

## ASX Release

10 November 2011

# Southern Crown Resources Limited

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### Directors / Officers:

Robin "Jock" Harmer Rhod Grivas Mark Papendieck David Reeves Adrian Hill

### **Issued Shares and Options:**

Shares: 35 million Listed options: 10 million Unlisted options: 6 million

ASX Codes: SWR, SWRO

### **Resource Estimate on Xiluvo REE Project**

The Directors of Southern Crown Resources Limited ("Southern Crown" or "the Company") are pleased to announce the successful completion of a JORC compliant resource estimate on the soil target at its Xiluvo Rare Earth Element (REE) Project in Mozambique.

An indicated category mineral resource of <u>1.1 million tonnes at 2.05%</u> total rare earth oxides (TREO) has been estimated at a cut-off grade of 1% TREO.

The resource contains a good balance between light and heavy rare earth elements containing an above average quantity of the five critical rare earth oxides of neodymium, europium, terbium, dysprosium and yttrium (CREO) – projected to be in critical undersupply for the next 5-10 years.

Southern Crown's Managing Director, Dr Jock Harmer commented: "Generation of an indicated JORC resource at our Xiluvo REE Project marks an important milestone for Southern Crown. Being unconsolidated and lying on surface, the soils represent a rare earth deposit that is expected to be easy and cheap to mine, positioned alongside excellent rail and paved road access to the port of Beira only 110 kilometres away.

Achieving an indicated category resource on one of our projects within 6 months of acquisition is a fantastic achievement.

We will now look to embark on a comprehensive program of metallurgical tests to identify an optimum process to concentrate the REE from the soils."



### The Xiluvo REE Project

Southern Crown's Xiluvo REE Project covers part of the Monte Xiluvo carbonatite complex situated in the Sofala Province of Mozambique 110 kms inland of the major Mozambique port of Beira. Access to Xiluvo is excellent – the complex is bound on the northern side by the paved EN6 national road and on the west and south by the national rail routes linking Zimbabwe (via Mutare) and Beira.

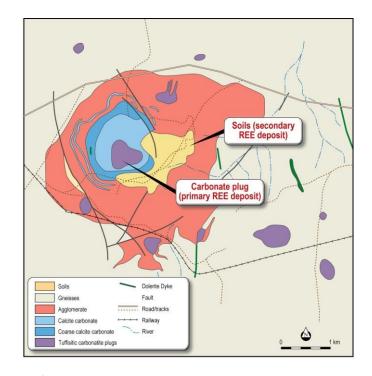


Figure 1: Geological sketch map of the Monte Xiluvo carbonatite complex showing the location of the REE enriched soils.

The company has a Joint Venture Agreement with Promac Lda, a Mozambican quarrying and construction company that holds a mining license over the area and operates a quarrying operation exploiting the calcitic carbonatite for use as construction aggregate. According to the Agreement Southern Crown can earn up to 85% ownership of the REE assets by spending US\$1,000,000 developing the project. The soils have accumulated in an internal basin within the central topographic bowl of the eroded Monte Xiluvo volcano structure and are derived from material shed predominantly from carbonatite plugs in the centre of the structure (Figure 1).

The soil deposit was systematically drilled at 50mx50m spacing in July 2011. The drilling was undertaken by specialists in the sampling of unconsolidated deposits and a powered sheathed auger technique was used to drill and sample more than 220 holes. Samples were assayed by Intertek Genalysis, Perth and a JORC-compliant resource estimate has been completed.

Grade and tonnage estimates were made for grade cut-offs of 0%, 1%, 2% and 3% total rare earth oxides (TREO) with the results summarised in Table 1.



CUTOFF (% TREO)	TONNES	% TREO	% P <sub>2</sub> O <sub>5</sub>
3	23,141	3.08	5.18
2	618,732	2.48	4.85
1	1,111,099	2.05	4.36
0	1,412,313	1.73	3.76

Table 1: Grade/tonnage mineral resource estimates for the Xiluvo soils

Category: Indicated

The concentrations of the individual rare earth elements in the resource estimate at a 1% TREO cut-off are presented in Table 2.

