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ASX/Media Announcement

## Rock-Chip Sampling Identifies New Zones of Heavy Rare Earth Mineralisation at Mount Muambe, Mozambique

### Highlights

- A limited rock-chip sampling program has identified numerous new zones of HREO-enriched mineralization
- Many of the samples show high HREO grades and ratios of the sought after elements dysprosium ( $Dy_2O_3$ ) and europium ( $Eu_2O_3$ )
- Results include:
  - A peak value of 1.22% TREO; average 0.73%
  - A peak value of 426ppm  $Dy_2O_3$ ; average 203ppm
  - A peak value of 198ppm  $Eu_2O_3$ ; average 130ppm
  - A peak HREO:TREO ratio of 64%; average 29%
- Recently completed ground radiometric survey reveals numerous significant, new REO targets
- Europium and dysprosium prices have risen astronomically over the last 5 years to \$640 and \$305 per kg respectively
- Significant REO exploration program planned for Mount Muambe in 2011
- Fluorite drilling results due in early February

### Summary

Globe Metals & Mining is pleased to announce that a limited rock-chip sampling program has identified numerous additional areas of heavy rare earth mineralisation at the Mount Muambe Fluorite Project in Tete Province, Mozambique.

The Company's geological team was able to obtain a limited number of rock-chip samples near the main access track built for the fluorite drilling program, before the onset of the wet season forced the cessation of field work.

Three separate, additional zones of HREO-enriched mineralisation were identified. Mineralisation was observed to correlate with radiometric targets associated with fenite and carbonatite agglomerate rock units. Unfortunately, the targets were identified late in the season and could not be adequately sampled before the rains began. As a result the largest and highest tenor radiometric targets were not sampled. These areas will be the focus for much of the 2011 REO exploration program at Mount Muambe.

