

ASX Release

4th July 2013



DEVELOPING A LOW COST RARE EARTH PROJECT

Second high value separated rare earth oxide produced

Peak Resources Limited (Peak; ASX: PEK; OTCQX: PKRLY) is pleased to announce the successful production of the second separated high purity rare earth oxide.

The neodymium – praseodymium oxide was produced from a bulk sample of mineralisation from the Company's 100% owned Ngualla Rare Earth Project in Tanzania. The successful production is an important milestone as this high value strategic commodity, used in the manufacture of permanent magnets, is forecast to provide over 50% of Ngualla's projected revenue.

The neodymium – praseodymium oxide was produced at the Solvent Extraction Pilot Plant currently in operation at ANSTO Minerals (Australian Nuclear Science and Technology Organisation) and is the second of four separated oxide products due to be produced following the mid and heavy rare earth oxide announced on 22 May.

Highlights:

- An ultra-high purity (99.9%)* neodymium praseodymium rare earth oxide has been produced at the Solvent Extraction Pilot Plant at ANSTO Minerals.
- Ngualla is one of the very few rare earth projects outside of China to have successfully produced a high purity separated product.
- Neodymium praseodymium are high value strategic commodities used as magnet feedstock in the renewable energy, green and high technology industries. The oxide is currently worth approximately \$54,000 to \$57,000 per tonne.
- A high recovery of >99.9% neodymium praseodymium was achieved in the solvent extraction separation process
- The ability to produce separated high purity rare earth oxide adds significant value to the project and allows
 access to wider markets for Ngualla's products.
- Neodymium praseodymium comprise 52% of the value of Ngualla's future production and together with the mid to heavy REO produced at ANSTO in May represent 75% of the forecast revenue for Ngualla.
- High purity cerium and lanthanum oxides will complete the four separated products to be produced by the Solvent Extraction Pilot Plant at ANSTO over the coming months.
- Samples and analysis of the products are available to potential customers for assessment during negotiations for off take agreements.

^{*}Assays by weight excluding water and volatiles (LOI)

Technical Report

A second high purity rare earth product has been produced at ANSTO Minerals test facility near Sydney. The separated, high purity neodymium – praseodymium oxide was produced by the second stage of the Solvent Extraction (SX) Pilot Plant following the medium and heavy rare earth oxide produced in May. The chloride feed solution for the Pilot Plant is derived from a 1.3 tonne bulk sample of Ngualla weathered Bastnaesite Zone mineralisation using the simple sulphuric acid leach recovery process.

Samples are available for assessment by potential off take customers.

Neodymium - Praseodymium Rare Earth Oxide

The second ultra-high grade product is a mix of praseodymium and neodymium as oxides (Photo 1). The purity of 99.9% REO is expected to exceed the requirements of off take customers.

The neodymium – praseodymium oxide constituents and low impurity levels are detailed in Table 2 below.



Photo 1: High purity (99.9%) neodymium – praseodymium rare earth oxide product produced from Ngualla mineralisation by the SX Pilot Plant at ANSTO Minerals

Table 2: Analysis of Neodymium – Praseodymium Rare Earth Oxide product

RARE EARTHS			OTHER METALS		
Element	Oxide	Oxide Calculated wt%	Element	Oxide	Calculated wt%
La	La ₂ O ₃	0.002	Al	Al_2O_3	0.09
Ce	CeO ₂	0.54	As	As ₂ O ₃	0.07
Pr	Pr ₆ O ₁₁	22.3	Ва	BaO	0.001
Nd	Nd ₂ O ₃	76.9	Ca	CaO	0.07
Sm	Sm ₂ O ₃	0.064	Co	CoO	0.001
Eu	Eu ₂ O ₃	0.002	Cr	Cr ₂ O ₃	0.001
Gd	Gd ₂ O ₃	0.002	Cs	Cs ₂ O	0.001
Tb	Tb ₄ O ₇	0.002	Cu	CuO	0.001
Dy	Dy ₂ O ₃	0.002	Fe	Fe ₂ O ₃	0.006
Но	Ho ₂ O ₃	0.002	Hf	HfO ₂	0.001
Er	Er ₂ O ₃	0.002	Mg	MgO	0.008
Tm	Tm ₂ O ₃	0.001	Mn	MnO ₂	0.002
Yb	Yb ₂ O ₃	0.001	Мо	MoO ₂	0.001
Lu	Lu ₂ O ₃	0.001	Na	Na ₂ O	0.07
Y	Y ₂ O ₃	0.001	Ni	NiO	0.001
			Р	P ₂ O ₅	0.018
			Pb	PbO	0.001
			Rb	Rb₂O	0.001
			S	SO ₄	1.0
			Se	SeO ₂	0.07
			Si	SiO ₂	0.06
			Ta	Ta ₂ O ₅	0.001
			Ti	TiO ₂	0.002
			Th	ThO ₂	0.001
			U	U ₃ O ₈	0.001
			Zn	ZnO	0.001
			Zr	ZrO ₂	0.001
Total REO %		99.8	Total Other Metals		0.024
% LOI		0.12			
Other Metals		0.02			
Normalised Total REO %		99.9			

Note assays are normalised to account for water and volatiles (LOI) which is not reported in the above table. Italics represent < values which are below detection limit.

