Quest Rare Minerals Ltd.

QUEST COMPLETES BULK OF PHASE II METALLURGICAL TESTWORK: PRODUCES ZIRCONIUM AND RARE EARTH CONCENTRATE

Toronto, May 15, 2012 – Quest Rare Minerals Ltd. (TSX ; NYSE Amex: QRM) is pleased to provide a summary of the metallurgical test results of its Strange Lake B-Zone deposit. Significant improvements in metal extraction have been achieved at Hazen Research, of Golden, Colorado ("Hazen"). Acid consumptions of approximately 200 kg/ton are being achieved with REE dissolutions in the 90-96% range, niobium dissolutions in the 93-96% range, and zirconium dissolutions in the 85-93% range. Considerable bench scale work has shown excellent reproducibility, and most operating variables have been established.

Work at Process Research Ortech Inc. ("Ortech") commenced in the first quarter of 2012, and significant progress has been achieved. Flow sheets to achieve the separation of zirconium, niobium, uranium & thorium, and REE concentrate have been developed. Quest is pleased to report that bench scale work has confirmed these flow sheets to the extent that a zirconium hydroxide product and a REE+Y oxalate product have been produced. Uranium and thorium have also been successfully extracted from the circuit with the intention of producing an environmentally stable discharge product. Significant work has been carried out on niobium and titanium separation. It is expected that this separation will be resolved in June, 2012.

Results of work completed are indicated in the table below.

	Previous	***Current***
Leach Extraction		
Zr	80%	85-93%
Nb	80%	93-96%
REE+Y	80%	90-96%
Solid Liquid Separation	-	98-99%
Solvent Extraction Recoveries[1]		
Zr	96%	95-97%
Nb	96%	85-95%
REE+Y	96%	>96%
Overall Recoveries		
Zr	77%	80-89%
Nb	77%	77-90%
REE+Y	77%	85-91%

[1] Projected based on typical counter-current SX operation. These recoveries will be confirmed in mini pilot testing expected to begin in Q4 2012.

"The metallurgical test results from the Strange Lake B-Zone are extremely encouraging," said Peter J. Cashin, Quest's President & CEO. "The relatively simple flow sheet has demonstrated recoveries significantly higher than those achieved in previous test work for Strange Lake, and also higher relative to our peers in the rare earth sector."

Thermal Sulphation

Extensive bench scale testing of a thermal sulphation process has been completed at Hazen. Test work has been performed on a number of metallurgical samples, including a composite sample that represents the first 10 years of mine life.

In the process that has been developed, run of mine material is crushed and ground, then mixed with sulfuric acid. The material is then heated and undergoes a thermal sulphation process where the sulphuric acid attacks the ore and forms the sulphates of the contained value metals. The dry calcine proceeds to a water leach where the values are dissolved into solution. The slurry is filtered and washed to produce a pregnant leach solution.

Extensive testing of the thermal process has determined conditions at which the refractory rare earth containing minerals can be attacked without the use of caustic (sodium hydroxide) or extreme temperatures. Rare earth, zirconium, and niobium recoveries to solution of up to 96%, 93%, and 96%, respectively, have been demonstrated.

Solvent Extraction Experiments

Bench scale solvent extraction test work to develop the separation processes at Ortech is ongoing. A detailed literature review has been completed, and this has formed the basis for the successful test work program that has identified separation routes for rare earths, zirconium and hafnium, niobium, titanium, and the removal of uranium and thorium. Small quantities of zirconium product, and a bulk REE+Y concentrate have also been produced.

The pregnant leach solution containing the zirconium, niobium, and rare earth values is the starting point for solvent extraction testing. The bench scale testing involves selecting appropriate organic reagents and analyzing their ability to separate the value metals from contaminants and each other. All solvent extraction separations are achieved using commercially available extractants.

In the flow sheet that has been developed, zirconium and niobium are removed and uranium and thorium recovered for final disposal. Following these initial separations, oxalic acid is added to the main process stream to precipitate rare earths and yttrium. Over 97% of the REE+Y values in solution are recovered to the oxalate precipitate. This oxalate precipitate will then be re-dissolved to produce a concentrated solution of rare earths and yttrium, which will undergo further refining using solvent extraction to achieve the individual separations.

Future Work

Mini-pilot plant testing to confirm individual product flow sheets established from bench scale testing is scheduled to begin in September, 2012. The results of these pilot programs will be used to finalize the flow sheet for the full scale pilot plant. The full scale pilot plant is expected to be operational in Q1 2013. The separations facility will therefore not be part of the PFS.

