Plant	3
VBNC and LIA Conduct Test Probe of Ice in Anaktalak Bay	4
Mine and Concentrator Update	4
Mill Operator Training Program Successful	4

CONTACT US AT:

Public Affairs
Tel: 709-758-8888
Fax: 709-758-8833
E-mail: voiseysbayinfo@inco.com

MANAGING DIRECTOR'S MESSAGE

2005 is already proving to be an exciting year for Voisey's Bay Nickel Company Limited (VBNC). We will see many key milestones occur this year leading up to the official handover of the mine and concentrator site and the hydromet demonstration plant site from our contractors later this year.

During this transition period it is important to remember that we must continue to strive for zero injuries at our work sites. Nothing is too important that we cannot take the time to do it safely. We have had excellent support from our contractors thus far in implementing our zero harm safety program and we need to remember that we have a

shared responsibility in maintaining the safest possible workplace. Everyone has a role to play.

May 1-7 is Occupational Health and Safety Week and I encourage everyone to take the time to reflect on how we can each contribute to maintaining a safe workplace for ourselves and our co-workers. ▼



Phil du Toit

HYDROMET DEMONSTRATION PLANT CONSTRUCTION UPDATE

It will be a busy summer at the hydromet demonstration plant construction site in Argentina. The demonstration plant is expected to be ready to test concentrate in November 2005, a deadline that Project Director, Joe Shirley says the team will meet.

According to Shirley the key to sticking to such a tight schedule is managing the details of the different components of the project. "That's how we have been working for the last 14-15 months," says Shirley.

And it seems to be working. The project is six months ahead of its original schedule. The hydromet demonstration plant team had an extremely successful year in 2004, which saw engineering and procurement advancing quickly, and construction of the main process building shell, pump house and site infrastructure completed. Shirley is particularly pleased with the excellent safety record to date at the site that he says has been achieved through co-operation by all parties.

The construction focus has shifted to the fabrication of the main process components, or modules, that make up the various hydromet process steps. Modules range in size from 20 to 50 tonnes and are being built at various fabrication shops before being transported to site.

"The modules are being fabricated primarily in Argentina, which is something we're very proud of. G.J. Cahill and Metal World, both local companies, are fabricating most of the process unit modules. The solvent extraction modules went on international tender and were awarded to a US company because of a specific skill set that was not available in the province. But again, we're very pleased that Metal World, supported by Penney Industrial, will be assembling, testing and putting together the solvent extraction modules at their facility in Argentina."

Approximately 74% of all contracts and procurement on the hydromet project have been awarded to Newfoundland companies. The project is also seeing good local participation through employment at the construction site. Approximately 40-50% of the construction workforce is from the local Placentia area and almost the entire workforce is from the province. Shirley credits the company's success in hiring local people to a cooperative relationship with the Resource Development Council (RDC) and contractors supporting the project.

"Our union agreement with the RDC gives hiring priority to qualified local residents during the

Continued on page 2

Hydromet Demonstration Plant Update

HYDROMET DEMONSTRATION PLANT CONSTRUCTION UPDATE

Continued from page 1

construction phase of the project. The RDC and our contractors have been very cooperative not only in supporting this agreement but also in respecting our human resources plans. We are encouraging all contractors and the RDC to respect our women's employment plan. That means more than hiring women, it means promoting and encouraging the participation of women in all facets of the project," says Shirley.

There has also been good interest from local residents, says Bob Kelly, construction manager for the hydromet demonstration plant.

"We've had lots of individuals drop by the site looking for work and inquiring about participation in job opportunities," says Kelly. "My approach has been to maintain an open-door policy and keep interested individuals abreast of information about the project schedule and I think the local community respects that. We also make an effort to keep in contact with the community through our Argentia Liaison Committee and regular meetings with the Chamber of Commerce, the Town Council, the Argentia Management Authority, and other local interested groups."

