

VanadiumCorp to benefit from rising vanadium spot prices

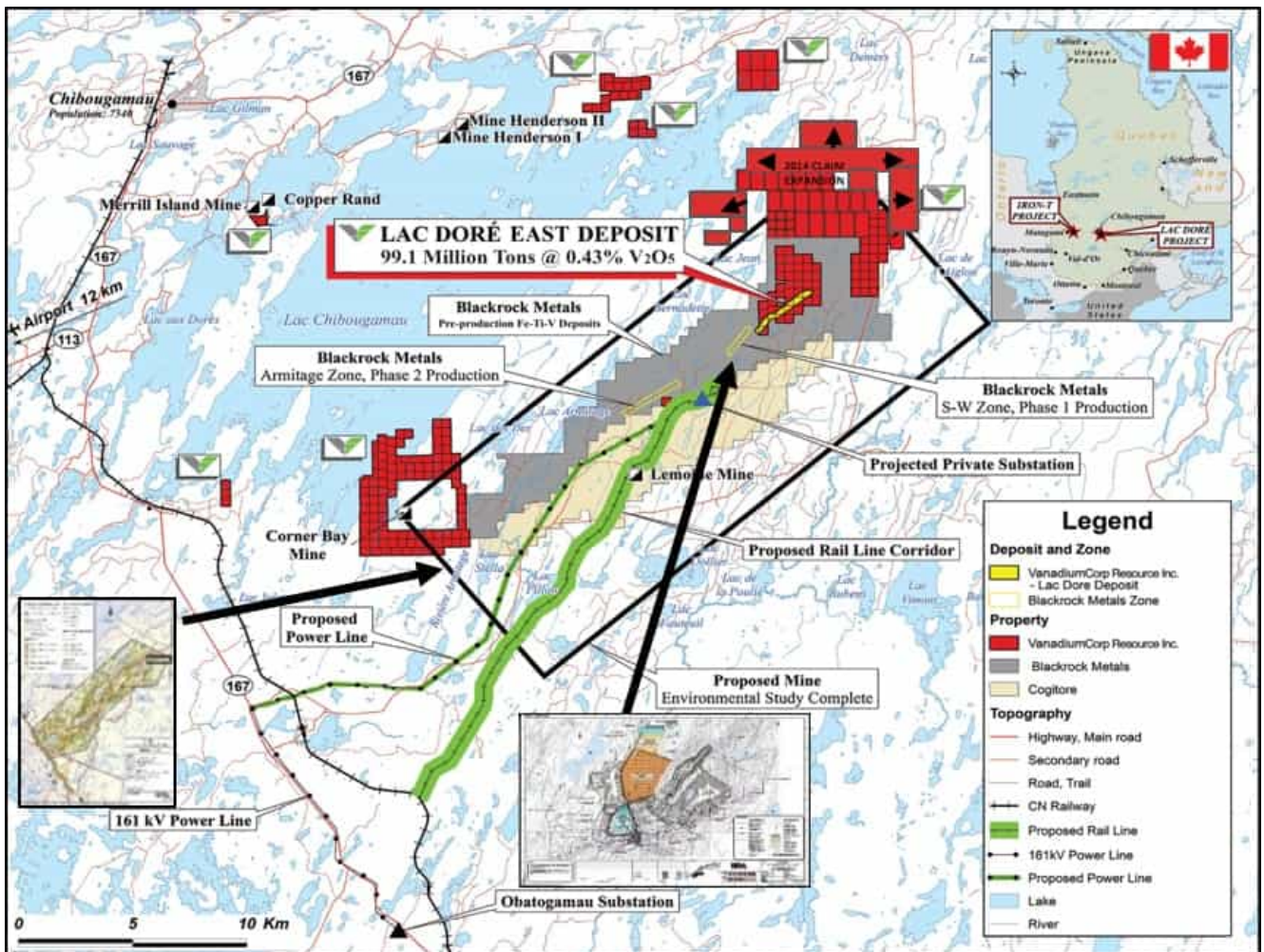
Vanadium was first discovered in 1801. It was mistaken for chromium and wasn't rediscovered for another 30 years. One of the most important industrial uses of vanadium is in the making of steel alloys, added in small quantities, as little as 0.15% vanadium is proven to double the strength of the alloy. This steel is used to make special tools and equipments. It is used in steel rebar, car gears, crank shafts, pipes and tubes in the chemical industry etc. In most recent years vanadium has emerged as a useful mineral for energy storage batteries. Henry Ford was one of the first exponents of the metal, using it to strengthen the Model T – the car credited with introducing the automotive industry to the masses in the early 1900s. Fast forward to today as the EV boom is taking off, vanadium is also booming due to its use in steel rebar and vanadium redox flow batteries. The world is slowly transitioning away from fossil fuels, and the metal could have a big role to play particularly in large scale energy storage.

Vanadium spot prices have almost tripled over the past year, while many other EV and base metals have recently fallen; vanadium continues to rise in value. China's new steel rebar rules requiring vanadium is the main reason.

