



MINING & CONSTRUCTION



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REDUCES
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*MECHANIZED ROCK
EXCAVATION WITH
ATLAS COPCO*

NO. 2, 2016

Atlas Copco



As recently appointed Business Line Manager for Underground Rock Excavation here in Canada, I've had the opportunity to see this market with a fresh set of eyes. I am amazed at the can-do culture that has been bred within the Canadian organization. Our entire focus is on finding solutions and creating customer satisfaction.

Canada is a clear leader in global mining, and what gets innovated and realized here in Canada is soon replicated in other markets. Whether it's mining with autonomous equipment or using real-time data to optimize operations, Canada has always been at the forefront of delivering technology and innovation to benefit the industry and those who work in it.

Close to my heart is the recent launch of Atlas Copco's first battery powered underground loader, the Scooptram ST7 Battery. This machine came to realization through a customer demand to go healthy, get ergonomic, and a goal to cut costs. I trust you will find the Zero Emissions article within this magazine informative and inviting. You'll see other articles focusing on customer successes with underground rock support, light compaction and deep hole drilling.

As you turn through the pages of this publication, it will become clear how Atlas Copco's entire team has been focused on delivering solutions, and that's the culture we breed.

Travis Battley
Business Line Manager—Underground Rock Excavation



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SWELLEX BOLT SOLUTION INCREASES PROFITABILITY

Installation of Super Swellex Rock Supports allows pillar ore recovery and reduces dilution in hanging wall situation »



More frequent encounters with poor rock conditions were forcing Rambler Metals and Mining to sacrifice recoverable copper ore in some sections of its Ming mine on the Baie Verte peninsula in Newfoundland. The copper was left behind in a series of back support pillars required during mucking operations, making 10 percent or more of a stope's ore unrecoverable.

When the mine experimented with a passive back support system based on Atlas Copco Connectable Super Swellex, it not only found it could recover the pillars but could reduce dilution due to back peeling and occasional failure.

Ming's narrow copper sulphide ore body generally lies at a dip of 35 to 45 degrees. The usual mining method has been to drive undercuts and overcuts along the highwall

contact. Cross cuts are then driven toward the footwall at a 90-degree angle to the ore body strike. The rest of the boxcut is drilled vertically.

Gavin Clow and Nic Scarcelli are the mine engineers in charge of ground support system design at Ming. Clow said that by Level 380 rock competency became problematic: "The cut will immediately want to unravel on you. The peeling is just unbelievable. During development we could be re-scaling again a day after we finished scaling. We had bagging in the screens, and the peeling and failures increased dilution, driving ore grade below economical recovery."

Clow pointed to Cavity Monitoring System (CMS) surveys conducted shortly after mucking that depicted how significant the back peeling was. Clow said, "Without support pillars you could basically just expect to have ground falls."

A 2014 study determined that Ming could use an active back support system based on cable bolts instead of ore pillars. But when Clow consulted Nicholas Dillman of Atlas Copco Canada's facility in Pasadena, Newfoundland, Dillman suggested looking into Swellex Connectables, pointing out the advantages of inflatable rock bolts over grouted cable bolts.

One of the advantages of working with Atlas Copco was that Dillman could also offer Atlas Copco product support. The global manufacturer has a long history of teaming with miners around the world. Unique situations such as Ming's are welcomed opportunities to find innovative new solutions.

Dillman said, "Atlas Copco doesn't just make and sell products. We offer solutions that provide increased productivity with increased safety. The advantage of working with Atlas Copco is our world-leading tech-



nical support.” Atlas Copco engineers determined that Super Swellex expandable rock bolts would indeed deliver the results Ming looked for in this unique application.

Super Swellex is designed for applications requiring fast installation and high breaking loads. While Swellex is a passive ground support system (tension is not preset on the bolts), it offers two things that can make it superior to cable bolts. The first is ease of installation. It can be installed quickly, by one person, in one operation: drill, insert, inflate with water pressure to 300 bar and move on to the next spacing.

