

# Diversification – the key to Fortune Minerals' success

by Brandon Larson

Although some of the largest deposits of anthracite coal are found in eastern Pennsylvania, **Fortune Minerals Ltd.** [FT-TSX] continues to work towards mining the 2.8 billion tonnes located at their Mount Klappan property in northwest British Columbia. Fortune Minerals has a very diversified portfolio of properties; along with the coal property at Mount Klappan, they also have their NICO property which contains gold-cobalt-bismuth-copper deposits. Both the Mount Klappan and NICO projects are at the advanced permitting stage. Just a short distance away, Fortune also owns the Sue Dianne copper-silver-gold deposit. In conjunction with these three major deposit projects, the company is also in the process of obtaining permits to construct and operate a hydrometallurgical processing facility called the Saskatchewan Metals Processing Plant (SMPP) just north of Saskatoon.

The Mount Klappan property was originally owned by Gulf Canada Resource Ltd. and following a takeover was later owned by a Canadian subsidiary of ConocoPhillips. Fortune Minerals acquired the property from ConocoPhillips in 2002. To date there has been over \$85 million worth of work carried out in research and development of the property, \$65 million of this was done by Gulf Canada in the 1980s.

Mount Klappan is 150 km northeast of the Port of Stewart and just over 300 km northeast of the Port of Prince Rupert. This location is especially beneficial for overseas shipping as the use of these ports can save up to 36 hours of travel time versus shipping from the Port of Vancouver. This does not take into account the time saved by not having to transport the ore by rail to Vancouver before loading onto a cargo ship. Benefits like these make the Mount Klappan Project both fiscally and environmentally attractive.

The Mount Klappan coal deposits represents one of world's largest undeveloped



Janet Rabesca, Environmental Field Assistant, collects ground water samples from a drill hole at the NICO Project in the Northwest Territories. Photo courtesy Fortune Minerals Ltd.

deposits of metallurgical coal with measured resources of 107.9 million tonnes, indicated resources of 123.0 million tonnes, inferred resources of 359.5 million tonnes and speculative resources of 2.2 billion tonnes. The definitive feasibility study, on the Lost Fox deposit, demonstrated run-of-mine coal reserves of 106.3 million tonnes, representing only 3.6% of the total resources.

The project offers a \$1.03 billion pre-tax NPV (8%) and 25.4% IRR from Lost Fox DFS at a base case price of US \$175 per tonne of 10% ash, ultra-low, volatile, pulverized coal injection product. Coal production is envisaged at 3 million tonnes per year for the initial production rate. In addition, there is potential to ramp up production via the mining of additional resources in the Lost Fox deposit and the adjacent Hobbit Broach, Nass and Summit deposits. There is a Canadian National Railway collaboration to extend railway infrastructure to the mine site, providing a scalable transportation solution to the Port of Prince Rupert.

In mid July, Fortune Coal Ltd., a subsidiary of Fortune Minerals, formed a joint venture with POSCO Klappan Coal Ltd., a subsidiary of POSCO Canada Ltd. (POSCAN), to advance the Mount Klappan Coal Project to production. POSCAN's parent company, POSCO, is based in South Korea and is one of the world's largest steel

producers. Under the terms of the joint venture agreement, POSCAN will acquire a 20% interest in Mount Klappan and, based on current capital cost estimates, is expected to make total payments and cash contributions totaling \$181 million, including \$30 million in upfront funding upon closing.

At the NICO Project in the Northwest Territories, Fortune Minerals is planning to operate a mainly open pit mine in order to extract the proven and probable 31 million tonnes of mineral reserves on site. Along with the gold, cobalt and little bit of copper on the property, it also contains the largest deposit of bismuth in the world.

Because of the chemical makeup of bismuth, it is one of the most environmentally safe ores that can be extracted. The uses of bismuth are constantly evolving; not only can it be used as a replacement for lead, it is also edible and one of the main ingredients in Pepto-Bismal. Some of the other common uses are for soldering in electronics, mixing with paint, ammunition and radiation shielding. One of the unique properties of bismuth is that it expands instead of contracts when cooled making it an excellent choice for blending and adding stability to many alloys.

As mentioned above, one of the other ores being extracted is cobalt. Every year there

is an 8%-10% increase worldwide for the use of cobalt. It is a very high strength metal that is popularly used in rechargeable batteries, including but not limited to, portable electronics (laptop batteries, MP3 players etc) and hybrid/electric vehicles.

Although most of the ore can be extracted through open pit mining, an underground mine will also have to be utilized along with an onsite processing plant. Both a developers assessment report (DAR) and environmental assessment have been submitted for the project.

“We are very proud of the development, operation and closure plan prepared for the DAR by our in-house team of professionals together with experts retained from outside engineering and environmental consultants,” said Fortune Minerals President, Robin Goad. Commencement of this project is estimated to create over 500 jobs for both the Northwest Territories and local Tlicho aboriginal community.

Fortune Minerals is also working closely with the Saskatchewan government to move the Saskatchewan Metals Processing Plant through the permitting stage. The provincial government is fully engaged in the process and has even created a new tax incentive to promote companies to set-up similar operations in Saskatchewan. The plant will be conveniently located, just 800 metres from Highway 305 and has Canadian National Railway tracks passing through the southern part of the property. The 480-acre property will receive 14-17 railcars of metal concentrate per week, averaging 180 tonnes per day from the NICO Mine.

In addition, Fortune Minerals has also purchased the Hemlo gold property in Ontario. The target of this purchase was the mill onsite which they have disassembled and put in storage for future construction on the NICO property to operate as the onsite processing plant.

Fortune Minerals’ third mining operation is the Sue Dianne copper-silver-gold deposit located only 25 km from their NICO property. With the proximity so close to the NICO property, Fortune Minerals is hoping to utilize it to expand the NICO Project. ■