

THUNDER BAY, ON--(Marketwired - December 22, 2015) - [Zenyatta Ventures Ltd.](#) ("Zenyatta" or "Company") (TSX VENTURE: ZEN) (OTCQX: ZENYF) is pleased to report on a recent academic paper confirming properties of naturally occurring Albany graphite to be comparable to synthetic graphite. The paper was presented at the "Symposium on Critical and Strategic Materials" hosted by the British Columbia Geological Survey and is titled "Geology, Ore Characteristics, and Origin of the Albany Graphite Deposit" by Dr. Andrew G. Conly and Lindsay C. Moore of Lakehead University in Thunder Bay, Ontario, Canada. The unusual mode of formation accounts for the favourable crystallinity and particle size of the graphite material found in the Albany deposit.

The authors conclude that "the Albany deposit is a distinctive type of igneous-hosted, fluid-derived graphite mineralization. Igneous-hosted deposits are very rare, as these environments do not usually provide suitable conditions for the formation of sizable deposits. The defining characteristic of the Albany deposit is the occurrence of crystalline, fine-grained graphite within two large (breccia) pipes. The formation of the Albany deposit required an unusual combination of geological factors approximately 1 Billion years ago."

Dr. Andrew Conly stated, "The rapid precipitation of graphite in the Albany deposit at temperatures up to 581 °C generated fine-grained, but highly crystalline graphite, with comparable crystallographic properties to synthetic graphite. We demonstrated this using XRD and Raman analyses which were performed at Lakehead University and Laurentian University, respectively."

A Government of Canada grant from the Natural Sciences and Engineering Research Council ('NSERC') assisted Dr. Andrew Conly (associate professor, Department of Geology at Lakehead University) in this collaborative research on the Albany graphite deposit. This recent academic research is of a geological nature and further enhances the understanding of the genesis and mineralising event of this deposit.

Dr. Andrew Conly further observed, "Evidence has shown that Zenyatta has discovered a sub-class of a hydrothermal graphite deposit unlike any other. Igneous breccia-hosted graphite deposits like Albany are rare, and to the best of my knowledge, none are currently being mined or even in an advanced stage of exploration globally. The deposit is interpreted as a vent pipe breccia that formed from CO<sub>2</sub> and CH<sub>4</sub> rich fluids that evolved due to pressure-related degassing of the host alkalic complex."

The initial research was announced on 4 February 2014 in a news release titled, "Experts Establish First Geological Model at Lakehead University for One-of-a-Kind Albany Graphite Deposit; Government of Canada Grant Awarded to Carry Out Additional Research." The latest paper along with news releases, reports and diagrams can be found at [www.zenyatta.ca](#). A more detailed explanation can be found in the NI 43-101 Technical Report dated 16 January 2014 under the section 'Deposit Type' filed on [www.sedar.com](#).

Peter Wood, VP Exploration for Zenyatta, commented, "Dr. Conly has been involved in the study of the Albany graphite deposit since Zenyatta's initial discovery drill hole in 2011. He was one of the first to recognize the geological significance and the economic importance of such a find. Academic work completed under Dr. Conly's supervision has considerably increased our understanding of the geological processes required for formation, and confirms that the Albany graphite deposit is not like any other graphite occurrence previously discovered or documented. It represents a unique geological setting that has led to the formation of highly crystalline graphite."

Synthetic graphite is used in many cleantech applications such as the manufacturing of anodes for lithium-ion batteries, major components of fuel cells and the fabrication of graphite powder into complex industrial parts. It is a high value market that is growing rapidly.

Synthetic graphite producers are faced with high energy costs associated with turning petroleum (needle) coke into high purity graphite powder. To turn coke into synthetic graphite requires significant exposure at high temperatures (up to 2800 °C or higher) in a furnace to evaporate contaminants and change the crystalline structure of the coke to graphite while releasing hazardous impurities. These (smoke stack) emissions are subject to strict environmental regulations; however, it is not possible to capture 100% of the discharge. Not only is this a costly process but it has a significant environmental issue.

The world trend is to develop products for technological applications that need extraordinary performance using high purity graphite powder at an affordable cost. Graphite from Zenyatta's Albany deposit can be upgraded to >99.9% graphitic carbon ('Cg') with very good crystallinity without the use of high thermal treatment<sup>1</sup> as shown in the preliminary economic assessment ('PEA'). If the technical feasibility and economic viability of the project can be established, the development of this deposit would place Zenyatta in a strong position to compete in high growth specialised markets such as those currently supplied by synthetic graphite.

A high degree of crystallinity, particle size and purity results in various positive qualities that graphite is known for such as electrical conductivity, thermal conductivity, compressibility, dimension stability, bending strength and lubricity. These qualities are very important for emerging high-tech or clean-tech applications. Zenyatta is in proactive development with major high purity graphite consumers to incorporate its Albany graphite into these advanced applications, as recently announced in a news release on 7 December 2015 reporting on use of Albany graphite in hydrogen fuel cells.

Peter Wood, P.Eng., P.Geo., VP Exploration is the Qualified Person under National Instrument 43-101 who supervised, reviewed and prepared the scientific and technical information that forms the basis for the disclosure contained in this news release. Dr. Conly's paper was also peer reviewed by two external reviewers and the British Columbia Geological Survey publication geologist and volume editor.

<sup>1</sup>CAUTIONARY STATEMENT: This analysis does not represent a statistically large sample size. Furthermore, these positive results do not mean that Zenyatta can extract and process Albany graphite for graphite applications on an economic basis. Without a formal independent feasibility study, there is no assurance that the operation will be economic.

CAUTIONARY STATEMENT: Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release. This news release may contain forward looking information and Zenyatta cautions readers that forward looking information is based on certain assumptions and risk factors that could cause actual results to differ materially from the expectations of Zenyatta included in this news release. This news release includes certain "forward-looking statements", which often, but not always, can be identified by the use of words such as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "will", or "plan". These statements are based on information currently available to Zenyatta and Zenyatta provides no assurance that actual results will meet management's expectations. Forward-looking statements include estimates and statements with respect to Zenyatta's future plans, objectives or goals, to the effect that Zenyatta or management expects a stated condition or result to occur, including the expected timing for release of a pre-feasibility study, the expected uses for graphite in the future, and the future uses of the graphite from Zenyatta's Albany deposit. Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results relating to, among other things, results of metallurgical processing, ongoing exploration, project development, reclamation and capital costs of Zenyatta's mineral properties, and Zenyatta's financial condition and prospects, could differ materially from those currently anticipated in such statements for many reasons such as, but are not limited to: failure to convert estimated mineral resources to reserves; the preliminary nature of metallurgical test results; the inability to identify target markets and satisfy the product criteria for such markets; the inability to complete a prefeasibility study; the inability to enter into offtake agreements with qualified purchasers; delays in obtaining or failures to obtain required governmental, environmental or other project approvals; political risks; uncertainties relating to the availability and costs of financing needed in the future; changes in equity markets, inflation, changes in exchange rates; fluctuations in commodity prices; delays in the development of projects; capital and operating costs varying significantly from estimates and the other risks involved in the mineral exploration and development industry; and those risks set out in Zenyatta's public documents filed on SEDAR. This list is not exhaustive of the factors that may affect any of Zenyatta's forward-looking statements. These and other factors should be considered carefully and readers should not place undue reliance on Zenyatta's forward-looking statements. Although Zenyatta believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Zenyatta disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

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