The second advantage is immediate full column rock support. Charging and blasting are not delayed waiting for resin or grout to cure.

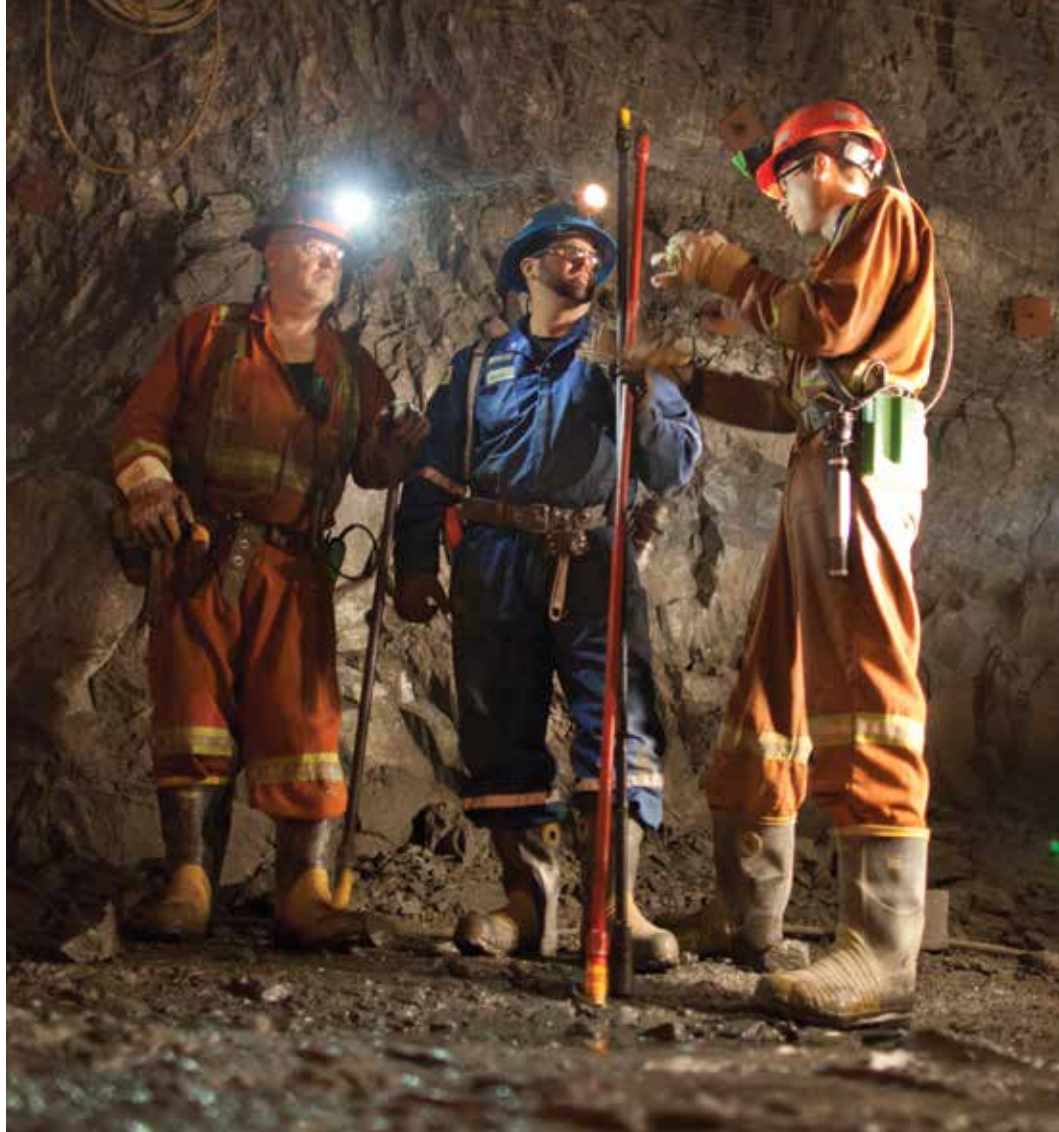
Clow went to work running the numbers. With a specific gravity of 2.8, a 15-meter-long, 1.5-meter-thick slab would weigh about 95 tonnes. Each 4-meter-long Super Swellex bolt has a holding capacity of 24 tonnes. Its bond strength is 12 tonnes per meter. Clow planned to set the 4-meter-long Super Swellex in five-bolt rings with a 1.5-meter spacing.

