



You like? I bought it online at Finning's heavy duty gear web site!

- ◀ Bill's online and he's addicted! He can't stop shopping
- New Cat stationary loaders bring hydraulic happiness

# Tracks & Treads

FALL 2007

www.finning.ca



## Galore Creek Project

The road is paved with gold – and yellow iron

### Blast the Ballast

Contractors rehab the famed Sea to Sky

### Ply the Waters

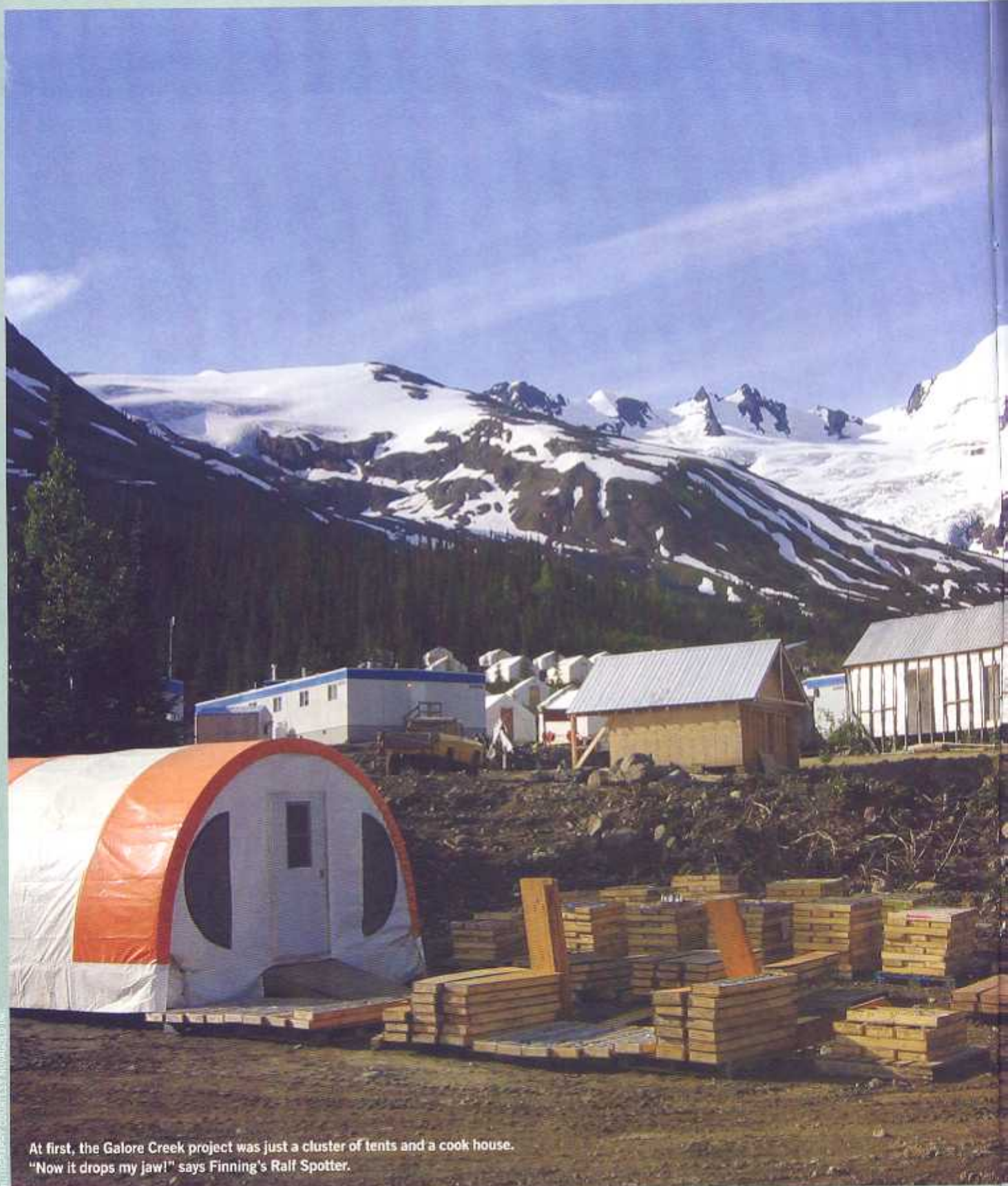
B.C.'s latest ferry is powered by Cat

### A Rock Story

Meet an Alberta gravel company that just can't stay small

**PLUS:**  
Cats Clean Stanley Park





At first, the Galore Creek project was just a cluster of tents and a cook house. "Now it drops my jaw!" says Finning's Ralf Spotter.

