

Zenyatta proves it is one of most successful emerging graphite miners

Earlier this week on September 2, 2014, Zenyatta Ventures ('Zenyatta', TSXV: ZEN | OTCQX: ZENYF) published the results from its pilot plant and metallurgical studies of graphite extracted from its Albany graphite project, tested by SGS Canada. The mineral produced "a high purity, highly crystalline graphite product". Moreover, "the flotation pilot plant results produced a concentrate that has been upgraded at laboratory scale to a high purity and highly crystalline graphite product using a caustic bake based process." The tests underscored that the resulting graphite presented less than 0.05% elemental impurities, meaning that Zenyatta has successfully produced a highly crystalline graphitic carbon (Cg) product featuring 99.95% purity. Purity is but one factor in determining mineral graphite's desirability; structure and shape are also important. The samples showed that there were "no deleterious elemental concerns and verifying good crystal structure". The overwhelming success of the test material has prompted Zenyatta to test the market, allowing over twenty potential end users to start evaluating the graphite themselves. Zenyatta will be further testing the materials to achieve even higher purity levels ahead of the preliminary economic assessment (PEA) that is expected to be published toward the end of 2014.



The Albany graphite is of the rare hydrothermal variety, which means that it occurs at naturally high purity levels and that it is very malleable. Both of these features add to its market desirability and value. Geologists define the type of graphite deposit at Albany as being of the 'breccia' variety, very rare

compared to other typographical deposits and, in fact, research of the Albany hydrothermal deposit will help to create the first 'genetic' model for this special variety of graphite. The important and simple fact that investors should consider is that the Albany deposit has been proven to present a very high carbon graphitic content, which means the graphite is pure enough to compete with synthetic varieties. Zenyatta's target customers are precisely the ones, who, until recently, had no alternative to synthetic graphite. There are incentives to switch from oil based synthetic graphite to naturally occurring graphite of Zenyatta's caliber. The processing has delivered a nice high-grade, pure product with minimal cost and minimal detrimental environmental effects. The synthetic graphite market accounts for a potential USD\$ 13 billion-dollar market.

The world of graphite mining has expanded considerably in recent years and many companies have claimed to find amorphous flake graphite of one type or another. Indeed, some flake graphite miners have even achieved surprising purity results, approaching Zenyatta's. The problem, however, is that to try purifying other standards of flake graphite to achieve those presented by Zenyatta would require more refining and still lack the quality of Zenyatta's deposit. Quality and purity are very important to the targeted end users in the green technology and clean-tech sectors. The Albany deposit's purity, therefore, allows Zenyatta to set ambitious sales targets, lithium-ion batteries, pebble nuclear reactors, solar power capacitors, wind power generators and graphene. This means that Zenyatta's graphite will command high prices. Moreover, the rarity of the type of graphite found at the Albany deposit is such that Zenyatta has received interest and support from the National Research Council of Canada Industrial Research Assistance Program for metallurgical testing.

Zenyatta is a promising graphite company. The only other

graphite in the world similar to its deposit is found in Sri Lanka and it now belongs to Germany's Kropfmühl AG. Zenyatta's deposit, however, is the largest and possibly purest (hydrothermal) graphite deposits in the world. The infrastructure at the Project is very good and will keep costs low. The Project's high visibility and uniqueness, moreover, have attracted a lot of attention. Tesla, which announced it would build the Gigafactory in Nebraska, wants to get into the battery side of the business with its "gigafactory", which is intended to make lithium-ion (Li-ion) batteries for electric vehicles. This giant plant may require investments of between USD\$ 4 and 5 billion dollars, occupy an area of 930,000 square meters, employ 6,500 employees and produce enough batteries to equip 500,000 cars per year. Graphite production in North America, the only place where Tesla expects to be sourcing it, will have to increase accordingly. Tesla has finally set his sights on the neighboring state of Nevada (hot and sunny – a selection criterion needed to enable the use of solar panels). The announcement of Tesla's proposed super-factory has assured us that a 'sustainable future' is possible. Tesla's planned launch of the Compact Model 3 will turn the brand a truly great automobile builder and a huge consumer of graphite. Meanwhile, the discovery of high grade mineral graphite and proof of the purity levels that can be achieved, mean that Zenyatta has the chance to become one of the more successful new graphite miners.