First Cobalt acquires assets in Canada and the DRC

Since joining **First Cobalt Corp**. (TSXV: FCC) in March, president and CEO Trent Mell has wasted little time rolling up his sleeves and getting down to work—unveiling two large property transactions, raising $6 million in financing, and putting key management in place.

The first deal—an option to acquire 100% of the largest past producer of cobalt in the Silver Centre mining camp in northern Ontario—gives the junior a dominant land position in a mining district that hasn't seen meaningful exploration in modern times. The company now controls about 21,000 hectares in Silver Centre, a town about 25 km south of the town of Cobalt.

The second deal—to become a 70% joint-venture partner on seven cobalt properties on the Central African Copperbelt in the Democratic Republic of Congo's Katanga province—gives it 190 sq km of prospective ground in a country that produces 64% of the world's cobalt.

Mell, who left his post as president and CEO of PearTree Securities to join First Cobalt Corp., says that while he loved building PearTree's mining group, which last year raised $300 million in equity investments, becoming the largest provider of flow-through capital in Canada, hands-on mining was never far from his thoughts.

Prior to PearTree, Mell was president and CEO of **Falco Resources** (TSXV: FPC) and executive vice-president at AuRico Gold. He has also held positions at **Barrick Gold** (TSX: ABX; NYSE: ABX) and **Sherritt International** (TSX: S).

The reason he chose First Cobalt, however, was because of the "really compelling" demand picture for the metal, which is used in batteries for electric vehicles. Lithium ion batteries were responsible for 20% of all cobalt demand in 2006, he says, and today half of global cobalt production goes towards the production of lithium ion and other batteries..

"The macro-environment for cobalt is strong," he says, estimating that about 81% of all electric-vehicle batteries consist of cobalt as a primary metal.

"In 2012, it [cobalt] wasn't favored for batteries, it didn't have the ability to discharge enough energy without overcharging the battery, but we've overcome some of those challenges and now it's the go-to metal for batteries," he says.

In addition, battery costs have dropped by about 80% in the last six years, making electric vehicles more accessible. "The Chevy Bolt, once credits are factored in, is US$30,000, so you're at the point where you don't have to be rich to afford one," he says.

China is also driving demand for the metal, with the government is mandating that manufacturers produce more electric vehicles.

First Cobalt has already kicked off a fully funded $1 million exploration program at its Keeley-Frontier project and put key management in place. Mell has recruited Peter Campbell as vice-president of business development and Frank Santaguida as vice-president of exploration. Campbell is a former exploration manager for Falconbridge and also served as chairman of Jennings Capital. Santaguida, formerly a principle geologist for **First Quantum Minerals** (TSX: FM; LON: FQM), has spent several years in the Central African Copperbelt, including a four-year stint living in Zambia.

This year's exploration program at Keeley-Frontier will include 7,000 metres of surface drilling, 5,000 metres of which will focus on the past-producing Keeley-Frontier mine, and the remaining 2,000 metres on regional exploration.

The program will incorporate the digital compilation of 50 years of historic mine data to generate a 3D geological model, along with detailed and property-scale structural mapping of mineralized veins and host rock. It will also feature systematic surface sampling at known prospects and occurrences throughout the property for assay analyses and a detailed magnetic survey of the 35-sq-km property.

What really excites Mell and his colleagues is that no work has been done in the camp for more than 50 years. He also notes that back in the day there were 70 different mines that produced silver and a bit of cobalt but that Keeley-Frontier was the top five producer of cobalt and the top ten producer of silver. The mine also had the best ratio of cobalt to silver of any of the 25 larger mines in the area, with 1 pound of cobalt for every 5.8 ounces of silver, at a time when the focus was on silver rather than cobalt.

Geologically, the property lies within the Cobalt Emplayment in the Southern Province of the Canadian Shield, where Huronian Supergroup sedimentary rocks lay unconformably over Archean basement rocks. Both the Huronian sediments and Archean rocks have been intruded by Porterozoic-aged Nipissing diabase occurring as both sills and dykes.

The majority of the mineralization is related to and occurs within 250 metres of the intrusion contact between the Nipissing diabase and surrounding rocks. Silver-cobalt mineralization occurs in steeply dipping carbonate veins controlled by complex fault networks. Most silver-cobalt was extracted from veins above the diabase sill, but limited exploration below the sill did locate high-grade silver as well as cobalt veins.

"We want to be the first company in the camp to understand what modern mining might look like here," says Mell. "We want to see the structure and what we can learn from that. We'll do ground geophysics—do all of our homework for the first two or three months—and then first drill 5,000 metres on Keeley itself to understand what was there, what was mined and not mined. Then we'll go to the north and follow some of the veins."