The company expects to continue to be successful in attracting provincial participation in the project in 2005. A major contract for Mechanical, Electrical, Piping, Instrumentation and Controls installation (MEPIC), which will be a focus of the construction program this summer, was recently awarded to M&M Engineering, a St. John's

based company. They will install, connect and support commissioning of all the process modules, as well as construct a number of larger process units inside the building. Other components to be completed as part of

this year's construction program are the installation of modules, and the construction of residue ponds, a change house, the assay laboratory and site electrical installation. ▼



Maxine and John Cochrane are pipefitters working at the hydromet demonstration plant construction site

RECRUITMENT UNDERWAY FOR HYDROMET DEMONSTRATION PLANT

With construction of the hydromet demonstration plant at Argentia almost 50% complete VBNC is getting ready for commissioning. This means getting a team in place to operate the 16 systems that need to be commissioned, or checked out for integrity of equipment and operability.

Hiring of the management team and superintendent staff is already well underway. A core group of individuals who worked on the mini-plant, part of Inco's R&D program, have been identified and offered positions at the hydromet demonstration plant, many of whom are from Newfoundland and Labrador. Approximately 24 people are expected to transfer from

the mini-plant and these individuals will be conducting in-house training with the rest of the staff in Argentia starting in September. This core group of operators and engineers is developing the in-house training for the demonstration plant right now in Mississauga.

"Hiring a core group from the mini-plant will ensure that we have experienced operators who have used this process before and experienced scientists and engineers who can pass on their knowledge to the demonstration plant operations team," says Wayne Scott, Manager of Human Resources.

Scott does not expect to have problems filling positions at the demonstration plant with residents of

Newfoundland and Labrador. "From what we have seen there are ample qualified people from this province who have the basic skills necessary to work in this kind of operating plant," says Scott. "College of the North Atlantic in particular are graduating good quality technologists every year and we have been very pleased with graduates from these programs, some of whom are working at the mini-pilot plant and the demonstration plant design team right now."

VBNC will do most of its hiring for the hydromet demonstration plant from May through September 2005. ▼

Hydromet Demonstration Plant Update

A CLOSER LOOK AT THE HYDROMET DEMONSTRATION PLANT

The hydromet demonstration plant is the final step in Inco's Research & Development program to explore the application of hydromet technology to treat Voisey's Bay nickel concentrate. The technology has already been proven at a laboratory scale and at a 1:10,000 scale mini-pilot plant at Inco's R&D facility in Sheridan Park, Ontario. The data gathered from the mini-pilot plant was then used to design the demonstration plant at Argentia, a 1:100 scale operation that will run from late 2005 to the end of 2007.

The demonstration plant may be 100 times smaller than a commercial operation, but given that the building is roughly the size of a football field, the plant is not what one would describe as small. According to Don Stevens, Operations Manager for the demonstration plant, testing the hydromet process at the pilot scale is necessary to show the viability of hydromet technology to process nickel concentrate. "We've predicted with good reason that this process is attractive on a go-forward basis, but now we have to show that and look at what happens when we start running the process over the long-term," says Stevens.

In order to do this, we will be testing equipment and construction materials to determine how effective they are in supporting a plant that operates 24 hours a day, seven days a week. In that regard, the demonstration plant will operate much like a commercial plant, but with one big difference – the demonstration plant's primary product will be data and not finished nickel.

There are several things Stevens and his team will be looking for specifically. They will of course be looking at the quality of the nickel that the demonstration plant produces but they will also pay close attention to the engineering involved in building a commercial plant. They will want to know whether the design of the demonstration plant is the most effective and whether the construction materials and equipment used in the demonstration plant are suited for a commercial scale operation.

