

Dr. Spencer of U308 Corp. on the vanadium redox battery market demand

July 5, 2018 – “As China and India change their building codes so the buildings can withstand earthquakes, the amount of vanadium that goes into the rebar increases. The steel industry has been growing at about 3.8% over the last 10 years. Vanadium in that steel is growing at about 8% because they need more vanadium and it is being dictated that they have to use more vanadium in building steel. That is over 90%. There is also vanadium going into titanium alloys for the aerospace industry and that is huge. But, the most exciting component of the vanadium space is vanadium redox battery.” States Dr. Richard Spencer, CEO, President and Director of U308 Corp. (TSX: UWE | OTCQB: UWEFF), in an interview with InvestorIntel Corp. CEO Tracy Weslosky.

Tracy Weslosky: I do not think many of our investors out there in the InvestorIntel audience appreciate that U308 has vanadium. Why do we not start there?

Richard Spencer: We have a huge amount of vanadium. Vanadium would be the coproduct with uranium out of the project in Argentina and the project in Colombia. Both projects, the process that we use to extract the uranium would also extract the vanadium and a couple of other byproducts as well.

Tracy Weslosky: Many of us know you as a world renowned expert on uranium. Let us talk about your expertise on vanadium. For those of you that may not appreciate what a significant critical material that vanadium is, let us start there. Tell us a little bit about vanadium, the vanadium market in general please.

Richard Spencer: Over 90% of it is used in the steel industry,

in rebar particularly. As China and India change their building codes so the buildings can withstand earthquakes, so the amount of vanadium that goes into the rebar increases. The steel industry has been growing at about 3.8% over the last 10 years. Vanadium in that steel is growing at about 8% because they need more vanadium and it is being dictated that they have to use more vanadium in building steel. That is over 90%. There is also vanadium going into titanium alloys for the aerospace industry and that is huge. But, the most exciting component of the vanadium space is vanadium redox battery. These things are the ugly duckling of the battery industry. They are not miniaturizable. They will never be in cellphones. They will never be in computers and that kind of thing. These are great big honking industrial-scale batteries. They are easily scalable. Basically they are just two tanks. They have got vanadium +4 and +5 on the plus side of the battery, a tank, and in the liquid on the other side of the battery, on the negative side, is vanadium +3 and +2. These are just liquids. They can be charged instantaneously basically, I mean, in a lithium-ion battery because there is a crystal structure in there. Each little ion has to move out of there and that wears the battery out. If that same material is in a liquid, like it is in a vanadium redox battery, there is nothing to wear down. These batteries are guaranteed for 20 years. A lithium-ion battery, as we all know from our computers, degrades after 3, 4, 5 years or however long it is...to access the complete interview, [click here](#)

Disclaimer: U308 Corp. is an advertorial member of InvestorIntel Corp.

Demand exceeds supply by 20% in “explosive” vanadium market

Mark Smith, President, CEO, and Director of Largo Resources Ltd. (TSX: LGO | OTCQB: LGORF) in an interview with InvestorIntel’s CEO Tracy Weslosky to discuss the economics and applications of vanadium. The supply of vanadium is 20% lower than the demand for it – “We are virtually on the edge of something very explosive”, says Mark about the metal’s price in response to a rise in demand. Vanadium is a reinforcing super metal and steel is the largest market for it. But because of their top tier product, Largo can tap into the higher end applications (aeronautics for example) at a premium price. Mark can be seen as the keynote speaker at the Cleantech and Technology Metals Summit on May 15-16, in Toronto.

Tracy Weslosky: For everybody out there, the reason we’re talking to Mark today is because he’s the CEO of one of the only vanadium producers in the world. Today we’re going to talk to you about vanadium.

Mark Smith: Perfect. I love to talk about vanadium.

Tracy Weslosky: Well, Mark I actually love vanadium myself. If you could just start real quickly with an introduction to vanadium for those out there that are new to this super metal.

Mark Smith: Vanadium is a super metal. Bottom line is it makes steel stronger. Over 50% of the vanadium in the world is used in rebar. I always like to say that cause I think people need to be able to, kind of, touch and feel in their own minds what vanadium actually does. It’s primarily used in rebar and it is used to strengthen steel. It’s in a lot of the car bodies and chassis. It’s in tools because you have to have a very strong

tool to do chipping or chiseling or something like that or a hammer. Those are the primary uses and it's got all kinds of specialty applications as well. A lot of it depends on purity levels of your vanadium. That's the story right now I think is purity levels.

Tracy Weslosky: I think the story would also be the increase in the price for vanadium. Yes?

Mark Smith: Yeah. It's more than doubled in less than 12 months. If you take a look at the supply and demand fundamentals in the world right now it would appear as if supply is about 20% below the demand level. That's making very conservative assumptions on the demand level. If there's any little uptick in demand at all, that spread just becomes worse and worse. You couple that supply and demand information with inventory information, which we've been plotting for 10 to 15 years now, and the inventory information suggests that we've been digging into inventory to meet the difference between supply and demand for over 6 years now, it's our opinion that there's very little inventory in the world...to access the full interview, [click here](#)

Disclaimer: Largo Resources Ltd. is an advertorial member of InvestorIntel