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ASX/Media Announcement

Heavy Rare Earth Potential Identified at Mount Muambe, Mozambique

Highlights

- **Re-assaying of fluorite rock-chip and stream sediment results show highly anomalous REOs, including areas of HREO**
- **54 historical stream sediment samples show:**
  - **A peak value of >1.2% TREO**
  - **Top 25% of samples have a mean value of >0.7% TREO**
  - **Only Ce, La & Nd analysed; no analysis for any HREOs**
- **Re-assaying of Globe's previous fluorite rock-chip samples show:**
  - **A peak value of 0.44% TREO**
  - **A peak result of 168ppm of the high value HREO dysprosium**
  - **Very high HREO:TREO ratio: peak 70%, average 50%**
  - **Potential for significant HREO by-product from any fluorite production**

Summary

Globe Metals & Mining is pleased to announce that it has identified significant potential for rare earth mineralisation at the Mount Muambe Fluorite Project in Tete Province, Mozambique.

The Company's experienced geological team recently conducted a review of all of the historical exploration data on the project with a view to assessing then potential for rare earth mineralisation in the Mount Muambe carbonatite. In particular, historical stream sediment sampling results from exploration during the late nineties showed highly anomalous results for the light rare earths Ce, La and Nd. However, the heavy rare earth elements were not analysed in this program.

The existence of rare earths in the stream sediment samples prompted Globe's geological team to request the re-analysis of high-grade fluorite rock-chip samples taken for due diligence purposes in late 2009. Surprisingly, the fluorite samples showed highly anomalous heavy rare earths, with TREO up to 0.44% and HREO:TREO ratios averaging 50% with a peak of 70%. Of particular note is the level of dysprosium, a much sought after, high value heavy rare earth, with results ranging up to 168ppm. Selected REO results from the fluorite samples are provided in Table 2.

Globe's Executive Chairman, Mr Mark Sumich, said "We have been pleasantly surprised at the recently identified potential for heavy rare earths within the high-grade fluorite zone at Mount Muambe, in addition to the identification of other areas for potential rare earth mineralisation. The Company will conduct additional field-work this year aimed at further defining these new rare earth targets. We are also looking forward to beginning our maiden drill program on the high-grade fluorite prospect at Mount Muambe in the coming weeks."

Rare Earth Results

A program of 54 stream sediment samples collected in 1999 showed a peak result of >1.2% TREO, with the average value of the top 25% of samples being >0.7%. This program only analysed the 3 common, light rare earths, being Ce, La and Nd. None of the heavier and more valuable rare earth elements were analysed, and therefore the TREO results are reported as "greater than" (>).

The stream sediment sample results show the highest results appear to be draining from a large area of carbonatite outcrop in the north-east of the carbonatite body. Another area of high REO stream sediment anomalism has dimensions of about 1.5x1.5km and occurs in the southern central part of the carbonatite body around numerous large outcrops. Selected stream sediment REO results are listed in Table 1 below.

Table 2 below shows selected REO results from the fluorite rock-chip samples that were recently re-analysed after recognition of Mount Muambe's REO potential. These fluorite samples show highly anomalous heavy rare earths, with TREO up to 0.44% and HREO:TREO ratios averaging 50% with a peak of 70%. Importantly, the high value heavy rare earth dysprosium shows values ranging up to 168ppm.

Table 1: Top 25% of REO stream sediment results from historical sampling

Sample ID	E	N	La_2O_3 (ppm)	CeO_2 (ppm)	Nd_2O_3 (ppm)	TREO (ppm)	TREO %
24	**617845**	**8195953**	**3,666**	**6,243**	**2,519**	**>12,427**	**>1.24%**
31	616510	8193756	1,462	3,081	891	>5,433	>0.54%
33	616745	8194746	1,690	3,381	1,179	>6,250	>0.62%
34	**616723**	**8194727**	**2,367**	**4,014**	**1,163**	**>7,544**	**>0.75%**
38	615982	8194661	1,695	2,815	1,096	>5,606	>0.56%
39	615728	8194746	2,181	3,765	1,369	>7,314	>0.73%
40	615602	8194974	1,824	3,128	1,409	>6,360	>0.64%
45	**617006**	**8195797**	**3,294**	**5,888**	**2,192**	**>11,374**	**>1.14%**
46	617302	8194800	1,501	2,775	1,049	>5,326	>0.53%
47	**616834**	**8194872**	**2,299**	**3,919**	**1,565**	**>7,783**	**>0.78%**
48	616850	8194471	1,476	3,234	871	>5,581	>0.56%
49	617128	8193936	1,579	2,664	1,000	>5,243	>0.52%