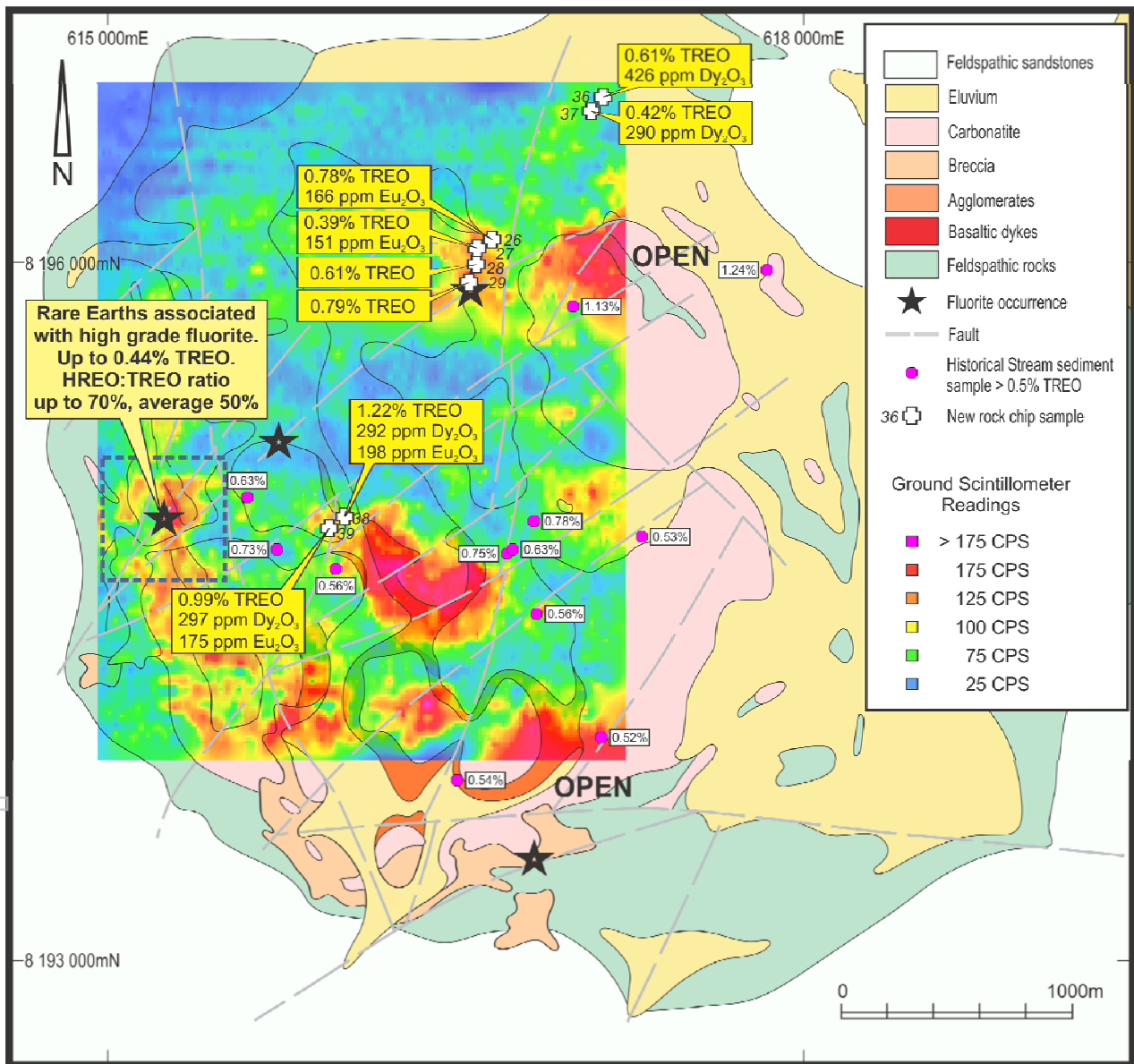


Importantly, however, the rock chip samples that were taken contain high grades and ratios of the much sought after and highly priced heavy rare earth elements europium and dysprosium, in addition to showing overall high grades and ratios of HREO:TREO.

Significant REO grades with impressive HREO:TREO ratios have now been shown to occur extensively in historical stream sediment samples, the fluorite rock-chip and trench samples (ASX announcement 28 September 2010), and now in the fenite and carbonatite agglomerate rock units reported in this release.

The enrichment of HREO at Mount Muambe is geologically unusual, as carbonatites are normally known to contain mainly LREO-dominant mineralisation. The Company is excited at the now well demonstrated REO potential at Mount Muambe and intends to conduct a substantial exploration program, commencing upon cessation of the wet season in 2011.

**Figure 1. Geology, ground radiometrics and REO rock-chip results at Mount Muambe**



## Rare Earth Results

A total of eight rock chip samples (Table 1) identified three different zones of HREO-enriched mineralisation, in addition to previous zones of HREO-enriched mineralisation in fluorite rock chips and REO anomalism in historical stream sediment samples.

Sample points X2036 and X2037 are located at the far northern edge of the crater and occur in highly altered fenite (i.e. altered Karoo sandstone) with strong iron staining and are associated with a very weak radiometric anomaly. These samples showed the highest values of dysprosium at 426ppm and 290ppm Dy<sub>2</sub>O<sub>3</sub> and very high HREO:TREO ratios at 64%.

Sample points X2026 through X2029 are located on the northern margin of the carbonatite unit along the Karoo sandstone contact. These samples are also characterised by highly altered fenite with strong iron staining and occur in association with a moderate radiometric anomaly. High europium values including 166ppm and 151ppm Eu<sub>2</sub>O<sub>3</sub> occur in these samples as well as a moderately high HREO:TREO ratio averaging 14% but reaching as high as 19% in one sample.

Sample points X2038 and X2039 are located just south-west of the centre of the carbonatite crater and just to the east of the main fluorite zone. The samples were taken at the margins of a discrete and high tenor radiometric anomaly. The rocks are altered agglomerate and represent a different setting to the other two recently discovered zones of HREO-enriched mineralisation. The two samples showed consistently high dysprosium at 292ppm and 297ppm Dy<sub>2</sub>O<sub>3</sub> and europium at 198ppm and 175ppm Eu<sub>2</sub>O<sub>3</sub>.

