

Third high purity separated rare earth oxide product

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

The lanthanum oxide was produced at the Solvent Extraction Pilot Plant currently in operation at ANSTO Minerals (Australian Nuclear Science and Technology Organisation) from a bulk sample of mineralisation from the company's 100% owned Ngualla Rare Earth Project in Tanzania. The high purity lanthanum oxide follows the mid+heavy rare earth oxide and the neodymium-praseodymium rare earth oxide produced in May and July 2013 respectively.

Highlights:

- A high purity (>99%)* lanthanum oxide has been produced at the Solvent Extraction Pilot Plant at ANSTO Minerals.
- Lanthanum compounds are used in a number of high-end technological applications, including nickel-metal hydride batteries, high quality camera and optical lenses, fibre optics and catalysts.
- Ngualla is one of the very few rare earth development projects to successfully produce high purity separated products from its mineralisation and this is an important step in de-risking the project.
- The ability to produce separated high purity rare earth oxide adds significant value and allows access to wider markets for Ngualla's products.
- The final product, a high purity cerium oxide will be produced in September.
- Samples and analyses of the products are available to potential customers for assessment during discussions for off-take agreements.

* Assays by weight excluding water and volatiles (LOI)



Together with the mid+heavy and the neodymium-praseodymium rare earth oxides, Peak has now completed production of four of the five rare earth products using the chosen simple sulphuric acid leach process. These 4 products represent 91% of the expected value of future production.

Photo 1. High purity (>99%) lanthanum oxide produced from Ngualla mineralisation by the Solvent Extraction Pilot Plant at ANSTO Minerals.

Technical Report

The separated, high purity lanthanum oxide was produced by the Solvent Extraction (SX) Pilot Plant currently in operation at ANSTO Minerals test facility near Sydney. It is the third of four oxides to be produced from a 1.3 tonne bulk sample of weathered Bastnaesite Zone mineralisation from Ngualla using the simple sulphuric acid leach recovery process. This follows the medium+heavy rare earth oxide produced in May and the neodymium-praseodymium oxide produced in July.

The SX Pilot Plant work is progressing well with only a high purity cerium oxide remaining to be produced in September 2013. Samples of the first three products are available for assessment by potential off take customers.

Lanthanum Oxide

The high purity lanthanum oxide is a single separated rare earth product (Photo 1) with very low impurity levels, as detailed in Table 2. The purity of >99% REO meets the specification requirements for the catalyst, phosphor and ceramic markets.

Lanthanum compounds are used extensively in a number of high-end technological applications, including nickel-metal hydride batteries for hybrid cars, high quality camera and telescopic lenses, fibre optics, catalysts in oil refineries, satellite communications, ceramics and carbon lighting.

Lanthanum oxide represents 11% of the expected revenue stream and 28% of the product output from the envisaged Ngualla operation.

The production of high purity rare earth oxides from a representative bulk sample of mineralisation de-risks Ngualla and distinguishes it from other development projects.

Ngualla's value drivers show signs of recovery

As illustrated in Figure 1 and Table 1, the value drivers for Ngualla are the praseodymium–neodymium and mid+heavy high purity oxide products (Photo 2), which together contribute 85% of projected annual revenue. The lower priced cerium and lanthanum oxides are relative by-products at 15% of the total revenue.

Neodymium and praseodymium are important specialty metals used in the renewable energy, green and high technology industries. 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.

There is growing evidence of a turnaround in the rare earth sector; prices are rising for neodymium, praseodymium, dysprosium and gadolinium and are stabilising for the remaining rare earths. There are reports* that buyers are starting to re-enter the market on the back of depleted stocks leading to an increase in Chinese exports.

Neodymium – praseodymium oxide is currently valued at around \$73,000 to \$77,000* per tonne and has seen a 35% increase since prices hit their lowest point for two years in July this year.

