Zenyatta Ventures Ltd. Provides an Update on Metallurgical Process Development at SGS Canada Inc. to Yield High Purity & Highly Crystalline Graphite Products

16.12.2014 | Marketwired

THUNDER BAY, ONTARIO--(Marketwired - Dec 16, 2014) - Zenyatta Ventures Ltd. ("Zenyatta" or "Company") (TSX VENTURE:ZEN)(OTCQX:ZENYF) is pleased to provide an update on the metallurgical process development on the Albany hydrothermal graphite deposit being carried out at SGS Canada Inc. ('SGS') facility in Lakefield, Ontario. Designing a new process flow sheet for a speciality industrial mineral product from a unique deposit like Albany involves innovation with timelines for completion that are difficult to predict. Even though it has taken longer than anticipated, the SGS team has made significant progress improving upon the bench scale caustic bake process and an innovative, viable flow sheet has been developed for the Albany graphite deposit.

Highlights:

- **A higher grade flotation concentrate of up to 92.5% graphitic carbon ('Cg') was produced compared to the previous 78.3% Cg concentrate;**
- **For the first time a fully engineered purification process has been completed providing data for energy requirements, water treatment, reagent consumption & equipment sizing;**
- **Optimization of NaOH consumption was achieved such that re-cycling was eliminated thereby reducing costs related to introduction of re-cycling engineering & equipment;**
- **Significant (~86%) reduction in the NaOH reagent dosage;**
- **A technically feasible & distinctive process flow sheet was developed and work continues to fully optimize it to meet customer expectations on purity.**

Dr. Stephen Mackie, Manager, Hydrometallurgical Group at SGS commented, "The recent test work has simplified the overall flow sheet for the purification of the graphite concentrate. Optimization of a process at this stage of a mineral project is a common exercise. We have come a long way in the last few months and will continue to develop a distinctive process for Zenyatta's unique, hydrothermal style graphite deposit."

Alex Mezei, M.Sc., P.Eng., Director, Engineering Technical Services at SGS stated "Our work has proven to be very effective in the early evaluation and troubleshooting of the flow sheet design, ultimately leading to significant progress on the Albany deposit. Nothing scales in a linear fashion in the mining industry. Many factors affect a final scaled up process, including reagent regime, temperature, residence time, mixing, separation and handling. We generated a significant amount of key process and engineering data, whilst gaining a solid understanding of the analytical requirements and acceptable methods. We will now proceed towards improving the flow sheet further using the same consistent and balanced approach, with emphasis on ensuring commercial applicability whilst defining the requirements for further increase of the final product purity. This is very important for a robust and cost effective process in the long run."

Aubrey Eveleigh, President & CEO at Zenyatta commented, "Process optimization (cost cutting, simplifying equipment, eliminating caustic re-cycling) was a success. The SGS test work has resulted in a 'thinking outside the box' robust process. While SGS has made significant progress on the metallurgical work, designing an innovative new process takes time and the timelines for completion are difficult to forecast accurately. Our priority is on defining the best possible process and meeting customer expectations on product quality for a broad range of applications with demanding specifications. The engineering work completed to date has been much more detailed than is normal for a project at the preliminary economic assessment (PEA) stage. We believe that Zenyatta is a leader in developing a new cost-effective process for the production of ultra-high purity natural graphite. Further purification test work is underway to produce a potential range of purities that are required by end-users. This is based on discussions with interested end users related to strict specifications under signed confidentiality agreements. The Company plan is to

develop an environmentally benign process for a high purity (benign) deposit. Given the feedback from potential strategic partners in the CleanTech sector, this is a critical consideration. Once ready, the complete process flow sheet and associated engineering data will then be fed into the PEA which is now underway by RPA Inc. The PEA economic evaluation is substantially complete except for the final inputs from the purification test work. The final results of the metallurgical work and the subsequent PEA will be announced once completed. While Zenyatta's independent contractors work on the metallurgical and PEA programs, the Company will continue to advance its market and business development programs."

The outlook for the global graphite market is very promising with demand growing rapidly from new applications. Graphite is now considered one of the more strategic elements by many leading industrial nations, particularly for its growing importance in high technology manufacturing and in the emerging "green" industries such as electric vehicle components. The application for graphitic material is constantly evolving due to its unique chemical, electrical and thermal properties. It maintains its stability and strength under temperatures in excess of 3,000°C and is very resistant to chemical corrosion. It is also one of the lightest of all reinforcing elements and has high natural lubricating abilities. Some of these key physical and chemical properties make it critical to modern industry.

Zenyatta continues to develop the unique Albany Graphite Deposit in Ontario, Canada. The Company's highly crystalline graphite deposit is situated 30 km north of the Trans-Canada Highway, power line and natural gas pipeline near the communities of Constance Lake First Nation and Hearst. A rail line is located 70 km away with an all-weather road approximately 10 km from the graphite deposit.

The metallurgical test work is being performed under the supervision of Alex Mezei, M.Sc., P.Eng., Director, Engineering Technical Services at SGS Lakefield, independent consultants to Zenyatta, and Peter Wood, P.Eng., P.Geo., VP Exploration of Zenyatta. Peter Wood and Alex Mezei are the Qualified Person's under National Instrument 43-101 who supervised the preparation of the scientific and technical information that forms the basis for the disclosure contained in this news release and they have reviewed this news release.

To find out more on Zenyatta Ventures Ltd., please visit website www.zenyatta.ca.

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 sample analyses and a preliminary economic assessment, 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 exploration, metallurgical processing, 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 identify mineral resources; failure to convert estimated mineral resources to reserves; the inability to complete a prefeasibility study; the preliminary nature of metallurgical test results; 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.

Contact

Zenyatta Ventures Ltd.
807-346-1660
info@zenyatta.ca
www.zenyatta.ca