Peak Resources Limited - Successful Completion of Rare Earth Solvent Extraction Pilot Plant

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Perth, Australia (ABN Newswire) - Peak Resources Ltd. (ASX:PEK) (OTCQX:PKRLY) is pleased to announce the production of the fourth and final separated high purity rare earth oxide (REO).

The cerium oxide product represents the successful culmination of the Solvent Extraction Pilot Plant work that commenced in February this year at ANSTO Minerals' (Australian Nuclear Science and Technology Organisation) test facility near Sydney. This fourth product follows the high purity mid + heavy rare earth oxide, the neodymium - praseodymium oxide and the lanthanum oxide previously announced.

The completion of the ANSTO Pilot Plant marks a milestone in Peak's technological development program as it is the last step in the practical demonstration of processing of Ngualla's mineralisation to high purity separated rare earth oxide products through the three metallurgical stages of beneficiation, sulphuric acid leach recovery and solvent extraction.

Completion of Solvent Extraction Pilot Plant

The delivery of these final cerium oxide products marks the conclusion of the six month Solvent Extraction Pilot Plant operation at ANSTO Minerals test facility near Sydney. The program started in February 2013 with the preparation of a feed for the Solvent Extraction Pilot Plant from a 1.3 tonne bulk sample of weathered Bastnaesite Zone mineralisation from Ngualla. ANSTO Minerals treated this sample using the simple sulphuric acid leach recovery process.

The Pilot Plant has been a resounding success achieving the following:

- Demonstrating that Peak has the technology to produce high purity rare earth oxide products from the Ngualla mineralisation;

- Provided samples for evaluation by potential off take partners; and

- Quantified operating data to accurately determine separation plant capital and operating costs.

The completion of this final processing stage is a significant milestone and positions Peak as one of a select few companies outside of China to have practically demonstrated the entire process route from feed mineralisation to high purity rare earth oxide products.

Cerium Oxide Products

The fourth and final product, high purity cerium oxide, has been produced in two forms to study cost and marketing options for this lower priced product used in the catalyst and glass polishing industries.

The first form, a 97% (see note*) purity cerium oxide, was produced via classic solvent extraction techniques. As the majority of cerium was recovered earlier in the process, only enough solution remained for batch tests rather than a continuous operation. ANSTO Minerals is confident that a +99% purity product will be achievable in a continuous operation where full equilibrium of solutions will be established.

The second form, a +90% purity cerium oxide, was produced by direct precipitation. This simpler method of production can potentially offer cost savings as it is a single stage process and uses cheaper reagents.

A cost benefit analysis will be completed to determine the optimum method of cerium production as part of the current Pre-Feasibility Study.

Note: *Excluding LOI and normalised

Neodymium to underpin Ngualla's production value Cerium production from Ngualla represents just

8% of predicted revenue. The lower priced cerium and lanthanum oxides are relative by-products at 15% of total project revenue.

The real value drivers for Ngualla are the neodymium - praseodymium and mid + heavy high purity rare earth oxide products (Figure 1), which together contribute 85% of projected annual revenue. These high value strategic rare earths are predicted to be in high demand in coming years and underpin Ngualla's future revenue.

Independent Confirmation of H igh V alue Product Purity

Samples of the mid + heavy and neodymium - praseodymium products produced in May and July this year were submitted to the specialist analysts Laboratory Services International (LSI) in Rotterdam, Netherlands (part of the Intertek Group) for an independent confirmation of the purity achieved by the Peak pilot plant. This London Metal Exchange (LME) certified laboratory confirmed that both products exceed 99.9% REO purity. Importantly, the radioactive elements of thorium and uranium could not be detected, being below the very low detection limit of 0.5 parts per million (<0.00005%).

About the Ngualla Rare Earth Project

The Ngualla Rare Earth Project in Tanzania is a recent discovery and the highest grade of the large undeveloped rare earth deposits.

Fundamental geological aspects of the central Bastnaesite Zone targeted for first production offer distinct advantages for development over other rare earth projects. These include the large size of the deposit, outcropping, high grade mineralisation amenable to open cut mining with low strip ratios, favourable mineralogy enabling a simple, low cost processing route and the lowest uranium and thorium levels of any major rare earth deposit in the world.

These favourable characteristics are reflected in the outcomes of the Scoping Study and preliminary economic assessment released on 3rd December 2012 (and revised May 2013), which defined very low capital and operating costs compared to other rare earth projects.

Ngualla is a leading rare earth project with an estimated NPV of US$1.77 billion and pre-tax IRR of 60% for an initial 25 years production and an average grade of 5.35% REO. The weathered Bastnaesite Zone can support a mine life of over 50 years at a 10,000tpa REO production level.

The Company continues to fast track the development of Ngualla with the aim of becoming a low cost, long term producer of high purity rare earth oxide products in 2016.

To view diagrams and photographs, please visit:
http://media.abnnewswire.net/media/en/docs/ASX-PEK-652677.pdf

bout Peak Resources Limited:

Listed on the Australian Stock Exchange (ASX:PEK) in November 2006 and based in Perth, Western Australia, Peak Resources Ltd. 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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