Clow believed Level 390 was an ideal choice to be the test site for the back support system for two reasons. First, the hanging wall in 390 averages a rock mass rating (RMR) of only 50. Proving that Super Swellex back support was effective in such a low RMR zone assured Ming Mine it would be effective for other ore zones designated for recovery using this back support method.

Second, Level 390’s proximity to dimensionally identical Level 380 with similar rock conditions provided the engineering team with an excellent point of comparison. It was being mined with the current ore-pillar support method, serving as a control against which to measure Level 390’s Swellex-support results.

Still, Clow had some reservations. Ming had to leave more pillars than originally planned in 380 due to a back failure. He worried Level 390 might force them to do the same. “We were a little gun shy going into 390. Actual mucked tonnage had been dismal compared to planned ore recovery in 380L, in spite of leaving pillars in.” He said this was due primarily to the back failure, but they also had to leave ore behind when unplanned dilution from the hanging wall exceeded Ming’s ore dilution cutoff of 15 percent.

Super Swellex bolts were installed in stopes 1, 2 and 3 of Level 390. First, 4-meter-long, 2 ½-inch-diameter holes were



drilled for production blast charging. Then a 2-inch-diameter installation hole was drilled 4 meters further for the bolt. Swellex was then installed using a prototype installation tool developed by Atlas Copco for this unique application.

Once the Super Swellex bolts were in place, charges were set with an air-decking technique to preserve hanging wall contact and minimize damage to the Super Swellex bolts. Using an air decking technique allows better control of blast energy, concentrating it in one part of a hole more than another without requiring the time and expense of mixed charging. An additional benefit is that desired fracture size consistency is achievable with less explosive, saving on cost of explosives and reducing unplanned impact beyond the targeted blast area.

The technique worked. The back still wanted to peel, Clow said, but he showed CMS surveys conducted several days after mucking operations depicting how the Swellex continued to hold the hanging wall, permitting little »

“ Atlas Copco doesn't just make and sell products.

We offer solutions that provide increased productivity with increased safety. The advantage of working with Atlas Copco is our world-leading technical support.”

Nicholas Dillman
Atlas Copco Canada, Pasadena, Newfoundland



» peeling where peeling occurred at all. “We had remote-mucked it all and were out of there four days before it started coming apart. That’s exactly what we needed. We’re not backfilling, so let it come down. But even when it did start to unravel, Swellex arrested it nicely.”

Clow performed a careful cost analysis that deducted costs of the artificial back support from the value of the ore recovered from the pillars. He determined the Super Swellex system had earned Ming 42 percent net profit as calculated on copper’s market’s value at that time. It was profit they would otherwise have left in the ground.

“We also compared the amount of dilution experienced across all the pillared stopes in the 380 level to the Swellex-supported stopes in the 390 level,” Clow said. “Less dilution was experienced in the Swellex-supported level.”

Clow said the single most important lesson of the test, however, was that the back support system had made pillar recovery possible.

Whether the passive back support will be feasible in other areas of the Ming operation depends on a case-by-case

analysis of the overall situation. The extra drilling and installation costs are not as easily justified when other methods exist. “We wouldn’t choose this technique for, say, a steeper dip or footwall zone. We’d backfill with paste.”

Use of rock bolts for back support would be reserved for ore zones with low RMR and relatively long strikes, those of 40 m or more, and then only when backfill capability was limited. However, it adds one more technique to Rambler’s toolbox for recovering ore in its unique resource at Ming.

