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#### **ASX/Media Announcement**

Soil sampling results define strong, 7km+ REE anomaly at Machinga, Malawi

# **Highlights**

- Orientation soil sampling results define strong 7km+ REE-Nb-Ta anomaly
- Potential for very large mineralised system demonstrated
- Multiple new target areas generated
- Anomalous areas correspond well to mapped margin of the Malosa Pluton
- Trenching program progressing well with ~500m completed so far and first results due in 4-6 weeks
- Initial ~1,500m RC drill program planned for Q2 2010

### **Summary**

Globe Metals & Mining is pleased to announce initial soil sampling results from the Machinga Rare Earth Project in southern Malawi.

In November 2009, the Company entered into a joint venture agreement to acquire an 80% interest in the Machinga Rare Earth Project from Resource Star Limited (RSL), an Australian company. Globe is the manager of the project.

The soil sampling program presented here was completed by RSL in November 2009, with those laboratory results having just been received by RSL and forwarded to Globe.

This orientation soil sampling program appears to indicate that almost the entire 7km+ strike length of the radiometric anomaly is highly anomalous in REE-Nb-Ta. The majority of the highly anomalous results occur on and just outboard of, the mapped eastern contact of the Malosa Pluton. The results demonstrate the potential for a much larger mineralised system than originally envisioned by the Company.

Globe's Executive Chairman, Mr Mark Sumich, said "The Machinga Rare Earth Project continues to impress with these early exploration results. The REE-Nb-Ta soil sampling results indicate that this could be a much more extensive mineralised system than originally thought."



### **Background**

Previous rock-chip sampling programs conducted by Resource Star Limited over the northern part of the Machinga Main Anomaly include;

- Peak result of 2.64% TREO (total rare earth oxides)
- Peak of 29,900ppm Nb<sub>2</sub>O<sub>5</sub> and 1,673ppm Ta<sub>2</sub>O<sub>5</sub>
- Very high ratio of heavy rare earth elements averaging 25-28% HREO:TREO
- Very high ratio of the high value rare earth element dysprosium avg. 2.5-2.7% Dy<sub>2</sub>O<sub>3</sub>:TREO
- $_{\odot}$  Average of top 25% of 126 rock chip samples 1.1% TREO, 8,400ppm Nb<sub>2</sub>O<sub>5</sub> & 472ppm Ta<sub>2</sub>O<sub>5</sub>

The Machinga REE mineralisation has a higher heavy rare earth ratio (HREO) at 25-28% than most of the major operating mines and deposits worldwide. For example, Avalon Rare Metals' Nechalacho Deposit in Canada has a HREO ratio of 20%, Kvanefjeld in Greenland 14%, Mt Weld 3% and Bayan Obo 2%.

Machinga also has a very high ratio of the high value rare earth element dysprosium (Dy), at 2.5-2.7% Dy<sub>2</sub>O<sub>3</sub>:TREO. Most deposits worldwide have dysprosium oxide ratios between 0.1 and 0.5%.

## Soil Sampling Results

RSL completed an orientation soil sampling program over the Machinga radiometric anomaly in November 2009 (Figure 1). A total of 136 samples were taken with results summarised below;

- Major anomalies identified at every point the soil line crosses the eastern contact of the Malosa Pluton
- Four major anomaly clusters identified details in Table 1 and Figure 1
- Peak results: 2,727ppm TREO, 5,567ppm Nb<sub>2</sub>O<sub>5</sub> and 327ppm Ta<sub>2</sub>O<sub>5</sub>
- $_{\odot}$  Average of all 4 major anomaly clusters (26 of 136 soil samples): 1,864ppm TREO, 1,912ppm Nb<sub>2</sub>O<sub>5</sub> and 126ppm Ta<sub>2</sub>O<sub>5</sub>
- Average of all 136 samples: 1,145ppm TREO, 712ppm Nb<sub>2</sub>O<sub>5</sub> and 43ppm Ta<sub>2</sub>O<sub>5</sub>

Table 1. Summary of significant Machinga orientation soil sampling results.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
No. of samples	5	5	2	14
Approx. true width	200m	200m	100m?	500m
Peak TREO (ppm)	2,525	2,727	1,791	2,327
Avg. TREO (ppm)	1,627	2,439	1,689	1,769
Peak Nb <sub>2</sub> O <sub>5</sub> (ppm)	5,567	1,239	1,796	3,420
Avg. $Nb_2O_5$ (ppm)	2,416	1,111	1,721	2,046
Peak Ta <sub>2</sub> O <sub>5</sub> (ppm)	327	78	111	244
Avg. Ta <sub>2</sub> O <sub>5</sub> (ppm)	148	73	108	139

<sup>\*</sup> TREO = Total Rare Earth Oxides (La through Lu + Y), HREO = more valuable Heavy Rare Earth Oxides (Eu through Lu + Y)

Cluster 1 represents the area where the majority of RSL's earlier work has been undertaken. This is an area with significant outcrop and highly mineralised rock chip samples. The area in and around Cluster 1 is the main focus of the current trenching program.

Cluster 2 is the highest, consistent rare earth anomaly and occurs in an area that was not sampled in the previous rock-chip sampling programs. This area has 5 immediately adjacent samples on a single line in excess of 2,000ppm TREO, averaging 2,439ppm TREO, and representing an approximate true width of 200m. This area represents a new, prime exploration target.