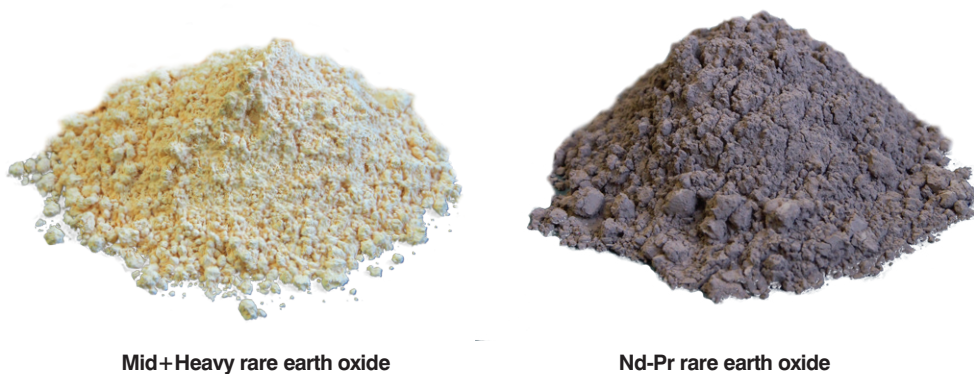


Photo 2. The two other high purity rare earth products successfully completed at the ANSTO Minerals Solvent Extraction Plant: a mid+heavy rare earth oxide and a neodymium-praseodymium oxide.

* Source Metals Pages and InvestorIntel.

Table 1: Product and relative value splits, based on in-ground rare earth distribution and the Scoping Study 10,000tpa production profile.

Product	Status of production of high purity REO products	Total Equivalent REO Production t/y*	Relative Value Contribution
Nd-Pr Oxide	✓ Completed	2,216	68%
Mid+Heavy Oxide	✓ Completed	300	17%
La Oxide	✓ Completed	2,875	7%
Ce Oxide	In progress (September 2013)	1,256	3%
Ce Oxide (concentrate)*	✓ Completed	3,762	5%
Total		10,409	100%

* Rare earth distribution derived from April 2013 Mineral Resource estimate for Bastnaesite Zone weathered mineralisation +3% REO. #Concentrate discounted to 53% of oxide price. Rare earth prices for relative value from Metal Pages, 22nd August 2013.