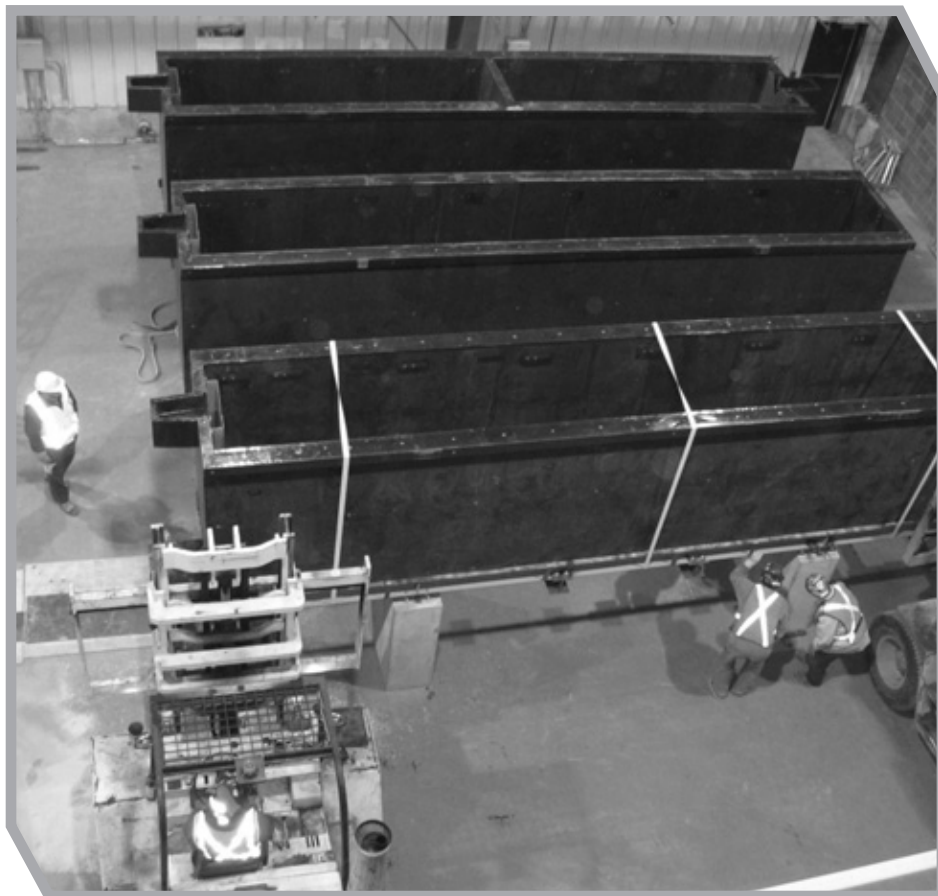
Another very important aspect of the research program at the demonstration plant involves closely examining the residue produced from the hydromet process. The demonstration plant has been designed to collect and store residue on site so that the demonstration plant team can monitor and implement tests to determine how best to handle residue in an environmentally safe way.

The demonstration plant has been designed in a modular format, which gives a lot of flexibility to modify equipment and processes as new information is obtained. Stevens' research team will also be able to modify specific aspects of the demonstration plant while other parts of the plant continue to operate. Another noticeable feature of the demonstration plant will be the laboratory, which will be larger than most laboratories found at commercial-scale operations. The demonstration plant laboratory will employ approximately 24 people and will operate 24/7.

"We're integrating things into the demonstration plant, based on what we've learned so far, at the mini-pilot plant. We fully expect to go beyond what was achieved at the mini-plant and open new frontiers on

this process to prove its viability. It's important to remember that based on what we learn at the demonstration plant, the process can be modified and improved," says Stevens.

"It's been a dynamic process so far. When we were beginning the mini-plant component we didn't know what would happen and during that stage we made some significant changes to the process, which shows that you have to be ready for the unknown and react to the unexpected. Our strategy moving forward will be to take advantage of the size of the operation and the technical expertise available to us and to examine all components of the hydromet process in order to determine the technical and economic viability of hydromet technology to process nickel sulphides." ▼



Construction workers installing electrowinning cells inside the hydromet demonstration plant process building

VBNC AND LIA CONDUCT TEST PROBE OF ICE IN ANAKTALAK BAY

Voisey's Bay Nickel Company Limited (VBNC) partnered with the Labrador Inuit Association in February to conduct a test probe into land fast ice near Nain, Labrador. VBNC chartered the *MV Arctic* (the Fed Nav ship being used to transport nickel concentrates from Falconbridge's Raglan mine in Northern Quebec to Quebec City) to probe the land fast ice and make a broken track for about 5 miles along the shipping route.