PHOTOGRAPHY COURTESY NINOVA GOLD INC.





# Work Galore

How do you build one of the most important gold mines in Canada in an isolated area without roads? Just drop in



STORY BY KATHERINE FAWCETT

**A**s of June 5, 2007, the middle of nowhere is finally on the map. It is located 1,600 kilometres north of Vancouver on roads that don't all exist yet.

But they soon will. And when they do, the Galore Creek Valley, in a remote mountainous region on Tahltan Nation Traditional Lands in northwest B.C., will be known as one of the most important gold mines on the world map.

On June 5, Curtis Williams, NovaGold's Galore Creek project manager, was able to pop the champagne in celebration. With federal and provincial permits finally in place, NovaGold and industry-giant Teck Cominco formalized a partnership to build the Galore Creek mine and its supporting infrastructure. In the agreement, each party will hold a 50% interest in the partnership and split the costs of construction and operation, with Teck funding the next approximately \$509-million in construction costs to complete their buy-in requirements.

The partnership announcement and the approvals were certainly not a surprise. In

fact, NovaGold had already signed about \$40-million worth of contracts for preparatory work to be ready before the agreement was formalized. The project is "great for the regional economy, for the province and also for Canada," says Williams. He is excited that Galore Creek is kick-starting the industry and providing opportunities for nearby communities and for the province.

The vision is to develop Galore Creek as an open-pit mine, with a 65,000 tonne-per-day processing rate over a minimum 20-year mine lifespan. At least 1,000 jobs will be created during construction; 500 during operations. On an annual basis, the mine is expected to produce 432 million pounds of copper, 341,000 ounces of gold and 4 million ounces of silver for the first five years of production, making it one of the world's largest mining assets.

Michael McPhie, president and CEO of the Mining Association of B.C., says that Galore Creek is especially significant considering that the province has not approved a new metal mine in more than 10 years. "Galore Creek will have a major positive impact on





Finning equipment awaits a lift into Galore Creek

the northwest region of B.C. and will be an economic driver in the province for many years to come," says McPhie.

However, you can't drive a pickup truck to the middle of nowhere. That's where Finning's mining account manager Ralf Spotter comes in. "It wasn't long ago that we were in NovaGold's office, discussing the project and machine requirements," says Spotter.

"Now every time I go up there, it drops my jaw – it's unbelievable."

Within the past year, Galore Creek has gone from a cluster of tents and a cook-camp to comfortable bunkhouses, offices set up with Internet access, trucks, heavy equipment and people everywhere.

Spotter is currently involved in Phase I of the project: road construction. Within a 27-month timeline, NovaGold's construction partners will build a 140-kilometre road from Bob Quinn, a town that isn't much more than

an airstrip and a weather station. The access road will include a 4.5-kilometre mountain tunnel and approximately 80 bridges, and

### **Everything the project requires is flown in by helicopter, from office supplies to food to furniture and, of course, heavy equipment.**

will cut through terrain that would have had old-time gold-rush prospectors turning their horses around. The roadwork is an integral part of the infrastructure required before actual mine, tailings and plant facility construction (Phase II) can begin.

Now that Phase I work is underway, Spotter says he's at the construction site weekly. "I never get tired of going up there. It's awesome. One glacier after another, mountain goats, grizzly bears – it's pretty spectacular country."

He travels to Galore Creek to keep tabs on the specific needs and concerns of Finning customers. "I check in with NovaGold, make sure their equipment is working fine. Then I move through the contractors and make sure there are no concerns, and I check in with our mechanics."