In another announcement, Quest Rare Minerals wishes to confirm the appointment of Mr. Colin Lindsay as the Vice President of Operations. Colin recently joined the Quest Team as the Senior Project Manager and brings a wealth of experience to move the Strange Lake project development forward. Reno Pressacco has resigned as the Vice President of Operations, effective May 15, 2012. The Board of Directors would like to thank Reno for his dedication and contribution to the Company during his tenure and wish him well in his future endeavours.

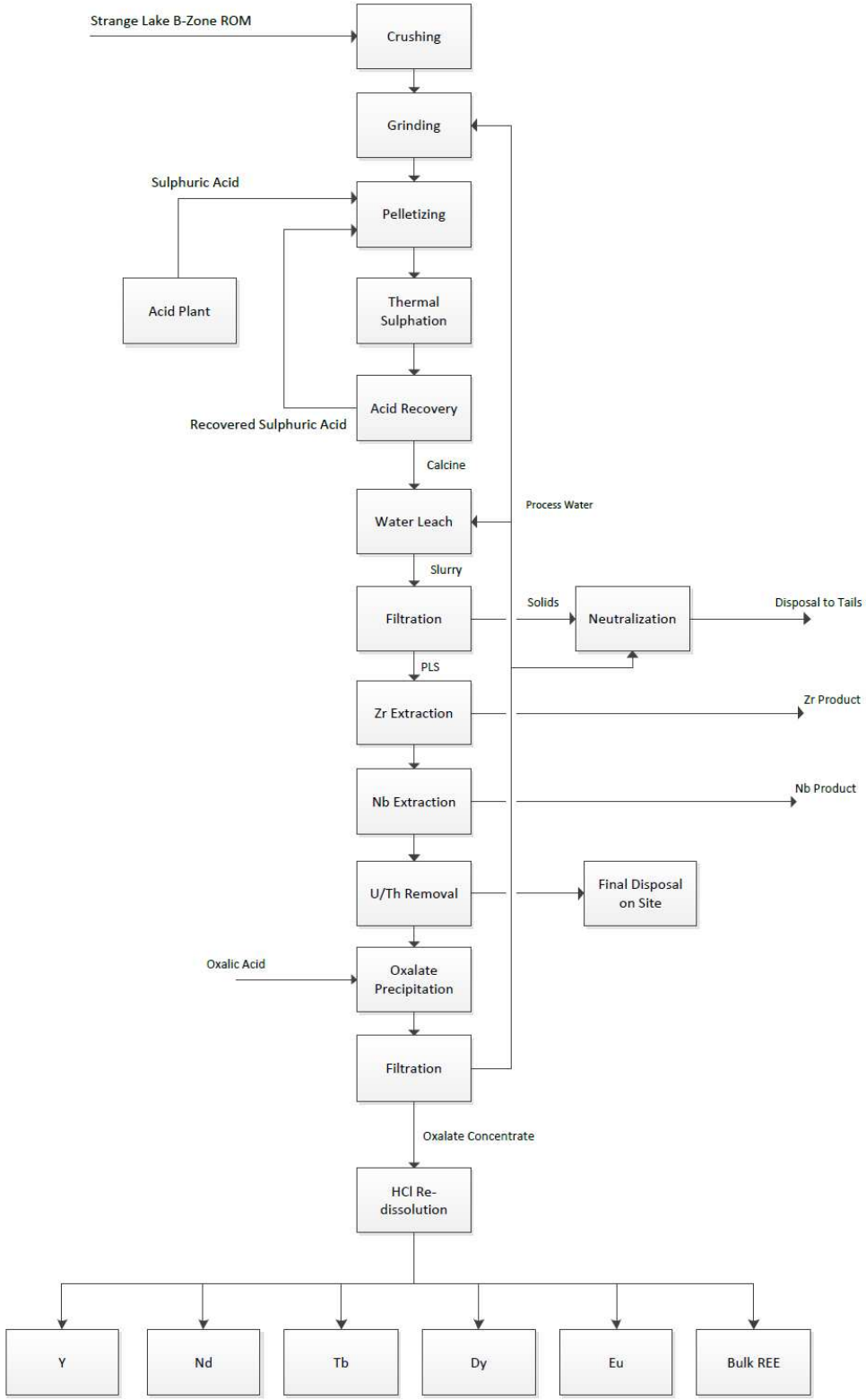

Figure 1 - Block Flow Diagram

About Quest Rare Minerals

Quest Rare Minerals Ltd. 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 Venture Exchange and NYSE Amex 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 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 recently filed a 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. As a result of a marketed equity financing completed in October 2010, Quest has a strong working capital position of $44.5 million.

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 Rare Minerals Ltd. ("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 that 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 March 2, 2011, and under the heading "Risk Factors" in Quest's Management's Discussion and Analysis for the quarter ended January 31, 2011, both of which are available on SEDAR at www.sedar.com and on EDGAR at 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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