The SX Pilot Plant work is progressing well with two additional separated rare earth oxide samples to be produced over the coming months. High purity lanthanum oxide and cerium oxide products are expected to be completed in August 2013.

This high value neodymium – praseodymium oxide will contribute approximately 52% of the total value of Ngualla's rare earth production as defined by the December 2012 Scoping Study (Table 1).

Table 1: Product and value splits, December 2012 Scoping Study, 10,000tpa production profile.

Product	Status of production of high purity REO products	Total Equivalent REO Production t/y*	Product Value (US\$)	Relative Value Contribution
Nd-Pr Oxide	✓ Completed	2,125	\$189.1M	52%
Mid+Heavy Oxide	√ Completed	288	\$82.9M	23%
La Oxide	In progress (August 2013)	2,756	\$38.6M	11%
Ce Oxide	In progress (August 2013)	2,126	\$31.9M	9%
Ce Oxide (concentrate)	✓ Completed	2,684	\$21.5M	6%
Total		9,980	\$363.9M	100%

^{*} Rare earth distribution derived from April 2013 Mineral Resource estimate for Bastnaesite Zone weathered mineralisation +3% REO.

As Table 1 and Figure 2 illustrate, the value drivers for the Ngualla operation are the neodymium – praseodymium oxide and Mid+Heavy high purity oxide products, which together contribute 75% of projected annual revenue (December 2012 Scoping Study). The lower priced cerium and lanthanum oxides are relative by-products at only 25% of the total revenue.

Critical rare earth products to underpin Ngualla's revenue

Neodymium and praseodymium are important specialty metals used in the renewable energy, green and high technology industries. Neodymium – praseodymium oxide is currently valued at around \$54,000 to \$57,000 per tonne.

These high value rare earths are combined with iron and boron to create powerful permanent magnets, (also known as NdFeB or NIB magnets) used in computers, cell phones, wind turbines, hybrid cars, audio systems, medical equipment and electric motors.



Some examples of end uses of neodymium – praseodymium magnets

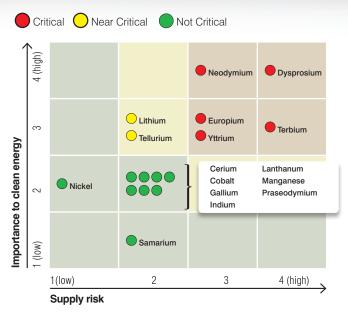


Figure 1: Medium term (2015 to 2025) Criticality Matrix, US DoE Critical Materials Strategy, December 2011.

Ngualla Project Rare Earth Products Relative Value Contributors



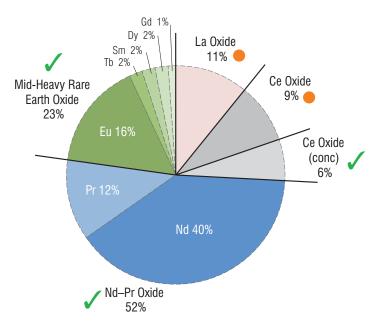


Figure 2: Relative value contributors by product type and constituent REO's, (refer Table 1). The majority (75%) of Ngualla's revenue is from the mid to heavy and neodymium – praseodymium high purity separated rare earth oxide products. Only the lanthanum and cerium high purity separated oxides now remain to be produced by the SX Pilot Plant.

The US Department of Energy, the European Union, the US Geological Survey and the British Geological Survey all identify neodymium as a 'Critical mineral' – a mineral with few or no satisfactory substitutes and vulnerable to high supply risks due to potential shortages resulting from constrained production in the face of high rates of growth in demand.

With China controlling world supply and imposing export restrictions, these strategic minerals (Figure 1) are predicted to be in undersupply in coming years and therefore support prices in the future.

The Solvent Extraction Pilot Plant at ANSTO Minerals has now successfully completed production of the following two high purity products:

- 1) Mid+Heavy rare earth oxide and
- 2) Neodymium Praseodymium rare earth oxide

These are important milestones as together these two products represent 75% of the value of future production from Ngualla (December 2012 Scoping Study). These high value, 'Critical' rare earths will underpin Ngualla's revenue streams, rather than the lower value 'light' rare earths of cerium and lanthanum.

About the Ngualla Rare Earth Project:

The Ngualla Rare Earth Project in Tanzania is a recent discovery and is 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 suitable to open cut mining with low strip ratios, favourable mineralogy amenable to a simple, low cost processing route and the lowest uranium and thorium levels of any major rare earth deposit in the world.

The favourable characteristics are reflected in the outcomes of the Scoping Study and preliminary economic assessment released on 3rd December 2012 (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.

Peak is moving forward with discussions, which are taking longer than initially expected, to finalise a formal agreement with a strategic partner that will see Ngualla fully funded through to production.

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.



Alastair Hunter Executive Chairman



The information in this report that relates to Metallurgical Test Work Results based on information compiled and / or reviewed by Gavin Beer who is a Member of The Australasian Institute of Mining and Metallurgy. Gavin Beer is a Consulting Metallurgist with sufficient experience relevant to the activity which he is undertaking to be recognized as competent to compile and report such information. Gavin Beer 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 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 mineralisation 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.