Spotter's greatest challenge is getting the machines his client purchases to where they need to be. With no roads, you can't just load them on a flatbed. In nearly 30 years with Finning, initially as a field mechanic, Spotter has solved a lot of problems. Until recently, those problems didn't include disassembling a 740 articulated rock truck so it could be flown, piece by piece, over ice-capped mountains by a MI 26 helicopter, and reassembled at the worksite.

For now, everything the project requires is flown in by helicopter, from office supplies to food to furniture and, of course, heavy equipment – but not all in one shot. In a kind of





Left: Equipment is taken by truck to a disassembly suite, where it is dismantled and flown, piece by piece, to the worksite

Below: Some yellow iron gets a bird's eye view of northern B.C.



large-scale, mountainous jigsaw puzzle, big machines must be broken down into smaller, lighter pieces, airlifted piece by piece and put back together. "For me anyhow, this is the first time to be disassembling machines and flying them in. It's really something," Spotter says.

The Chinook helicopter can lift a maximum of 20,000 pounds (9,070 kilograms); the Russian MI 26 chopper at work on the project carries up to a 38,000-pound (17,235-kilogram) load. But Finning's 330 DL weighs in at a whopping 80,000 pounds (36,285 kilograms), and takes three heli-loads to deliver. First, the boom, stick and bucket are removed and flown together. Next, the counterweight and tracks are flown together. The upper and lower structures are the last components to be delivered.

Reassembling the machines is no easy task. Finning technicians put the equipment together again for the client as it is flown in. A machine like the 330 DL will take two days to assemble.

"There's no shop, no overhead cranes, no air guns," says Spotter. "You've got to really know what you're doing. And you've got to

get creative. It's incredibly well orchestrated." According to Spotter, the machines being flown in include: 330 DLs, 740 rock trucks, CS 563 Packers and 325s for working on bridge abutments, among others.

The 140 kilometres that will become an access road have been divided in two sections. Sigfusson Northern Ltd., a Manitoba-based

### Within the past year, Galore Creek has gone from a cluster of tents and a cook-camp to bunkhouses, offices with Internet access, trucks, heavy equipment and people everywhere.

construction company, is taking on work from kilometre zero to kilometre 74.5, with Formula Pile and Bridge Contractors Ltd. of Prince George building the bridges. TNDC/Tercon, a joint venture between the Tahltan Nation Development Corporation and Kamloops-based Tercon Contractors Ltd., are carving the second section, kilometre 74.5 to kilometre 130, out of the dense northern B.C. forest.

TNDC/Ruskin Bridge Partnership Ltd, another Tahltan joint venture (this one with Ruskin Construction Ltd. of Prince George), is taking charge of bridge building on this section.

As it is located in Tahltan lands, the First Nations people want to be sure that benefits from the mine are directed to their communities. Not only is TNDC involved in road construction, it's also involved in joint ventures concerning earth works at the mine site, environmental monitoring, catering, ground transportation, power line installation and even avalanche control. A Tahltan Participation Agreement, signed with NovaGold in 2006, ensures that First Nations will be included in all aspects of mine development and operations.

"The idea is to get involved in every aspect of the mine, in every job we can," says Bill Adsit, president of Tahltan Nation Development Corporation. "We need to have options. We need to give the Tahltan Nation control of a lot of different sectors of the economy... We don't have enough expertise or manpower to do all the work. Within the JV agreements, we're looking for business opportunities and





training. The IV hires as many Tahltan people as they can, then we go to all the surrounding First Nations from Whitehorse to Terrace, and even to Smithers." Adsit estimates that in the first year of Phase I, approximately 350 First Nations people will be employed in some capacity at Galore Creek.

NovaGold's Williams said, "It's only been through meaningful and open dialogue [with the Tahltan Nation] that this mine has been able to proceed at all. They have been very much involved... They bring in expertise on many levels."

Galore Creek is not TNDC's only project. It has been purchasing equipment from Finning for other jobs since 1985. But it is one of the biggest and most complicated currently on the go. "Well, they got over 100 feet of snow there this winter, and we haven't had a warm spring," says Adsit, who says he's ready to tackle any hurdle. "Then there are the [mountain] goats. We needed to wait until the goats moved on."