′		La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Но	Er	Tm	Yb	Lu	Υ
ı	ppm	3783	8042	848	2960	430	117	300	35.9	153	24.2	56.6	5.9	31.9	3.8	651
1 1	oxide %	0.44	0.94	0.10	0.35	0.05	0.01	0.03	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.08
)	proportion	22%	46%	4.9%	17%	2.4%	0.7%	1.7%	0.2%	0.9%	0.14%	0.32%	0.03%	0.2%	0.02%	4.0%

Table 2: REE distribution in resource at a 1% TREO grade cut-off

In assessing and comparing REE deposits, the relative contributions of the different rare earth elements need to be considered along with the grade of the total REE: individual rare earth oxides trade at vastly different prices and the relative prices of the rare earths have varied significantly over the last 12-18 months. Several assessments of the supply/demand balance over the next 5-15 years agree that the supply of five of the REE – neodymium, europium, terbium, dysprosium and yttrium – is likely to lag demand. As a consequence, these have been termed the "Critical Rare Earths".

the amount of these critical rare earth oxides (CREO), expressed as kilograms of CREO per tonne of ore, provides a useful metric for comparison of deposits.

In a recent independent review by Gareth Hatch<sup>1</sup>, 20 advanced REE projects having JORC compliant or NI43-101 compliant resource or reserve estimates were compared on the basis of their CREO contents. The CREO content of the Xiluvo soils is compared to these "Top 20" REE projects in Figure 2. On the basis of its CREO content, Xiluvo ranks eighth of these projects.

<sup>&</sup>lt;sup>1</sup> Hatch (August 2011: "Critical Rare Earths: Global Supply & Demand Projections and the Leading Contenders for New Sources of Supply"; available from www.techmetalsresearch.com)



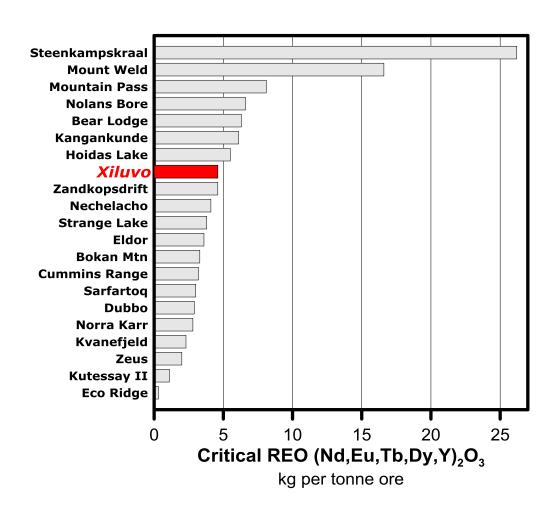


Figure 2: Comparison of CREO in current REE projects

The unconsolidated Xiluvo soils offer the prospect of a relatively easily and cheaply exploitable source of rare earths, with no or limited stripping of overburden, no blasting or crushing, and excellent road and rail access to the port of Beira, Mozambique. Southern Crown will now commence metallurgical testwork on a representative sample of the resource to allow a scoping study to be undertaken. Southern Crown is actively seeking a partner for this stage to assist in the development of the project.



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### About Southern Crown Resources Limited

Southern Crown Resources Limited, listed on the ASX on 2<sup>nd</sup> December 2010 and on 5<sup>th</sup> May 2011 completed the acquisition of Rare Earth International.

Southern Crown immediately commenced exploring the Nkombwa and Xiluvo projects located in Zambia and Mozambique respectively. Both Nkombwa and Xiluvo are large rare earth enriched carbonatite complexes. Historical core drilling at Nkombwa has identified intercepts of mineralised carbonatite returning high grades between 5-8% TREO. Surface sampling programs over the last 12 months have returned several outcrop samples having TREO in excess of 10% with the most enriched sample having 22.09% TREO.

The Board of Directors has a strong mix of technical, financial and corporate skills to successfully explore the Company's existing projects as well as source and develop further acquisition opportunities globally.

The Company continues to evaluate additional mineral projects considered likely to add value to shareholders.

### **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on information provided by Dr R.E. "Jock" Harmer, PrSciNat, FGSSA an employee of Southern Crown Resources Limited. Dr Harmer has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity they are 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. The information in this report that relates to Mineral Resources has been compiled by Mr Lynn Widenbar. Mr Widenbar, who is a Member of the Australasian Institute of Mining and Metallurgy, is a full time employee of Widenbar and Associates and produced the Mineral Resource Estimate based on data and geological information supplied by Southern Crown Resources Ltd. Mr Widenbar has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Widenbar consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.