Peak Resources Ltd. - Revised Scoping Study delivers lower costs for Ngualla

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Perth, Australia (ABN Newswire) - Peak Resources Limited (ASX:PEK) (OTCQX:PKRLY), is pleased to announce reductions in both operating and capital costs at its 100% owned Ngualla Rare Earth Project in Tanzania.

Peak has updated the December 2012 Scoping Study and preliminary economic assessment to reflect the significant improvements in costs and option to increase production as a result of recent positive beneficiation test work results and a higher grade and increased Mineral Resource for the weathered Bastnaesite Zone at Ngualla.

Highlights

The current May 2013 revision to the December 2012 Scoping Study shows further improvements to project economics including:

- Operating Cost of $10.18 per kg REO* equivalent product reduced 8% from $11.05

- Lower Capital Cost of US$373 million reduced 7% from $400 million (excluding contingency)

- Higher mine grade of 5.35% REO for initial 25 years production increased from 4.35%

- Lower strip ratios of 0.89 for the first 25 years of mining down from 3.34, reducing mining costs by 44% per kg REO produced

- Reduced sulphuric acid consumption by 45% in the hydrometallurgical (leach recovery) process

- Extended mine life from 25 years to in excess of 50 years from the weathered Bastnaesite Zone

**REO total rare earth oxide including yttrium*

These enhanced results deliver an improved NPV10 and IRR of US$1.768 billion and 60%, on the December 2012 10,000 tonne per annum base case scenario The option to double production rates to 20,000tpa REO delivers NPV10 of US$3.833 billion and IRR of 77%

Peak Executive Chairman Alastair Hunter said 'This update to the Scoping Study and preliminary economic assessment quantifies the excellent results achieved from the improved resource model and beneficiation test work released in April this year. The update further confirms Ngualla's position as a low cost operation, with the lowest capital requirement of all emerging rare earth producers.'

Mineral Resource

In April this year Peak announced an improved Mineral Resource estimate with infill drilling increasing the average grade and the amount of weathered mineralisation in the Bastnaesite Zone. This mineralisation is the high grade, near surface central portion of the Ngualla Mineral Resource amenable to the proven, low cost simple sulphuric acid processing route and targeted for production in the initial 25 years of the operation and beyond.

Using a lower cut-off grade of 3.0% the Mineral Resource estimate for the Bastnaesite Zone weathered mineralisation is 21.6 million tonnes at 4.54% REO (see Table 2 in link below for classification details). This is an increase from 8.2 million tonnes at 4.35% in the mining schedule defined by the December 2012 Scoping Study.

The new Mineral Resource also confirms the high ratio of the five Critical rare earths such as neodymium in

the deposit (US DoE, 'Critical Materials Strategy' report, December 2011). The combination of Ngualla's large size, high total grades, and high Critical rare earths grades distinguishes Ngualla from other rare earth development projects, as is graphically illustrated by Figure 1.

Mining

Using the improved Mineral Resource model Peak has revised the mine optimisation undertaken for the Scoping Study. This optimisation has resulted in a new mining schedule, revised pit shells, and a doubling of the mine life from 25 years in the initial study to 50 years. The revised pit shell for the initial 25 years of production at 10,000tpa contained REO is illustrated in Figure 3 in link below.

The larger size and higher average grade of the Mineral Resource has a positive and compounding impact on the average grades of the pit shells produced from the pit optimisation process. In practical terms the optimisation has identified higher grade areas of the deposit that can be mined earlier, translating into an average mined grade of 5.80% REO for the first five years of production, and 5.35% REO for 25 years. This compares to 4.64%, and 4.35% REO used in the December 2012 Scoping study design.

As there is a direct correlation between grade and operating costs of the processing plant this significant improvement in grade has reduced total operating costs.

The larger resource has also resulted in a lower strip ratio down from 3.34 to 0.89 for the first 25 years of mining. The improvements reduce mining costs by 44% per kg of contained REO production compared to the December 2012 Scoping Study estimates.

Beneficiation

The process plant at Ngualla will comprise a front end beneficiation circuit which includes crushing, milling, magnetic separation and multiple stage flotation (Figure 4 in link below). The latest beneficiation test-work reported in the ASX release of 6th of March 2013 has confirmed that the physical separation will increase the grade of the feed over 3 fold, thereby reducing the mass of mineralisation to the hydrometallurgical (leach recovery) process.

This significant 78% mass rejection reduces both capital and operating costs by:

- reducing the size of the acid leach stage of the hydrometallurgical plant and associated sulphuric acid plant by approximately 45%, and

- substantially lowering sulphuric acid requirements also by 45% - the major contributor to reagent and operating costs.

