



**Quest Rare Minerals Ltd.**

## **QUEST PRODUCES SEPARATE HEAVY AND LIGHT RARE EARTH CONCENTRATES FROM STRANGE LAKE B-ZONE DEPOSIT**

**Toronto, September 5, 2013 - Quest Rare Minerals Ltd. (TSX; NYSE MKT: QRM)** is pleased to announce that it has produced a heavy rare earth plus yttrium (HREE+Y) concentrate with a purity level of approximately **84%** from Quest's metallurgical test work, of which 75% is composed of yttrium oxide. Quest anticipates that further improvements in product quality and recoveries will be made. Quest has also successfully produced a separate light rare earth (LREE) concentrate, and high-purity zirconia product using Strange Lake B-Zone materials from ongoing test work at Hazen Research and Process Research Ortech.

Quest has engaged the Helmholtz Institute for Resource Technology in Germany and SGS in Lakefield, Ontario for peer reviews of its metallurgical processes. Quest is planning to work with both of these groups on the full demonstration pilot plant, where the process capacity will be increased significantly compared to the mini-pilot plant, with the metallurgical processes to run on a continuous basis. Quest is currently undertaking project planning and development of experimental design for the full pilot plant. The startup of the pilot plant is anticipated after the release of Quest's upcoming pre-feasibility study on the Strange Lake B-Zone. Quest is also in discussions with potential industrial partners for evaluations of the product results obtained to date. The chemistry received from the HREE+Y concentrate is seen as aligning well with the ideal metal distribution required by one of the third parties with which Quest is currently in discussions regarding a potential partnership.

More than 120 thermal sulfation and water leaching experiments have now been completed at Hazen Research in Golden, Colorado, and the response of a number of metallurgical samples to the process is well understood. A process for recovery of excess sulfuric acid has been proven in repeated tests.

Quest continues to optimize the Strange Lake flow sheet to improve cost and recovery. The approach of combining the wash and leach filtrates separately without recycle, together with volume reduction, had resulted in improved recoveries. By undergoing this approach, a LREE concentrate containing approximately **27% LREE** by metal, or **68% LREE** double sulfate, was also produced in the process. While lanthanum and cerium represent 75% of the products contained within this concentrate by weight, the elements praseodymium, neodymium and gadolinium account for most of the value within the LREE concentrate. The zirconium solvent extraction process has been tested at Ortech in both bench scale and mini-plant programs, and has succeeded in producing high-purity zirconia products. Radio elements have been separated from the zirconium stream as part of the zirconium solvent extraction process. Quest has provided zirconia filter cake material to TAM Ceramics for quality evaluation. Quest and TAM recently entered into a non-binding Letter of Intent with respect to the purchase by TAM of all of Strange Lake's annual zirconia production (See Company Press Release on July 9<sup>th</sup>, 2013).

“The progress made by our production team in engineering marketable products from Strange Lake mineralization has been extremely encouraging,” stated Peter Cashin, President and CEO of Quest. “The test results from our pilot plant work have further solidified Quest’s vision of becoming a leading manufacturer of strategic minerals and metal oxide products. We will use these products to further advance our dialogues with potential strategic entities, joint venture partners and customers around the world. We believe our suite of high-quality products will provide a one-stop shop for our end users, with the substantial quantity and mine life to ensure long-term supply stability. These results are also major milestones to be included in our upcoming pre-feasibility study.”

### **About Quest Rare Minerals**

*Quest Rare Minerals Ltd. (“Quest”) is a Canadian-based exploration company focused on the identification and discovery of new and significant Rare Earth deposit opportunities. Quest is publicly listed on the TSX and NYSE MKT as “QRM” and is led by a highly-respected management and technical team with a proven mine-finding track record. Quest is currently advancing several high-potential projects in Canada’s premier exploration areas: the Strange Lake and the Misery Lake areas of northeastern Québec. Quest’s 2009 exploration led to the discovery of a significant new Rare Earth metal deposit, the B-Zone, on its Strange Lake property in northeastern Québec. Quest has filed a National Instrument 43-101 Indicated and Inferred Resource Estimate on the B-Zone deposit and has completed a Preliminary Economic Assessment (PEA) for the deposit. In addition, Quest announced the discovery of an important new area of REE mineralization on its Misery Lake project, approximately 120 km south of the Strange Lake project. Quest continues to pursue high-value project opportunities throughout North America.*

### **Forward-Looking Statements**

*This news release contains statements that may constitute “forward-looking information” or “forward-looking statements” within the meaning of applicable Canadian and U.S. securities legislation. Forward-looking information and statements may include, among others, statements regarding the future plans, costs, objectives or performance of Quest, or the assumptions underlying any of the foregoing. In this news release, words such as “may”, “would”, “could”, “will”, “likely”, “believe”, “expect”, “anticipate”, “intend”, “plan”, “estimate” and similar words and the negative form thereof are used to identify forward-looking statements. Forward-looking statements should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether, or the times at or by which, such future performance will be achieved. No assurance can be given that any events anticipated by the forward-looking information will transpire or occur, or if any of them do so, what benefits Quest will derive. Forward-looking statements and information are based on information available at the time and/or management’s good-faith belief with respect to future events and are subject to known or unknown risks, uncertainties, assumptions and other unpredictable factors, many of which are beyond Quest’s control. These risks, uncertainties and assumptions include, but are not limited to, those described under “Risk Factors” in Quest’s annual information form dated January 25, 2013, and under the heading “Risk Factors” in Quest’s Management’s Discussion and Analysis for the fiscal year ended October 31, 2012, both of which are available on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov), and could cause actual events or results to differ materially from those projected in any forward-looking statements. Quest does not intend, nor does Quest undertake any obligation, to update or revise any forward-looking information or statements contained in this news release to reflect subsequent information, events or circumstances or otherwise, except if required by applicable laws.*

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