Clow, who was working up a full technical report on the application, said he’d like to test the passive back support system in a bigger stope. The stopes of Level 390 were relatively small, he said. Each stope offered about 1,500 tonnes, a total of roughly 5,300 tonnes from the entire 390 level. Ming’s Level 594, which is currently under trial, has about 20,000 tonnes available. Clow said, “Its hanging wall is more competent, having an RMR of 75. I expect with its more competent back, dilution should be much lower than was experienced in Level 390.”



ZERO emissions

The Scooptram ST7 battery was introduced at the Canadian Institute of Mining, Metallurgy and Petroleum Expo in Vancouver. The May expo showcased a wide variety of industry equipment and resources to 7,000 attendees. Panels and sessions included the latest in innovation, standards of excellence, rock mechanics, geology and exploration, green mining, predictive maintenance, women-in-mining, ethics, rare earth elements, planetary and terrestrial mining, and much more.



Making mining cleaner, safer with Scooptram ST7 Battery

Atlas Copco has introduced to the Canadian market a battery driven product for underground loading and hauling. The Scooptram ST7 Battery rig meets and exceeds environmental standards and modern safety requirements while still efficiently doing its job. The ST7 Battery is built with smart functionality and can be operated by line-of-sight remote control.

Until now, diesel-powered machines or electric cabled rigs were the only options.

The main problem of diesel-powered machinery underground is emissions, es-

pecially as mines are going deeper than ever. Mines have to invest in expensive infrastructure improvements to increase ventilation capacity. The problem with electric rigs is connecting to a power source and dealing with limited range, as well as having to move lines as the mine advances.

Richard Riach, global senior project manager, said, “The ST7 Battery is not a replacement for electric rigs already in production. It instead gives underground mines one more zero-emissions option.”

“Loaders and trucks consume about 80 »





SCOOPTRAM ST7 BATTERY

- Quiet operation
- No heat generation
- No emissions
- Reduces need for ventilation
- 10 minutes to change out battery
- Full recharge in 2.5 hours
- 4+ hours operation on a charge
- Comes automation-ready

» percent of the diesel fuel underground. The loaders are most often used in dead ends of the mine, which are the most difficult to ventilate. “To make the greatest impact on work environment and ventilation costs, it was an obvious choice for Atlas Copco to launch a battery-driven loader as our first product of this type,” said Lars Senf, vice president of marketing at Atlas Copco Underground Rock Excavation.

It’s no accident that the ST7 Battery is being introduced first in Canada before the global rollout. Although production models will be manufactured in Sweden, the design and prototype of the rig were completed in Canada for Kirkland Lake Gold. Success of Atlas Copco Canada’s role in designing a new version of one of the world’s most popular underground haulers is a tribute to their technical capabilities.

Riach said the process went smoothly—and very quickly. “The entire process took just one nine-month cycle, from scratch to running.”

Riach, whose lifelong career has been in mining, said he was at first skeptical of the concept. Upon first hearing that a machine with the power of the ST7 could be run on a battery, he scoffed, “How?”

The design of the ST7 was driven by the recent revolution in battery design. Riach said, “My skepticism was outdated. The cell

technology is there. Let’s use it.”

He compared the improvements made in battery cell design to “the difference between the cheap 4.2-volt electric screwdrivers of yesteryear that initially convinced your dad they were cute but had no use, and those used today on construction sites. No one is afraid to buy a cordless drill anymore. They’re everywhere.”

The Scooptram ST7 Battery can either be recharged while it’s not needed or the operator can simply swap batteries at the charging station. The battery is easy to unplug, hoist out, and swap for a fresh one. It also has one other trick: it uses the inertia of the rig to recharge while tramping down the ramp.

Charging a used battery doesn’t take long. Riach said, “We had one operator who plugged it in before lunch and the charge was topped up enough to finish the shift by the time he came back.”

Retrofitting such a powerful battery to a rig famous for its low profile and great visibility was no easy task, but Riach said, “Even though the Scooptram ST7 was already so compact, the battery-operated version of the ST7 actually improves on its sightlines by an inch” (25 mm).

It’s a little more powerful and a little faster on the ramps as well.

Andrew Lyon, General Manager of Atlas



“The successful design of the Scooptram ST7 Battery is the first step in powering heavy, mobile equipment underground.”