**Table 1. New REO rock-chip sample results – Mount Muambe**

Sample ID	La <sub>2</sub> O <sub>3</sub> (ppm)	CeO <sub>2</sub> (ppm)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Eu <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>2</sub> O <sub>3</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	Er <sub>2</sub> O <sub>3</sub> (ppm)	Yb <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)	TREO (ppm)	HREO (ppm)	HREO:TREO
X2026	623	2,215	2,407	<b>166</b>	33	151	44	17	663	7,794	1,458	19%
X2027	300	782	1,395	<b>151</b>	18	51	9	5	145	3,936	676	17%
X2028	620	1,825	1,933	109	19	75	24	19	384	6,078	868	14%
X2029	420	2,649	3,211	84	12	46	16	10	222	7,883	562	7%
X2036	522	882	468	101	75	<b>426</b>	194	145	2,445	6,088	3,914	<b>64%</b>
X2037	344	628	324	58	45	<b>290</b>	153	130	1,705	4,206	2,712	<b>64%</b>
X2038	711	3,621	3,718	<b>198</b>	59	<b>292</b>	102	50	1,465	<b>12,249</b>	2,734	22%
X2039	913	3,105	2,307	<b>175</b>	60	<b>297</b>	102	55	1,303	<b>9,907</b>	2,536	26%

Only selected rare earth elements have been presented in this table due to space constraints, and therefore the TREO column will not be exactly equal with the sum of the individual REO results presented. TREO = Total Rare Earth Oxides (La through Lu + Y); HREO = more valuable Heavy Rare Earth Oxides (Eu through Lu + Y).

## Radiometric Results

The Company completed a ground radiometric survey over part of the carbonatite complex covering approximately 2.5km by 3.0km, which is about one third of the area considered prospective for REO mineralisation. The results of this survey show three major radiometric anomalies, with the largest measuring 600m x 300m and the other two remaining open by virtue of occurring at the edge of the surveyed area. Numerous other, lower tenor radiometric anomalies were also identified.

The three major radiometric anomalies identified appear to be associated with carbonatite-fenite contacts or carbonatite-agglomerate contacts.

It is now apparent that the rock-chip sampling has not sampled any of the three major radiometric anomalies. The Company considers these un-sampled major radiometric anomalies to represent prime targets for significant HREO-enriched mineralisation.

## Concluding Comments

- The carbonatite complex at Mount Muambe appears to be unusually enriched in heavy rare earths (HREO).
- The complex shows significant grades of the high value and increasingly important HREOs dysprosium and europium.
- Only approximately one third of the geologically prospective areas has been covered by the ground radiometric grid, and only very limited reconnaissance rock chip sampling has been undertaken to date.
- There is obvious correlation between the radiometric anomalies and the REO mineralisation sampled to date.
- None of the three major radiometric anomalies have been sampled.
- The Company now considers Mount Muambe to be highly prospective for REOs with significant potential for numerous zones of HREO-enriched mineralisation.
- A major exploration program for REOs and fluorite is planned for 2011 and will include completion of the radiometric grid over the remaining two thirds of the complex, systematic sampling and mapping, trenching and significant drilling.

## Tenure

The Company recently reported that its Mozambican joint venture partner, Bala Ussokoti Lda (BUL) has been granted an extension to the Mount Muambe Exploration Licence 570L until 28<sup>th</sup> November 2013. It should also be noted that BUL currently does not hold REO rights for 570L. However, 570L is an exclusive Exploration Licence (i.e. no overlapping tenements are permitted) and therefore these rights should be awarded to BUL and become subject to the joint venture upon application to the Minister for Mines in Mozambique. The Company can report that in conjunction with BUL it has begun the application process to add REO rights to licence 570L.

## 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 2013 at a rate of 3,000tpa niobium metal, principally in the form of ferro-niobium.

Globe also has a number of other projects at an earlier stage of development: it is earning up to an 80% interest in the Machinga Rare Earth Project in southern Malawi from Resource Star Limited (ASX: RSL), and the Company can earn up to a 90% interest in the Mount Muambe Fluorite-HREO Project in Mozambique. Initial drill programs on both projects were undertaken in 2010.

Globe manages its projects from its regional exploration office in Lilongwe, the capital of Malawi. The Company has been listed on the ASX since December 2005 (ASX: 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 Non-Executive Director 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.*