Lower Operating Cost

Higher grades from the new Mineral Resource model and mining optimisation studies along with improved upgrades through the beneficiation process has resulted in a substantial reduction in the overall operating cost from US$11.05 to US$10.18 per kg of contained REO product as compared to the December 2012 Scoping Study.

The large reductions in processing costs in the leach recovery phase of the hydrometallurgical process are offset to some degree by the requirement to now generate additional power on site (Table 3 in link below). This is due to the smaller amount of acid required and thus the smaller amount of power generated as a by-product of the on-site sulphuric acid plant.

Lower Capital Cost

The smaller hydrometallurgical and associated sulphuric acid plant now required as a result of the improved beneficiation and higher mining grades have led to a saving of US$27 million in the estimated capital expenditure for the 10,000tpa project. The revised capital requirement excluding any contingency is now estimated at US$373 million down from US$400 million in the December 2012 Scoping Study. A breakdown of the estimated capital cost for the project is shown in Table 4 in link below.

Revised Economic Assessment

The improved operating and capital costs have a significant impact on the before tax and royalty NPV and IRR for the project. Using the same assumptions as the December 2012 Scoping Study for comparison purposes, including maintaining the 10,000tpa contained REO production rate, costings and product pricing, the revised pre-tax and royalty NPV at a 10% discount rate is US$1.768 billion, an increase of US$197 million. The associated IRR is 60%, an increase of 7%. As the REO price sensitivity curves in Figures 7 and 8 illustrate, Ngualla continues to remain profitable at significantly reduced rare earth prices, further reinforcing the robustness of the project.

The value drivers for Ngualla are the high purity, separated neodymium - praseodymium and heavy rare earth products which together contribute 75% of total revenue (Table 5 in link below). These include the higher value Critical rare earths forecast to be in undersupply in coming years.

Option for increased production profile

The increased size of the Mineral Resource has allowed Peak to examine the economic benefits of doubling the base production rate to 20,000 tonnes of contained rare earth oxide per year. This increase in production has a significant positive impact on the NPV and IRR of the project.

Utilising the same assumptions as the December 2012 Scoping Study, and factoring capital and operating expenditure proportionately as appropriate, the comparative NPV10 is US$3.833 billion, with an IRR of 77%. The capital cost excluding contingencies for this scenario is estimated at US$672 million.

Preliminary Feasibility Study

Work on the Preliminary Feasibility Study scheduled for completion in 2013 is continuing with major milestones being achieved. On 22nd May this year Peak announced the production of a mixed middle and heavy rare earth product of 99.9% purity from the solvent extraction pilot plant currently in operation at ANSTO in Sydney.

Production of an additional three separated high purity products are expected over the next one to three months.

The Preliminary Feasibility Study is also focussed on making additional improvements on the project that are expected to translate into further savings in both operating and capital costs. Individual studies include:

- - Further test work to follow on from early encouraging results to recycle sulphuric acid - the single largest reagent cost.

- - Optimisation of the hydrometallurgical acid leach recovery stage to reduce reagent and power consumption

- - Investigating lower cost power options and the use of renewable energy sources

- - Investigating the optimum, potentially offsite location of the processing facilities to take advantage of lower transport, power and reagent costs.

- - Continued beneficiation studies to improve cost effective physical upgrade and further reduce downstream processing requirements

Peak will continue to provide updates on progress as results are received.

To view tables, figures and diagrams, please visit:
http://media.abnnewswire.net/media/en/docs/ASX-PEK-637091.pdf

About Peak Resources Limited:

Listed on the Australian Stock Exchange (ASX:PEK) in November 2006 and based in Perth, Western Australia, Peak Resources Limited is developing the Ngualla Rare Earths Project in southern Tanzania. Peak also holds a number of gold projects comprising a mix of brownfield, greenfield and advanced exploration prospects in the highly prospective Lake Victoria Goldfields area of Tanzania.

Peak ’s goal is to generate shareholder value through:

- Development of the exciting new high-grade, low uranium and thorium Ngualla Rare Earth discovery into

production

- Exploring for niobium-tantalum and phosphate at Ngualla to generate a pipeline of additional commodities

- Discovery of new gold deposits within its large, highly prospective portfolio of exploration projects in Tanzania

- Aggressive new project acquisition programmes in East Africa

Peak's head office is located in Perth, Western Australia with an exploration office in Mwanza, Tanzania.

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