Cluster 3 is represented by 2 samples in the southern part of the part of the soil orientation survey. This shows anomalism on the southern, fault displaced contact of the Malosa Pluton.

Cluster 4 shows approximately 500m true width of strong soil anomalism. The soil anomaly is open to south of Cluster 4.

Future soil sampling will in addition to covering the whole of the radiometric response, in particular target the area south of Cluster 4 with the aim of extending the overall strike length of known anomalism.

# **Geological Model**

-Of personal use only

The Company, with its JV partner RSL, has developed a working geological model by reviewing and compiling all historical and recent geological and exploration data. Features of the model are;

- The highly differentiated eastern contact of the alkalic granitoid Malosa Pluton shows strong and consistent regional REE-Nb-Ta soil anomalism
- Strongly mineralised pegmatites are hosted in country rock gneisses in the hanging wall area immediately east of the main contact zone
- The eastern contact of the Malosa Pluton appears to dip moderately to the ENE whilst mineralised pegmatites have steeper dips and multiple strike orientations
- The system appears to have some geological similarities to Avalon Rare Metals' Nechalacho Deposit in Canada

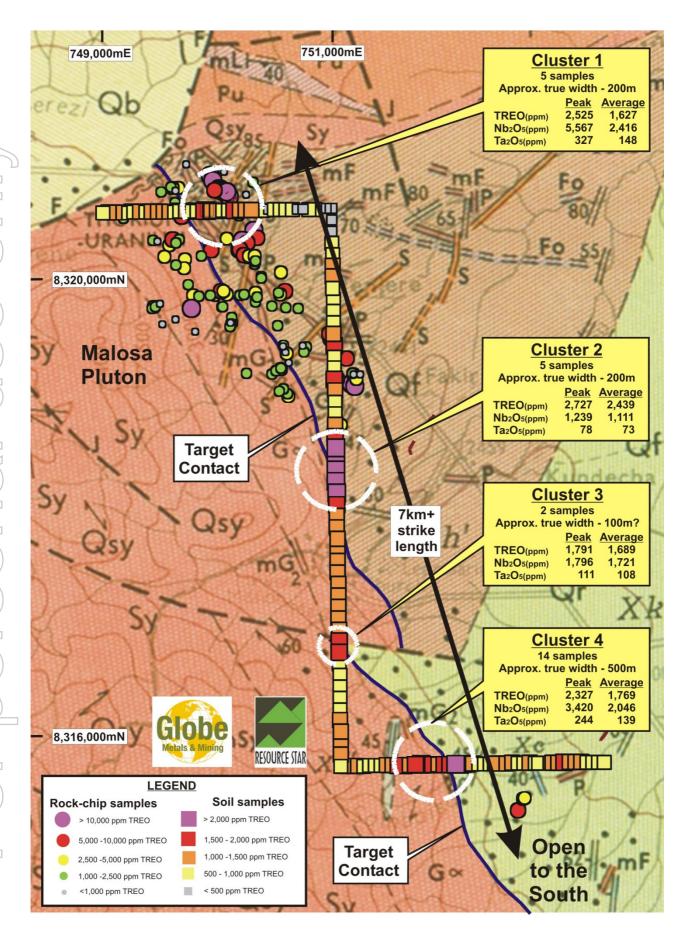


Figure 1. Machinga REE-Nb-Ta Project – orientation soil sampling results over geology.

#### **About Resource Star Limited**

Resource Star Limited is a publicly-listed Australian company (ASX:RSL) that has interests in uranium exploration assets in the Northern Territory, in Western Australia and in Malawi. These interests are held through Resource Star Limited and through two wholly-owned subsidiaries, Orion Exploration Pty Ltd and Eastbourne Exploration Pty Ltd.

The Company has recently closed a Share Offer of up to 25,000,000 fully paid ordinary shares, with the assistance of Allegra Capital. The Offer was made pursuant to a prospectus lodged with the ASX, which will assist with the Company's compliance with Chapters 1 and 2 of the ASX Listing Rules in order to re-list, which is expected shortly.

### **About Globe Metals & Mining**

Globe Metals & Mining is an African-focused resource company. Its main focus is the multi-commodity (niobium, uranium, tantalum and zircon) Kanyika Niobium Project in central Malawi. A Bankable Feasibility Study was commissioned in August 2009 and production is planned to commence in 2012 at a rate of 3,000tpa niobium metal, principally in the form of ferro-niobium. Mine life will be in excess of 20 years.

In August 2009 Globe announced that Thuthuka Group Limited (Thuthuka), a South African world class multi-disciplinary engineering company, entered into a formal joint venture agreement to invest US\$10.6 million into the Kanyika Niobium Project to earn a 25% interest in the Project (as opposed to equity in the ASX-listed parent company). The US\$10.6 million investment by Thuthuka will fund ~85% of the estimated cost of the bankable feasibility study into the Project.

Globe has a number of other projects in Malawi and Mozambique, which it manages from its regional exploration office in Lilongwe, the capital of Malawi. The Company has been listed on the ASX since December 2005 (Code: GBE), and has its corporate head office in Perth, Australia.

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Competent Person: The contents of this report relating to geology and exploration results are based on information compiled by Dr. Julian Stephens, Member of the Australian Institute of Geoscientists and Executive Director - Exploration for Globe Metals & Mining. Dr Stephens has sufficient experience related to the activity being undertaken 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 and consents to the inclusion in this report of the matters compiled by him in the form and context in which they appear