After entering the land fast ice on the morning of February 20th the *MV Arctic* did a star turn at the end of its track before departing back to the Labrador sea via the same route. Positioning of poles with fluorescent flags attached along both sides of the broken track and around the star turn started shortly after the ship entered land fast ice. Of equal importance was the construction of an ice bridge across the broken track to determine the amount of time that it takes the ice to refreeze for safe crossing of the ship's track. Ice bridge construction commenced the morning of February 21st after testing the ice thickness for bearing capacity. A local contractor, Sikumiut, using local resources and

local knowledge of ice and the best crossing locations, was utilized in locating and preparing the bridge, which took about three hours to complete.

Once VBNC starts shipping concentrate from Voisey's Bay, ice bridges strategically located at traditional ski doo crossing locations in the Nain and Edwards Cove area will minimize the impact of concentrate movement on Inuit harvesting and travel on ice.

"The test probe provided VBNC and the Labrador Inuit Association with valuable information on how the land fast ice in Anaktalak Bay reacts to shipping activity," says Herman Perry, Manager of Site Services & Transportation for VBNC. "It provided those involved with an appreciation of the time involved in the marking of the track, preparation of ice bridges, positioning of lights at bridge locations and equipment requirements. This information will help us develop practical procedures that will guide the safe operation for VBNC's winter shipping program and minimize the impact the shipping program will have on local Inuit travel." ▼



The MV Arctic performing a turn in land fast ice in Anaktalak Bay

MINE AND CONCENTRATOR UPDATE

At the mine and concentrator site in Labrador, construction teams are in the midst of their final construction season. Construction is now 83% complete and will officially wrap up in late 2005.

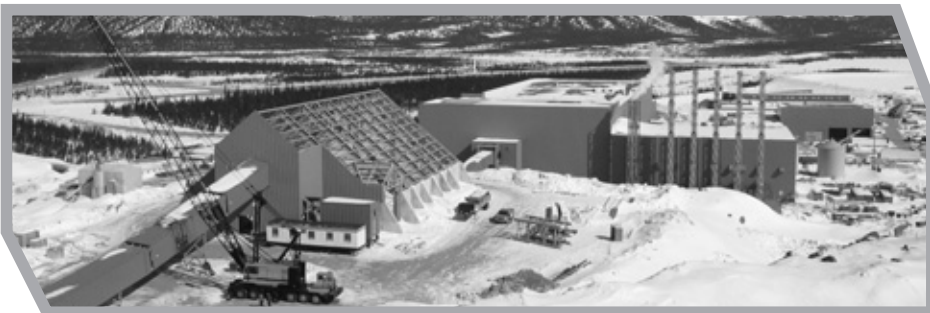
The camp site is at full capacity right now with over 1,300 people rotating shifts to complete any major projects for 2005. These projects include installing mechanical, electrical, piping, instrumentation and controls systems and finishing construction of the concentrate storage building, the coarse ore storage building and the permanent accommodations and services complex.

On the operations side, Bob Cooper, General Manager of the mine and concentrator, says the focus of the operations team is on creating a smooth start up for the operation. Activities include the hiring and training of personnel as well as setting up the systems to support the operations such as safety and environmental management, materials management and maintenance.

The first of many important milestones occurred in late March when VBNC's mining group assumed control of the pit. Other significant events that will occur this year are milling the first ore on August 1 and the first shipment of concentrate from Voisey's Bay which is expected to occur in November 2005. ▼

MILL OPERATOR TRAINING PROGRAM SUCCESSFUL

The first Introduction to Mill Processing course was delivered to ten people in Happy Valley - Goose Bay in 2004 and since then additional courses have been offered in Goose Bay, Sheshatshiu, Natuashish, Port Hope Simpson and Nain. Sixty participants have received training. The course was specifically designed for VBNC's operation, giving participants the opportunity to learn skills that are required for mill operation that are not readily found outside of two or three-year technical programs in the province. All courses, which were offered to members of Innu Nation, Labrador Inuit Association and Labrador Metis Nation, yielded excellent results and 24 participants were chosen for Phase II of the program, which took place in Sudbury. The purpose of the second phase of the program was to give participants the opportunity to gain exposure to the different nickel processes in a milling operation. ▼



Coarse ore storage building (foreground) and concentrator building