Richard Riach
Atlas Copco Global Senior Project Manager



Richard Riach,
Atlas Copco Global Senior Project Manager

Copco Mining and Rock Excavation, said he thinks customers will be impressed with how effective the ST7 Battery is. “The ST7 was the right size to start with for this new product development because it is used in narrow veins, which are difficult to ventilate.”

Erik Svedlund, product manager for Electric Vehicles—Underground Material Handling, said, “All the obvious benefits with battery power add up to something that might not be as obvious, like a reduced environmental footprint and higher worker satisfaction.”

Svedlund said, “Mines are built around

the machines of today. When you change the machines, you also change the mine’s planning capabilities.”

Lyon said the ST7 Battery could actually extend a mine’s life because at certain deep depths, ventilation is restricted and temperatures can be so high that the air actually has to be cooled. The ST7 Battery addresses both those issues.

“The successful design of the Scooptram ST7 Battery is the first step in powering heavy, mobile equipment underground,” Riach said. “In the future we might see a broader range of battery-powered equipment.” ☺



Electrician Reg Landry double-checks connections of the first-ever production model of the new battery-operated Scooptram ST7. Production models arrive from Sweden, but the rig prototype was actually designed and built by Atlas Copco Canada’s Sudbury shop.

Dan Fazekas, technical sales representative, has enjoyed demonstrating light compaction equipment for Atlas Copco Canada—Construction Tools Division.



HIT HARD WITH LIGHT COMPACTION

Atlas Copco light compaction units get favorable reviews after demonstrations

As soon as Dan Fazekas got back from light compaction training in Sweden, he was anxious to demonstrate the units. Fazekas, Ontario and Manitoba technical sales representative for Atlas Copco Canada—Construction Tools Division, spent a lot of time during training running competitors' machines against Atlas Copco's. He knew the impression Atlas Copco compactors would make on those who experienced them.

Fazekas began a string of demonstrations on plate compactors and rammers. He said three of the demos in particular exemplify the impression the Atlas Copco light compaction units have on those who experience them for the first time.

In November 2015 Fazekas had just finished explaining the benefits of the LT6005 rammer at an open house with an Ontario-based rental partner. As it was running, he invited one of the attendees to try it, stepping

away from it before the attendee got to it. It startled the men.

"I remember the expression on the gentleman's face," Fazekas said. "The LT6005 was on a 20-degree incline jumping by itself without falling over. At that moment I knew just how much our units stood out from the competition."

The second memory that stands out for Fazekas was an incident that surprised him as much as the customer. "It was December 23, a funny time for a demo, but the customer was keen to try the unit and the job needed to get done. A wet field was being compacted prior to some construction." The LG500 plate was set up with extensions, making the plate 33.5 inches wide and increasing its weight slightly to 1,122 pounds.

The customer moved the LG500 to an extremely soft, wet area. When Fazekas asked him why he was doing this, the customer re-



Dan Fazekas
Technical Sales Rep
for Atlas Copco Canada—
Construction Tools Division

plied, "If this unit's as good as you say it is, let's see what it can do in these conditions."

Fazekas said, "The LG500 zipped up and out of that sink hole as if it were a snowmobile climbing out of a drift. I was as amazed as he was at what we saw it do."

To his surprise, what he'd intended to be a simple demonstration turned into a sale. "The customer was so excited with it that he issued a purchase order on the spot." Fazekas has followed

up with the customer since the sale: "He still loves the LG500."

Fazekas conducted a demo of the LG500 for a company who was installing sewer mains and making 18-inch lifts on a road.

"They had two of a competitor's units running at this location. I let the men run our

LG500 set up with plate extensions alongside of those. That other manufacturer has one of the highest market shares so I was extremely happy to see them there.”

As it happened, the Ministry was on site to verify compaction readings, Fazekas said. “When they told me our LG500 reading was 96 percent compaction—on the first pass—all I could say was, ‘Wow!’”

