Peak Resources Limited Provides Update on Ngualla Rare Earth Project

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WEST PERTH, AUSTRALIA -- (Marketwire - Jul 10, 2012) - Peak Resources Limited ("Peak") (ASX: PEK) (OTCQX: PKRLY) (PINKSHEETS: PKRLY) is pleased to provide a progress report on the development of a mineral processing route for its 100% owned rare earth Ngualla Rare Earth Project.

Ngualla is the world's fifth largest rare earth deposit outside of China and the highest grade of the top seven. Ngualla is potentially a low-cost, long term rare earth project located in Tanzania.

Highlights

- Test work to prove the first two stages of a five stage sulphuric acid leach process for high grade weathered rare earth mineralization has been successfully completed

- High rare earth recoveries of 95% were reported from the initial acid leach stage and 99% from the primary precipitation stage

- The sulphuric acid leach 'proof of concept' work is on schedule to be completed during the September 2012 Quarter

- Acid leach process optimisation studies planned to further improve recoveries and reduce costs

- Acid leach tests on a further 31 samples confirm that high rare earth leach extraction rates of 86% can be expected from sulphuric acid leaching of high grade weathered bastnasite rare earth mineralization within the central core of the Southern Rare Earth Zone

- Initial results from the development of an acid bake process for peripheral mixed bastnaesite -- monazite rare earth mineralization shows encouragement with 94% extraction of rare earths using concentrated sulphuric acid and baking at 250°C

Richard Beazley, Managing Director of Peak Resources, said, "These results are a significant step forward in the confirmation of a viable sulphuric acid leach process for Ngualla rare earth mineralization. The high recoveries achieved are particularly promising and the results support the Company's expectations that Ngualla will be a low cost mine. We look forward to sharing our results from additional studies by the end of the third quarter."

Technical Report

Background

Peak is completing test work to evaluate the efficiency of a sulphuric acid leach process for the production of a rare earth concentrate from a significant portion of the high grade, weathered carbonatite mineralization at Ngualla. If successful, it could contribute to Ngualla being a low cost rare earth mine in terms of both capital and operating costs.

Rare earth mineralization in the central core of the Southern Rare Earth Zone is predominantly in the form of the carbonate rare earth mineral bastnaesite, which is typically easily leachable by lower cost sulphuric acid. Sulphuric acid is usually not used directly to process carbonatite hosted rare earth mineralization due to the presence of other carbonate minerals such as calcite, ankerite and dolomite that comprise much of the primary rock, consuming and neutralising most of the acid. Large areas of carbonatite at Ngualla are so strongly weathered that the acid consuming carbonate minerals have been completely removed through the natural weathering process, leaving bastnaesite as the sole remaining carbonate.

Metallurgical test work strategy

The objective of the metallurgical test work currently in progress is to prove a commercial rare earth mineral

processing route for Ngualla and is focussed on three areas:

1. Confirm and refine the sulphuric acid leach process to establish the mineral processing plant design and associated capital and operating costs.

2. Conduct rare earth leach extraction efficiency tests on a larger number of weathered bastnasite mineralization samples collected over the entire Southern Rare Earth Zone to confirm the effectiveness of the sulphuric acid leach process on the portion of the Mineral Resource likely to be targeted for development; improve statistical confidence in the relationship between leach extraction and geology, mineralogy and trace element contents.

3. Evaluate the acid bake process as a possible alternative processing route, particularly for additional future production from peripheral monazite mineralization.

Sulphuric acid leach process flow sheet development

Encouraging results have been received from the sulphuric acid leach and rare earth recovery test work in progress on a representative weathered composite sample T19133. The composite sample grades 3.6% REO and is made up from 25 x two metre drill samples from six reverse circulation (RC) drill holes within the Southern Rare Earth Zone at Ngualla.

The Sulphuric Acid Leach and Primary Precipitation stages (Figure 1) of the five stage sulphuric acid leach -- precipitation process have now been successfully demonstrated at "proof of concept" level with encouraging results. An extraction efficiency of 95% of the rare earths was achieved during the Sulphuric Acid Leach stage with 99% subsequently recovered from the leach solution via Primary Precipitation.

The primary precipitate has a grade of 21% REO and represents just 8% of the original mass of the head feed. The Company considers these results to be very positive considering that the process has not yet been optimised for parameters such as temperature, leach time, acid strength, pulp density and the precipitation reagent.