The Keeley-Frontier mine produced over 3.3 million pounds of cobalt at a recovered grade of 0.5% and 19.1million ounces of silver at a recovered grade of 58 ounces per tonne 1,644 grams per tonne) between 1908 and 1965. Most of the production took place between 1922 and 1931.

In the 1920s and 1930s, the camp, which consisted of two production hubs—one in Cobalt and one in Silver Centre—was the biggest silver camp in the world.

"They were twin silver producing towns but after the silver boom, Silver Centre was abandoned while Cobalt lived on. Silver Centre then became a ghost town and is now basically a forest. I think there's still sign in Cobalt that points the way to Silver Centre but I haven't seen it myself."

The main advantage to optioning land in Silver Centre rather than Cobalt was that the company could get a larger land package. "We've got 21 square kilometers so there's a real ability to get in there and have room to explore a larger area," Mell explains. "It's pretty competitive–there probably was more action around Cobalt, Ontario, than Silver Centre, so with these properties there were no third parties to deal with and we got in fairly quickly."

While Keeley-Frontier, which First Cobalt is optioning from **Canadian Silver Hunter** (TSXV: CSH), is the company's flagship asset, Mell is also excited about the seven properties the company is securing in the

DRC. Santaguida, First Cobalt's vice president exploration, operated just south of these properties when he working as First Quantum's principal geologist, and is familiar with the area.

Five of the properties sit in a cluster, about 40 km northeast of the provincial capital of Lubumbashi, and are about 30 km from the Kinsevere copper mine, 65 km from the Tenke-Fungurume mine, one of the world's largest known copper and cobalt resources, and about 65 km from **Ivanhoe Mines**' (TSX: IVN; US-OTC: IVPAF) Kipushi zinc-copper project.

First Cobalt has signed an exclusive letter of intent with an associate of Madini Minerals to form a strategic alliance and earn a controlling 70% interest over the seven properties. Madini will take an 8.5% stake in First Cobalt.

Madini, a South Africa-based group of geologists, mine and metallurgical engineers, and capital markets professionals, specializes in turning around operations in Sub-Saharan Africa. Mell met the Madini guys after looking at assets in the DRC.

"The typically don't do exploration, but in this case they did because they saw the same opportunity we did and they have a good network into the Congo," Mell says. "One of their principals, Serge Ngandu, has got a great reputation and has good contacts, so for us it was a great marriage and a great opportunity to hit the ground running. He has a great network in the DRC, which will be invaluable for us as we set ourselves up in the country."

Ngandu—a Congolese metallurgical engineer with 34 years of mining experience in Africa was educated in Europe and operated across Africa, designing, commissioning and operating mineral processing plants and managing mining projects, and will join First Cobalt's board of directors.

All of the seven properties are exploration plays, all of them have surface mineralization and one of them has a bit of a starter pit. One of the properties is adjacent to land that has a pit and is held by the DRC's state-owned mining company, Gécamines.

Mell concedes that the DRC isn't the easiest location to work in and companies have to be "mindful of corruption and geopolitical issues" but says he feels safe where the properties are located in Katanga, which sits at the southern end of the Congo.

"North Americans in particular have a hard time with Africa as a continent—generally we're more comfortable in South America," he says. "But when you go to the Congo, there are 80 million people there, it's two-thirds the size of Europe so it's very hard to paint the country with one brush. You've also got big companies there like Glencore and Ivanhoe."

"To say it's a no-go zone flies in the face of its geology and the number of large companies that are there…We are hundreds of miles away from a lot of the armed conflict we read about in the West."

First Cobalt is the only junior mining company exploring for cobalt there, making it "very unique in the cobalt space," he adds

The junior will likely spend between $1 million and $2 million over the next year in the DRC. The company has about $5 million in its treasury and a low burn-rate, with just three full-time employees, he says, adding that he doesn't take a salary, opting to take shares in the company as his compensation.

Looking ahead, Mell says, demand for cobalt is only going to rise as the electrification of transportation continues to grow.

"Rarely if ever has a mining company gone exploring for cobalt as a primary metal and now you've got a dozen or more juniors looking for the metal," he says. "I've never seen that in my lifetime."

Cobalt isn’t an easy metal to find, he adds, but it’s fun exploring for a commodity that the younger generation is interested in as part of the solution against environmental degradation.

“It’s green, it’s new economy stuff,” Mell says. “It’s a bit of a tangent, but it’s nice to see millennials take an interest in our sector.”