Three weeks later, the customer bought three LG500 units, two LG300 units and two LT5005 rammers.

“Our customers’ reaction upon seeing how our light compaction units run, how they feel, and running them side by side against our competitors’ light compaction units is exactly what I experienced myself when I first encountered them in Sweden. Our units offer something special that you don’t fully appreciate until you see it for yourself. I enjoy product demonstrations. I can set any sales tactics aside and customers simply see the performance and effectiveness of the product range”



Compaction testing confirms the LG500's effectiveness.

ATLAS COPCO LIGHT COMPACTORS

LG500

The Atlas Copco LG500 is a high-speed, electric-start compactor with forward and reversible plates for compacting medium to deep layers of granular soils: silt, sand and gravel—even cobbles and boulders. Balanced design and hydraulic control system enable easy, precise handling both for rough surfaces and for spot compaction.

Operating mass	1157 lb (523 kg)
Plate width	29 1/2" (750 mm)
Engine	10.9 hp (8.2 kW) Hatz diesel
Amplitude	1/16" (1.6 mm)
Frequency	60 Hz
Vibration emission value	2.1 m/s ²



LG300

The LG300 is a forward-reversible plate for lighter compaction tasks, ideal for tight spots and moving around corners fast. Like the LG500, the LG300 is easy on the operator with a low-vibration handle.

Operating mass	677 lb (307 kg)
Plate width	20"/23.6" (508 mm / 600 mm)
Engine	5.6 hp (4.2 kW) Hatz diesel
Amplitude	1/32" (1 mm)
Frequency	68 Hz
Vibration emission value	1.7 m/s ²



LT6005 rammer

The LT6005 is Atlas Copco's four-stroke, 120 cc rammer nicknamed the “jumping jack” for its ability to bounce in place unmanned without toppling. High centrifugal force and speed combine for deep and effective compaction, while its slim design allows close work near walls and posts or in narrow trenches.

Operating mass	154 lb (70 kg)
Plate width	11" (280 mm)
Plate length	13" (330 mm)
Engine	3.5 hp (2.6 kW) Honda gasoline
Amplitude	30" (1 mm)
Frequency	12 Hz
Vibration emission value	6.4 m/s ²



LF75 LAT

The LF75 LAT is 20-inch forward plate suitable for either use on asphalt, sand, gravel or silt.

Operating mass	203 lb (307 kg)
Plate width	20" (508 mm)
Engine	5.5 hp (4.1 kW) Honda gasoline
Amplitude	1/32" (1 mm)
Frequency	95 Hz
Vibration emission value	1.2 m/s ²





Vive La Différence

Puits Artesiens GLF credits Atlas Copco support for the smooth move from its productive T3W to its new, equally productive TH60

When Guy Morin purchased 30-year-old Puits Artesiens JL Lemieux in the Mont Laurier, Quebec, area from Jean Luc Lemieux, renaming the company back in 2010, Morin saw no reason to change Lemieux's formula for success. Although he changed the name to Puits Artesiens GLF, he retained the veteran drilling services of Steve Piché and his commercial salesman, Robert Durocher.

He kept Lemieux's 2008 model Atlas Copco T3W. After all, by 2010 Atlas Copco T3W and T4W water well rigs had been a reliable part of predecessor's drilling reputation for 20 years.

Morin also wished to continue the rotation practice of Lemieux's successful business model. Rotating rigs on a five-year schedule generally ensured keeping pace with the most recent technological advances while a rig in use was still at peak resale value. With 40,000 pounds of pullback

capability and a dedicated deck engine to power drilling operations, the 2008 T3W rig was extremely well maintained and working perfectly, Morin said. "But it was six years old with 4,000 hours on it."

Originally he intended to order a new T3W model, but when he learned a 2014 TH60 was immediately available from Atlas Copco's St. Apollinaire location in Quebec, it was too attractive to pass up. Still, Morin admitted he was a little hesitant. Although the single-engine TH60 is



also a 40,000-pound rig, drilling operations are PTO-driven. “I was concerned about switching to a single-engine design—specifically, would the engine have enough power for the compressor, and would its cooling system being adequate.”