Chris Milne, Tahltan/Tercon's project manager, agrees that there are plenty of challenges. The Tahltan/Tercon section of the road is especially rugged. "It's steep terrain, no doubt. You get a lot of glacial til at the lower elevation and plenty of rock as you move west into the mine site." He says the more challenging portion of construction involves between 70% and 90% side slope, which requires either full or three-quarters bench design which will be customary throughout. "This creates problems with production, and moving at a fast pace. We're having to slash our way in."

## A Condensed History of Gold Mining in B.C.

A complex geological history has blessed B.C. with a wealth of mineral deposits, including the one that still ignites the greatest passion: gold.



200 million years ago: Western Canada exists only at the bottom of an ocean. The Pacific Plate begins to crack, the sea floor is forced up against the Continental Plate. Molten rock bursts out from beneath the earth's crust, creating mountains mixed with sediments from the ocean bed. Volcanoes near the water's surface create perfect conditions for the formation of mineral deposits, including gold, silver and platinum.

Fast forward a few million years: Most of this land is now buried by snow and ice. Thick glaciers literally move mountains and carve valleys, carrying mineral-rich sediments with them and depositing them as they melt.



Fast forward a little more: Humans appear on the scene. The mineral deposits left in the wake of the glaciers draw people looking to cash in on the world-wide craving for gold. In the mid-1800s, prospectors venture north from California in search





But with 30 pieces of new or nearly new Caterpillar equipment, from D6 and D8 dozers, 330 and 345 excavators to 740 and 735 articulated rock trucks and more on the way, Milne knows they are up for it.

"There's something changing all the time, but it's nothing we can't handle," says Milne, who was hired by Tercon to manage the project. "The terrain, the environment, the weather, it all creates a challenge for completing the project on the timeline, but it is a challenge we can undertake and complete. Once you get over the scope of the project, it's down

to business and you start formulating a plan to get it done."

On the same section of road, TNDC/Ruskin Bridge Partnership Ltd. will be installing 23 bridges. Project Manager Jim Brown, a former heli-logger who has been with Ruskin for a decade, says the longest bridge spans 370 feet (112 metres), and the highest measures nearly 265 feet (80 metres) into the sky. "That one is pretty much between two mountain peaks," says Brown. "There are some very difficult challenges, due to all the rock. Everything needs to be blasted. But it's

an everyday job for us."

As if building a 140-kilometre road weren't enough, the last four kilometres into the Galore Creek Valley is mountain wall with no pass, and will require a tunnel through a mountain. EBC Inc., a Quebec company, has recently begun drilling and blasting the tunnel, which is 26 feet (eight metres) wide and equally high.

All the action taking place in the middle of nowhere is having a ripple effect throughout Northwestern B.C. From his office in Terrace, Spotter says you can "feel the excitement. Everyone benefits, from the guys who sell nuts and bolts to the trucking outfits to the airlines. The town's buzzing. This is huge."

So huge, that for many people the middle of nowhere is quickly becoming the centre of the world. ■



Left: The 140-km access road requires tunneling through a mountain and building bridges

Above: This MI 26 helicopter can carry up to 38,000 pounds – that's half of one 330 DL

of the precious metal. They find success as they work their way up the Fraser River. In Barkerville in central B.C., later in Dawson City, Yukon, and in many points along the way, hardy explorers stake claims, amass fortunes and never return home.



During the next century: Mining companies from around the world enter the game. Metal deposits are developed by large companies, B.C. strengthens its reputation as a land of resource opportunities, and expands from mainly gold to copper, silver, lead, zinc and more.



The 1990s: Not a good decade for the mining industry. Prices for precious metals drop and some mining companies find working in Canada difficult.



The next few years: Stronger prices are coupled with government support, such as lower taxes and fewer mine regulations. Optimism returns with a golden sparkle. In 2007, the beginning of the Galore Creek project is a major indication that B.C. is taking full advantage of its geological blessings once again.