VanadiumCorp Resource Inc. (TSXV: VRB) intends to become the leading vanadium supplier to the emerging vanadium battery market for grid level and renewable energy storage. The Company is located in Quebec, Canada. VanadiumCorp's proprietary breakthrough process is 100% green with unprecedented recovery of metal value. Further advantage is 100% ownership and development of two of the purest deposits in the world.

Lac Doré Vanadium Project

The Company's flagship 100% owned Lac Dore project spans over 45 km² and is located close to the mining town of Chibougamau in mining friendly Quebec, Canada. Their current NI 43-101 vanadium resource measures 621 million lbs V₂O₅ from VTM concentrate grading 1.08% V₂O₅. Mineralization is at surface, open at depth and along strike, with nearby infrastructure such as road, rail, 161Kv power, workforce, water and a local airport. The Company also has another smaller project known as the Iron-T Vanadium Project also in Quebec, and royalties on the Raglan Nickel-PGM mine.



Lac-Dore claim map

President and CEO of VanadiumCorp Adriaan Bakker states: “The biggest opportunity in the vanadium market is really in energy storage. We identified some key facts in the vanadium market.

Number one being vanadium electrolyte that is required by batteries is a non-existent commodity. It is created by an offshoot of production from the steel industry from this inefficient type of production. There is just not enough vanadium available to go into energy storage.”

VanadiumCorp and Electrochem Process Technology (“VEPT”) (patent-pending) have partnered to develop a chemical process method applicable for vanadium, iron and titanium. This will allow them to explore innovative new approaches by utilizing half the conventional energy and featuring a negligible carbon footprint that will address the industry challenges and the global shortage of battery grade vanadium.

VanadiumCorp has a good sized resource, with exploration upside, currently supported by very strong vanadium spot prices. For now their patent pending technology is not showing any value on the market, once proven successful at scale it will add significant value to the Company. The market is currently awaiting the updated Preliminary Economic Assessment [PEA] which will give investors a better idea of the project economics. On June 11, 2018 VanadiumCorp received by email a notification of a cease trade order. As a result, VanadiumCorp will remain cease traded by the BCSC Commission until the newly authored PEA can be filed. Stay tuned.

Feasibility Study results position NioCorp “shares to head skyward”

NioCorp Developments Ltd. (TSX: NB | OTCQX: NIOBF) (“NioCorp”) released a positive feasibility study for its Elk Creek

project in Southeast Nebraska. The results show that the deposit contains valuable niobium, scandium and titanium metals. The primary focus of the group is to produce ferroniobium and to this end, the company has already secured an offtake for 75% of its production, which de-risks the project considerably.

According to the feasibility study, this massive ore body has a potential value of \$17.6bn over a life of 32 years and has the capacity to produce 143,824 tonnes of niobium, 3,237 tonnes of scandium and 359,128 tonnes of titanium oxides. Capital raising is already in full swing, with \$2m already secured in a private placement so that construction on the mine can begin. The company must now execute a graceful run-up to completing the \$1bn facility that could turn Nebraska, which is not a major mining destination by local or global standards, into the state's major mining destination.

Taking a total of only 36 months, the feasibility study was completed remarkably efficiently, which is largely attributable to the experience of the management team allowing them to move more confidently through the formalities of the exploration stage. Now that the project is de-risked, the company can follow-up on an in-principal agreement with a loan guarantee scheme from the German government to serve as debt financing. This loan agreement will be sufficient to kickstart decent equity financing and propel NioCorp to the ranks of major producer.

The study's results show that the potential returns are indeed substantial and demonstrates a positive net present value (NPV) and internal rate of return (IRR) of \$2.3billion and 24.3% respectively, at a discount rate of 8% and an after-tax NPV of \$1.7bn. The payback period following production is expected to be 3.4 years. With three quarters of the company's ferroniobium production already committed, recouping the cost outlay should be a smooth run.

Over the last six years, more than \$6bn was invested into the niobium market and the landscape of this niche metal has gone through considerable changes in a very short time frame. For years, ferroniobium demand was met by almost entirely by the Salles family in Brazil (CMBB), with Anglo American's Brazilian operations providing the balance. IAMGOLD in Canada was arguably the only other significant producer. Since this time, 30% of CMBB has been sold to two Asian consortia for \$3.9bn, while IAMGOLD sold its deposit to Magris Resources, a private equity firm, backed by Singapore and Hong Kong investors and not to be left behind, Anglo American sold its Brazilian based niobium business to China Molybdenum (CMOC). Today, Asian investors are said to own more than one third of the globe's ferroniobium production capacity.

Ferroniobium is used to increase steel strength, and with the US's emphasis on domestic infrastructure development, high-strength steel is going to be important in the medium term. Moreover, as the largest players are now in Asian hands, the regional diversification, that Niocorp offers, cannot be underestimated.

With a key federal permit in-hand, NioCorp's advance should be fairly swift, especially considering that management have completed the feasibility stage in such a short time frame. Once the funding is secured, construction could be complete within a couple of years, and with numbers like these, the value of the company's shares are set to head skyward. NioCorp is currently trading at C\$0.68 with a market cap of C\$129.74m, and investors hopeful about making money from the junior mining world should be looking for the most feasible, de-risked, and therefore potentially profitable outfits.