TREO totals are reported as "greater than" (>) because only three elements being La, Ce and Nd make up these totals. All other rare earth elements and Yttrium were not analysed in this historical work. Grid system is UTM: WGS 84 Zone 36S.

Table 2. Selected REO & fluorite rock-chip sample results – Mount Muambe Fluorite Prospect

Sample ID	La_2O_3 (ppm)	CeO_2 (ppm)	Nd_2O_3 (ppm)	Eu_2O_3 (ppm)	Tb_2O_3 (ppm)	Dy_2O_3 (ppm)	Er_2O_3 (ppm)	Yb_2O_3 (ppm)	Y_2O_3 (ppm)	TREO %	HREO: TREO	Fluorite
Z000006	220	416	187	25	18	136	108	102	1,625	0.31	70%	>58%
Z000011	625	1,214	418	22	12	75	41	37	526	0.33	25%	>55%
Z000014	**354**	**660**	**230**	**24**	**21**	**168**	**119**	**104**	**1,543**	**0.35**	**61%**	**>65%**
Z000015	**274**	**529**	**242**	**27**	**21**	**161**	**126**	**123**	**1,853**	**0.37**	**68%**	**>47%**
Z000016	247	463	198	23	19	145	119	115	1,455	0.30	67%	>53%
Z000019	333	711	323	28	20	141	92	78	1,132	0.32	52%	>32%
Z000020	310	635	257	20	15	111	86	90	1,264	0.30	56%	>60%
Z000024	**839**	**1,074**	**317**	**22**	**15**	**113**	**100**	**108**	**1,478**	**0.44**	**45%**	**>58%**

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). Fluorite results were previously reported on 1st December, 2009.