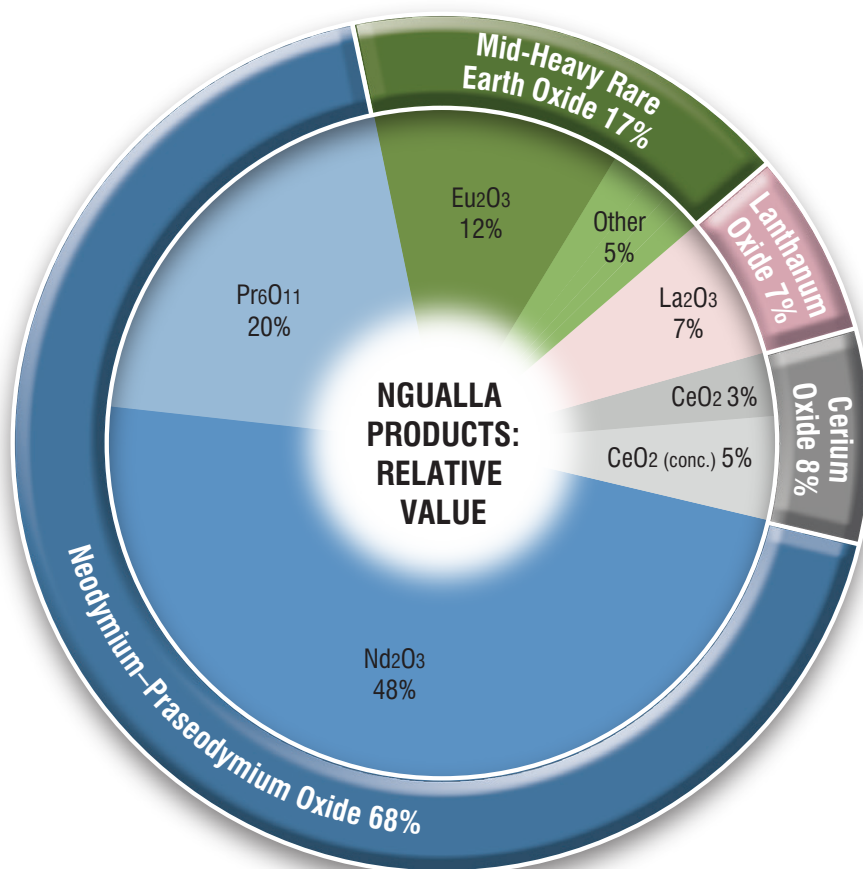


Figure 1: Relative value contributors by product type and constituent REO's, (refer Table 1). The majority (85%) of Ngualla's revenue is from the mid to heavy and neodymium – praseodymium high purity separated rare earth oxide products. Only the cerium high purity separated oxide now remains to be produced by the SX Pilot Plant.

About the Ngualla Rare Earth Project:

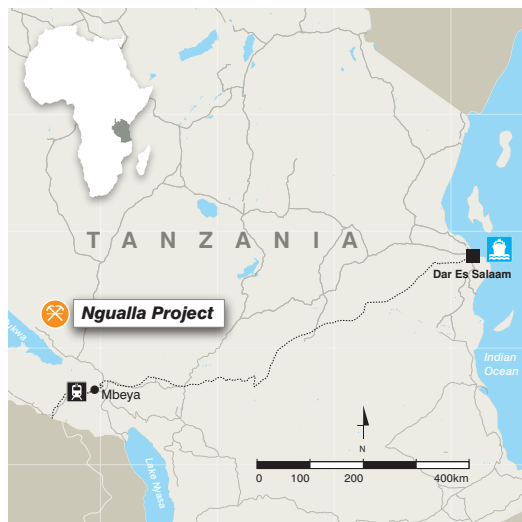
The Ngualla Rare Earth Project in Tanzania is a recent discovery and the highest grade of the large undeveloped rare earth deposits.

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.



A handwritten signature in black ink, appearing to read 'Alastair Hunter'.

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.

Appendix:

Table 2. Analysis of lanthanum rare earth oxide product.

RARE EARTHS			OTHER METALS		
Element	Oxide	Oxide Calculated wt %	Element	Oxide	Calculated wt %
La	La ₂ O ₃	99.1	Al	Al ₂ O ₃	0.009
Ce	CeO ₂	0.18	As	As ₂ O ₃	0.006
Pr	Pr ₆ O ₁₁	0.0037	Ba	BaO	0.005
Nd	Nd ₂ O ₃	0.0063	Ca	CaO	0.17
Sm	Sm ₂ O ₃	0.0006	Co	CoO	0.007
Eu	Eu ₂ O ₃	0.0005	Cr	Cr ₂ O ₃	0.007
Gd	Gd ₂ O ₃	0.0005	Cu	CuO	0.006
Tb	Tb ₄ O ₇	0.0005	Fe	Fe ₂ O ₃	0.007
Dy	Dy ₂ O ₃	0.0005	Hf	HfO ₂	0.006
Ho	Ho ₂ O ₃	0.0005	Mg	MgO	0.008
Er	Er ₂ O ₃	0.0005	Mn	MnO ₂	0.008
Tm	Tm ₂ O ₃	0.0005	Mo	MoO ₂	0.006
Yb	Yb ₂ O ₃	0.0005	Na	Na ₂ O	0.006
Lu	Lu ₂ O ₃	0.0005	Ni	NiO	0.006
Y	Y ₂ O ₃	0.0006	P	P ₂ O ₅	0.01
			Pb	PbO	0.005
			S	SO ₄	0.047
			Se	SeO ₂	0.007
			Si	SiO ₂	0.020
			Ta	Ta ₂ O ₅	0.029
			Th	ThO ₂	0.0005
			U	U ₃ O ₈	0.0006
			Zn	ZnO	0.006
			Zr	ZrO ₂	0.006
Total REO %		99.3	Total Other Metals		0.17
% LOI		0.57			
Other Metals		0.17			
Total REO %		100			

Note: Assays are normalised to account for water and volatiles (LOI) which are not reported in the above table. Italics represent < values which are below detection limit. The totals above may not sum precisely due to rounding.