The next steps in the process to prove a viable production route to a rare earth carbonate concentrate are two Purification stages followed by a Final Precipitation stage and are expected to be completed during the September 2012 Quarter. The processing flow sheet will be optimized in the December 2012 Quarter to further improve rare earth recovery and lower reagent costs and to provide production data for the Scoping Study.

Rare Earth leach test work for weathered bastnasite mineralization

Peak completed metallurgical variability test work on an additional 31 samples of weathered mineralization from across the Southern Rare Earth Zone to quantify the effect of variable mineralogy on rare earth leach extraction rates using sulphuric acid.

The results continue to be encouraging with 20 of the 31 samples returning rare earth leach extractions of greater than 75% and averaging 86%. Importantly, the samples returning lower rare earth leach extraction levels lie outside of the initially targeted bastnaesite rare earth zone or are surficial gravel and contain slightly elevated levels of phosphate. Mineralogical studies have shown that the elevated phosphate reflects the presence of some monazite, a phosphatic rare earth mineral that is less easily leached in sulphuric acid.

Samples showing high rare earth extraction rates all lie within the bastnaesite rare earth zone, a 750m x 700m area forming the core of the Southern Rare Earth Zone and containing the bulk of the > 4% REO mineralization at Ngualla (Figure 2).

Results from this larger number of samples collected over a wide area indicate a significant portion of the higher grade, near surface weathered rare earth mineralization at Ngualla may be amenable to the sulphuric acid leach process being tested.

Acid bake process for monazite samples

A monazite rare earth zone is peripheral to the bastnaesite rare earth zone and represents a lessor proportion of the > 4% REO mineralization at Ngualla. This second mineralization style is partially refractory, with sulphuric acid leach extraction recoveries from this material averaging 45% in the eight samples tested to date.

Two of the low leach recovery samples were subjected to an acid bake process (concentrated sulphuric acid at 250ºC) for comparison to the acid leach. The leach recovery increased from 43.1% and 37.6% to 94.5% and 92.0% respectively. As part of the ongoing Scoping Study, baking will be evaluated as an alternative to sulphuric acid leaching. A further 100 samples will be subjected to leach test work during July and August to provide data for this assessment.

The Company is pleased with progress and results from the sulphuric acid leach test work and the alternative acid bake process clearly has potential for the monazitic rare earth mineralization. Peak will continue to provide regular updates regarding the progress of the metallurgical flow sheet development as results come to hand.

About Peak Resources

Peak is developing the Ngualla Project, a potentially low-cost, long term rare earth project located in south west Tanzania. Ngualla has been ranked as the fifth largest deposit in the world outside China, and the highest grade of the top seven.

Ngualla has a Mineral Resource of 170 million tonnes grading 2.24% of rare earth oxides (REO). Within the resource there is a highly weathered and near-surface zone estimated at 40 million tonnes at 4.07% REO, equivalent to 1.6 million tonnes of contained REO (see Table 1 below for resource classifications). Ngualla is also a bulk deposit which is largely outcropping. These attributes place the project among the world's most notable rare earth discoveries of recent years.

Ngualla is a potential low cost open pit mine due to its shallow outcropping high grade mineralization. The initial sighter metallurgical test work to date has been completed using a sulphuric acid leach process route suggesting a relatively less complex, potentially cheaper capital outlay and shorter time to production.

Table 1: Classification of Mineral Resources for the Ngualla Rare Earth Project, 1.0% and 3.0% REO cut-off grades.

Lower cut - off grade	Resource Category	Tonnage (Mt)	REO (%)*	Contained REO tonnes
1.0% REO	Measured	29	2.61	750,000
	Indicated	69	2.43	1,700,000
	Inferred	72	1.92	1,400,000
	Total	170	2.24	3,800,000
3.0% REO	Measured	11	3.99	430,000
	Indicated	21	4.09	850,000
	Inferred	8.7	4.11	360,000
	Total	40	4.07	1,600,000

**REO (%) includes all the lanthanide elements plus yttrium oxides. Figures above may not sum precisely due to rounding. The number of significant figures does not imply an added level of precision.*

The information in this report that relates to Exploration Results is based on information compiled and/or reviewed by Dave Hammond who is a Member of The Australasian Institute of Mining and Metallurgy. Dave Hammond is the Technical Director of the Company. He has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dave Hammond consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Rob Spiers, who is a member of The Australasian Institute of Geoscientists. Rob Spiers is an employee of geological consultants Hellman and Schofield Pty Ltd. Rob Spiers has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Rob Spiers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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