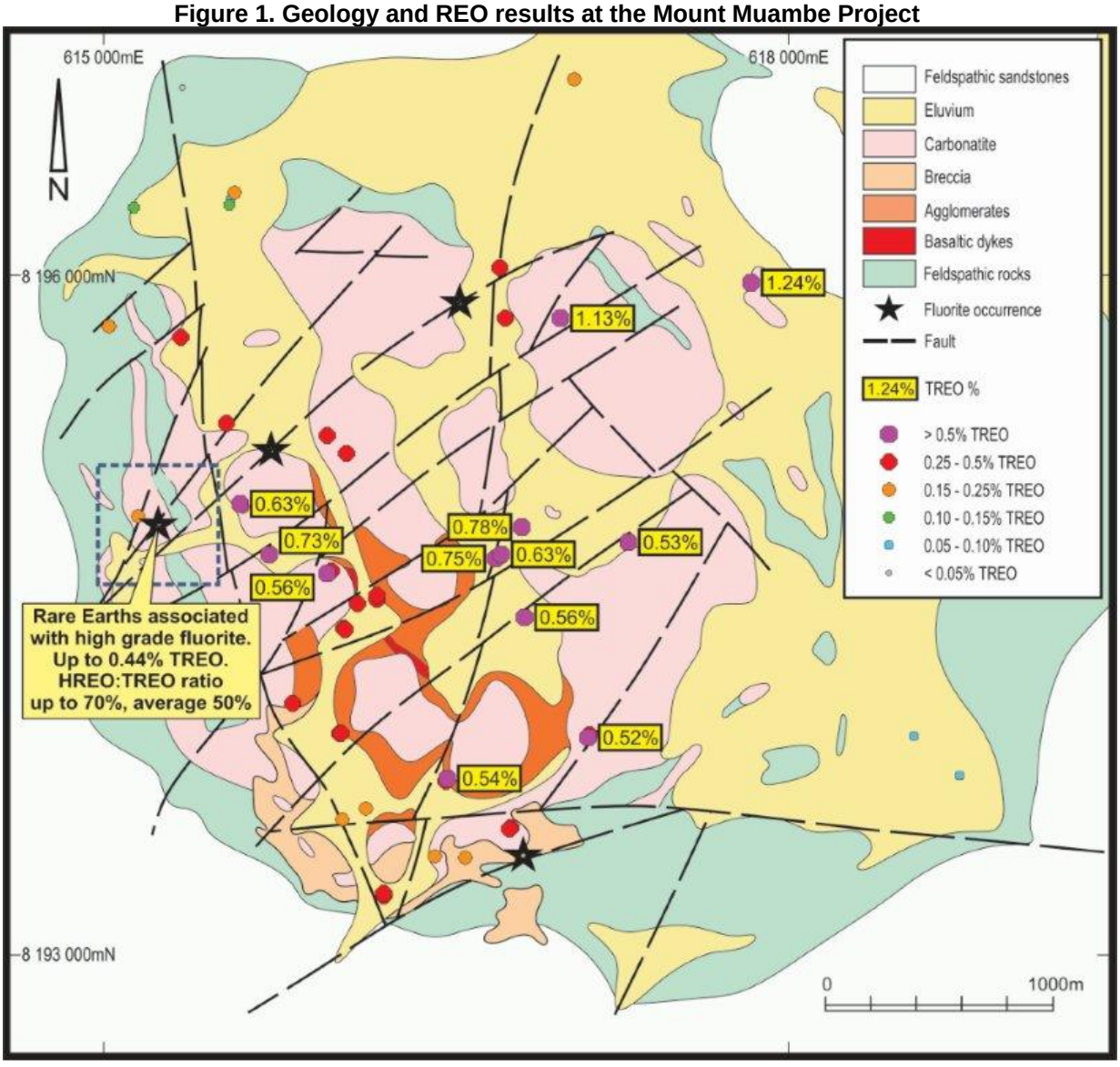
Planned Drilling

The Company has experienced significant delays due to rough terrain in its efforts to built a ~6km access road from the outside of the crater to the main fluorite prospect. However, we are pleased to report that a drivable access road has now been constructed, with only minor sheeting required in the worst areas for full completion to allow drill rig access. We expect this to be complete in approximately two to four weeks, with drilling to begin immediately thereafter. An initial 1,000m of RC drilling is planned to test the high-grade fluorite zone and the additional potential for co-existing heavy rare earths in that area.

Tenure

The Company is pleased to report that its Mozambican joint venture partner, Bala Ussokoti Lda (BUL) has been granted an extension to the Mount Muambe Exploration Licence 570L until 28th 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. It is not expected that the REO rights to this licence would be unreasonably withheld.

Figure 1. Geology and REO results at the Mount Muambe Project



About the Mount Muambe Fluorite Project

Geology

Mount Muambe is a circular, carbonatite body approximately 6km in diameter that was emplaced into Karoo sedimentary rocks and basalts.

Carbonatites are rare, carbonate-rich igneous rocks with only ~300 known occurrences world-wide. Carbonatites are often associated with rifting or other extensional stress regimes. For this reason, south-east African countries situated near the East African Rift are particularly well endowed with carbonatites. They most commonly occur as extrusions such as volcanoes, often forming typical ring or crater structures.

These unique rocks can be enriched with a host of different economic commodities ranging from copper to iron, titanium, niobium, thorium, uranium, rare earth elements (REE), barium, fluorine, phosphorous and other rare or incompatible elements.

The Mount Muambe intrusion itself has built a prominent ring-like structure where it has uplifted the resistant Karoo rocks, which now form steep hills. Inside the ring structure, within the carbonatite itself, the topography flattens considerably.

There are two main types of carbonatite present at Mount Muambe, in addition to altered country rocks called fenite:

- A fine grained, massive, banded calcium carbonatite which forms the bulk of the complex
- An agglomeritic carbonatite is found mainly in the southern parts of the crater and contains clasts of fine and course grained carbonatite, quartzite, basalt and fenite.

Fenite occurs at the margins of the intrusion where former country rock has been completely altered by fluids associated with the carbonatite. The fenite consists nearly entirely of alkali feldspar. The majority of fluorite mineralization occurs within fenite.

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 Project in Mozambique. Initial drill programs on both projects will be undertaken in mid-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.*