He paired up with Atlas Copco Account Manager Kevin Neville to set about marketing his existing 2008 T3W. Brian Greene, account manager for the New England area in the U.S., had a motivated buyer who purchased Morin’s T3W on the spot.

As it turned out, Morin’s anxiety was quickly put to rest. “The Cummins ISX engine of the TH60 rated at 600 hp has more than adequate power. And the cooling system has proven itself, since rigs sold within the last year or two are not experiencing problems. That took care of my concerns.”

Water well drillers are sometimes staunchly committed to one or the other drill, the two-engine T3W or the single-engine TH60. Morin himself was completely satisfied by the T3W. But he and Piché have actually come to prefer some of the differences. “I am very satisfied with this rig, too. Having that 600 hp under the hood is noticeable on the highway. I have power to climb hills without

losing speed or power, yet I’m also saving in the neighborhood of 20 to 30 percent in fuel economy on a well-by-well basis.”

Piché actually enjoys the distinct ergonomics of the single-engine setup for many reasons. “For one, there is less noise in the driller’s environment, since there is no deck engine and the cooling fan is further forward. The compressor’s blow-down outlet is also located closer to the front of the rig.”

As for the cooling concerns, Morin reported that the new rig runs substantially cooler even during the long drilling days in summer temperatures. This is because the engine and cooling radiator are in the front of the truck.

It’s a lighter rig, as well, Morin said: “The TH60 weighs about 1,000 to 1,500 kg (2,200 to 3,300 pounds) less, fully loaded. That’s important during the thaw period, when weight limitations are strictly enforced by our Department of Transportation.”

As for reliability concerns, Morin said: “We purchased the extended warranty from Cummins as a security blanket. Overall maintenance costs should definitely be cheaper for one engine than also having to maintain a deck engine. Just saving on regular oil changes will add up quickly.”

Morin described himself as “a 100 percent believer in preventive maintenance and OEM parts.” He uses the Atlas Copco Service Group for all of his maintenance needs. “I have Copco come in at the end of my drilling season go over the rig top to bottom to identify any problems and deal with them immediately.”

In fact, he prefers to rely on “the total Atlas Copco drilling package, from service to drill rods and bits. The reason is simple. We get what we pay for. I learned this just from the difference in life between Atlas Copco and no-name drill rods. Discount components may save you in the short term, but they cost you more over time. So I have completely converted over to Atlas Copco hammers and bits as well.”

Morin grounds his convictions in fact, grounding his faith in Atlas Copco tooling only after an objective demonstration. “Working with Kevin and his technical support rep, Marcel Demers, we tested two competing hammers against each other and saw roughly a 15 percent increase in productivity using the Atlas Copco bits with QLX 50 and QLX 60 DTH hammers.”

He is also technologically progressive. “I »



(from left) Chris Graves, Atlas Copco Business Development Manager Drilling Solutions, Puits Artesiens GLF owner Guy Morin, and Kevin Neville, Atlas Copco Account Manager

also started using the Elemex system for my casing advancement needs, which has made us that much more productive. One great advantage of the Elemex system is if we discover we need to take the casing deeper after we've already tripped out of the hole, we can relock into the ring bit and continue down farther."

Puits Artesiens GLF receives only a few calls to re-drill or hydrofrac existing wells to restore or increase water volume. About 98 percent of the wells that its customers require are for new 6 1/8-inch-diameter residential services. Most of these wells are drilled to depths of 75 to 80 meters (250 to 260 feet). Morin targets a production zone capable of sustaining 200 gph, but if the zone is deep, it depends on the customer's needs and willingness to pursue that volume.

Ground conditions vary with the location. The drilling crew finds the easiest wells to drill are those in solid granite outcroppings or shallow overburden over granite. The time to drill one of these wells, including a one-hour drive to and from client site and five to six hours of setup and drilling, is a single shift. "We normally complete them

one day and have our pump contractor go in the following day."

