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# First Vanadium Set to Change the Resource Landscape

Investors may not have heard of First Vanadium Corp. (TSX.V: FVAN; OTCQX: FVANF; Frankfurt: 1PY – Not Rated) before yesterday's ground-breaking news, but savvy investors will recognize it as a landmark shift in the resource industry.

## Background

First Vanadium owns exclusive mineral rights to the noted Carlin Vanadium Project in North Central Nevada, which contains the largest and highest grade primary Vanadium deposit in all of North America. For the uninitiated, Vanadium is an extremely valuable and highly sought-after, strategic mineral that is critical to a number of industries. Vanadium is found in the production of steel, along with industrial and utility-scale battery storage technology.

### Ground-Breaking News

The maiden resource announced yesterday is a significant improvement over the historic levels on all metrics and is worth taking note. To illustrate the significance and unique magnitude of these new figures, it is instructive to compare it to the historic level. Prior to FVAN's drilling in 2018 there was a 2010 historic Inferred estimate of 28M short tons @ 0.515% V<sub>2</sub>O<sub>5</sub> containing 289 million pounds of V<sub>2</sub>O<sub>5</sub> from 127 drill holes dating back to the 1960's. This was already a sizeable amount of contained metal and value in this deposit of about *US\$5 billion* based on recent spot prices.

As huge as that number is for a junior mining company that is only part of the story.

FVAN completed two drill campaigns in 2018 totaling 89 holes; most of these holes (about 60%) were infill holes to tighten up the drill spacing and improve on the confidence of the geology, grade and thickness of vanadium zones. The other holes were step-out holes to expand on the dimensions of the deposit. The results of these projects are off the charts with potential investment returns to be envied by all of the Company's peers:

FVAN spent about \$1 million in the drilling and added about US\$1.5 billion of new in-the-ground metal value (at spot price of US\$17.60/lb). Spend \$1 million, and add \$1.5 billion of in the ground metal value. Unheard of. With 378 million pounds of V2O5 at spot US\$17.60/lb the deposit now has an in-the-ground metal of over US\$6.6B.

According to the Company's press release, in every metric of the maiden resource, there was an improvement. "Our Maiden resource estimate far exceeds our expectations. Approximately 77% of the estimation reports to the Indicated category, grades are higher than expected in the Indicated category, and the contained pounds of V2O5 metal in the deposit in both Indicated and Inferred categories are higher than expected."



### By the Numbers

The results of the program recorded the following key figures:

- 30.8% gain of contained metal in the deposit from 289 million pounds to 378 million pounds of V2O5 (89 million pound gain in both categories).
- 13.7% gain in the total tonnage (both categories).
- 19.4% improvement in grade (0.515% to 0.615%) in the Indicated category.

It saw an increase in the total tons from 28 Mst to 31.83Mst, an increase of 13.7%. It upgrades a sizeable amount of the Inferred estimate to the Indicated category (about 77%). All of these aspects are very strong improvements and positives for the project and company.

Following this news, FVAN has 31.83 million tons combined, on an indicated and inferred basis. The bottom line? It more than confirms and further strengthens the claim of being the largest, highest grade primary vanadium deposit in North America. Clearly, industry drivers and higher prices are ahead.

Industry Drivers to Generate Major Interest in FVAN's Stock

The high profile use of vanadium in green and clean energy battery storage products is on the rise and could eventually exceed the use of lithium-ion in large power storage applications, which had been a standard-bearer in energy storage projects as well as in the electric vehicle market. Vanadium Redox Flow Batteries (VRFBs) are increasingly being used for large-scale storage in industrial-scale renewable energy projects such as wind and solar in the U.S. and abroad that require long power durations.

This migration is due to its unique ability to efficiently provide hundreds of megawatt hours of energy on a grid scale along with lower setup costs and scalability. As the shift from natural gas and other power plants to low-carbon electricity and renewable energy occurs, vanadium becomes even more valuable.

Still, the primary use of vanadium (90%) is in rebar for steel production. Incorporating this strong mineral improves steel strength and lowers its weight. Thus, it is found in rebar, pipelines, jet engines, and even car frames which offer improvements to the vehicles by making them safer, lighter, and more fuel efficient. As noted by the Company on its website, vanadium is one of the strongest alloys on earth.

Interestingly, a major driver in demand and therefore pricing has been courtesy of China. In late 2018, the Chinese government changed its regulations requiring improvement of steel quality which prompted the incorporation of broad vanadium into rebar. As the largest miner and producer of the metal, the subsequent demand drove vanadium prices in a mini-leap.

Against this backdrop, it is easy to see why this metal was the best performer in 2018 and has been on a tear since falling back in early – mid January 2019, and is likely to continue this year, driving these shares markedly higher.



## Looking Ahead

As a key corollary, being able to boast that this project represents the largest, highest grade primary vanadium deposit in North America is a major boost domestically for the U.S. and as a result, a boost for FVAN as well. It is estimated that China currently produces 65% of the world's vanadium. Considering the fragile current economic relationship between China and the U.S., having this deposit on U.S. soil could substantially reduce the country's future reliance on vanadium from China or elsewhere.

Going forward, the landmark news will surely prompt an economic study which could eventually lead to future milestones on the road to production. Experienced resource investors are aware that future stock prices for FVAN will be driven by vanadium spot prices along with company milestone events. However, it is important to note that during the lifecycle of junior mining companies, there are a few events which serve as catalysts that drive the largest historical rises in value. Given the magnitude of the upward shift in value based on the recent news, we believe that this is one of those few events that typically prompt and accompany major increases in near term stock prices. Therefore, we believe that FVAN's stock is clearly on the swift path to return to its 52-week high of US\$1.60, and likely approach the \$3 mark, as compared with its recent close of US\$0.467.

## **Recent Trading History For FVAN.V**

(Source: www.Stockcharts.com)





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