But there are also areas where Puits Artesiens GLF encounters deep sand layers. "In some cases the sand compresses like clay. That makes for really tough, slow drilling." One particularly difficult service area requires drilling 400 to 450 feet down, casing off the first 250 to 280 feet. Morin said they must hydrofrac roughly 50 percent of newly drilled wells to increase the water flow.


In today's heavily regulated market, however, the largest obstacle Puits Artesiens GLF runs into is permitting hang-ups. "Our clients are responsible for going to their town halls to make their request. Sometimes we can be waiting an extra two weeks before they have the permit in hand."

Puits Artesiens GLF drills almost exclusively with DTH, using the Elemex Casing advancement system, averaging 12 to 15 minutes per 20-foot rod, which is similar to what they achieve on conventional DTH. "We use Elemex because we are required by the province to have a minimum of 20 feet of grouted casing in all applications. More often, though, we case to the 150- to 200-foot range. Because of the diverse ground condi-

tions, we often find we have to use screens due to loose gravel and sand formations."

The well begins with 10-inch bore and grouted casing to 20 feet to seal out any potential for surface contamination. If it's in sand or gravel, the next 150 to 200 feet is drilled and cased using Elemex and 168 mm (6 5/8-inch), 0.188-inch wall steel casing. They will add foam to help remove cuttings. After tripping out of the cased off section, Puits Artesiens GLF will switch to 5 1/2-inch DTH bit.

Morin said, "I am sold on Atlas Copco and have good support from my account manager and the service group. Since I purchased the company in 2010, I have continued my relationship with them. Ever since Kevin came on board in 2012, the relationship has grown even stronger."

Morin said, "I have been solicited by another manufacturer, but I have never seriously considered changing over from Atlas Copco." As for the switch from his T3W to the less familiar TH60, Morin said, "Having the support of the Atlas Copco people has made the whole transition seamless." 



British Columbia Premier Christy Clark spoke on the modern mining industry's positive impact on the economy. She is shown with Brad Wheeler, right, a product specialist with Atlas Copco Thiessen, Langley, B.C.

Copper Mountain sponsors 6th Annual Mining Days

Each year the Mining Association of British Columbia (MABC) celebrates the contributions of the modern mining industry to British Columbians and familiarizes them with what mining operations are all about. For its part in BC Mining Week, Copper Mountain hosted its 6th Annual Mining Days event. Festivities included a two-hour tour of the mine itself. About 250 of the 600 residents and visitors, who had come to the event from as far away as France, boarded six buses for the 20-minute bus ride to the Copper Mountain mine site.

Copper Mountain also sponsored two hours of free family fun in Princeton's Veterans' Square during the afternoon with free face-painting, balloons and barbeque, as well as information booths and interactive displays by the mine and its suppliers, including Atlas Copco, to explain what mining is all about.

Honored guests included Christy Clark, Premier of British Columbia. Clark spoke on the modern mining industry's positive impact on the economy.

Patrik Gillerstedt, Copper Mountain mine operations manager, said, "The Premier's support is important not only to us, as a company, but to the industry. Her appearance here, as well as the annual celebration of Mining Days itself, is a tremendous tribute to BC's history as a mining culture and helps us all appreciate modern mining's many benefits to the community and to the region as a whole."


Other dignitaries appearing at the event



Interaction with mining suppliers at booths like this one by Atlas Copco during Copper Mountain Mining Days help Princeton residents and visiting guests learn all about modern mining techniques and technologies.

included Linda Larson, MLA Boundary-Similkameen; Jackie Tegart MLA Fraser-Nicola; Princeton mayor Frank Armitage; and former Penticton MLA Bill Barisoff.

One of the oldest associations in the province, the Mining Association of BC, represents the collective needs and interests of coal, metal and industrial mineral companies, as well as smelters, in British Columbia.

Located in southern British Columbia, the Copper Mountain mine initiated commercial production in the latter half of 2011 and has continued to improve its operations since startup. The 18,000-acre site has a large resource of copper that remains open laterally and at depth with additional, significant exploration potential. 

WHERE TO FIND US

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