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ASX/Media Announcement

Updated JORC Resource Estimate – Kanyika Niobium Project

Highlights

- Total 60Mt: 5Mt Measured, 18Mt Indicated and 37Mt Inferred (previous estimate total was 13Mt Indicated + 42Mt Inferred)
- 77% increase in Measured + Indicated resource tonnage
- 5% increase in total contained metal
- First 10-12 years of proposed mining in Indicated & Measured categories
- Grade targeted for mining in first ~7 years of operation ~4,700ppm Nb₂O₅, an increase of 24% from last forecast (May 2009)

Summary

The major focus of the 2009 drilling program at Kanyika was to significantly increase the tonnage of Measured and Indicated resources. An additional requirement was to gain a better understanding of the distribution of the high grade material that will likely be mined in the earliest years of operation. The Company was highly successful on both accounts, with 23Mt of Measured + Indicated material being defined, which is 5Mt more than initially expected. Importantly, the increased drill density in many of the near surface areas of the resource allowed for definition of numerous high grade shoots, which will be targeted in the early years of mining.

Dr Julian Stephens, the Company's Exploration Director commented, "The 77% increase in Measured and Indicated resource tonnage has far exceeded our expectations and targets for the 2009 drilling program. The Kanyika Niobium Deposit continues to demonstrate its very robust nature"

Table 1: Mineral Resource Estimates for Kanyika (1,500 ppm Nb₂O₅ lower cut).

| Category | Million Tonnes | Nb ₂ O ₅ ppm | Ta ₂ O ₅ ppm | U ₃ O ₈ ppm | ZrSiO ₄ ppm |
|--------------|----------------|------------------------------------|------------------------------------|-----------------------------------|------------------------|
| Measured | 5 | 3,900 | 180 | 110 | 5,300 |
| Indicated | 18 | 3,100 | 140 | 80 | 4,800 |
| Inferred | 37 | 2,700 | 130 | 80 | 5,100 |
| Total | 60 | 2,900 | 140 | 90 | 5,000 |

Table 2: Mineral Resource Estimates for Kanyika (3,000 ppm Nb₂O₅ lower cut).

| Category | Million Tonnes | Nb ₂ O ₅ ppm | Ta ₂ O ₅ ppm | U ₃ O ₈ ppm | ZrSiO ₄ ppm |
|--------------|----------------|------------------------------------|------------------------------------|-----------------------------------|------------------------|
| Measured | 3 | 5,400 | 250 | 160 | 6,600 |
| Indicated | 7 | 4,400 | 200 | 110 | 5,900 |
| Inferred | 11 | 3,600 | 160 | 90 | 5,600 |
| Total | 21 | 4,100 | 180 | 110 | 5,800 |



Commentary

The resource area covers 2.3km of strike length, at its widest 300m width and has a maximum depth of 250m. A further ~1.5km of strike length of known, mineralised alkalic granitoid south of the resource area remains to be drilled out in future. In addition, high grade mineralisation at the extreme northern end of the deposit plunges to the north and remains open down dip and along strike (down plunge).

Mr Michael Job, of Quantitative Group, completed the resource estimate utilising Globe's internal 3D geological and mineralisation models

Important points to note on the new resource estimate:

1. **Increase in Measured and Indicated** – The total tonnage in Indicated and Measured categories has risen 77% to 23Mt. This is 5Mt more than the Company had targeted and again re-affirms the very robust and consistent nature of mineralisation at Kanyika.
2. **Increase in Total Contained Metal** – The total contained metal has risen to 174,000t for Nb_2O_5 , an increase of ~5% from the last resource estimate. Contained tantalum, uranium and zirconium have also increased by a similar amount.
3. **Increase in Grade of >3,000ppm Nb_2O_5 Component** – The Nb_2O_5 grade of the 21Mt portion of the resource (Measured + Indicated + Inferred) above a 3,000ppm cut off grade has now risen from 3,800ppm to 4,100ppm, an increase of ~8%. Importantly the total 10Mt of Measured and Indicated resources above a 3,000ppm cut off has a weighted average grade of 4,700ppm. This high-grade Measured and Indicated material is planned to be mined first and represents 7 years of potential mill feed.
4. **Definition of High-Grade Shoots** – The areas of the deposit defined as Measured and Indicated are characterised by distinct, high-grade shoots within broader mineralised zones. The increased drill density in these areas has allowed a better understanding of the geology and controls on the high-grade shoots. The high grade shoots were therefore able to be modelled separately, ultimately resulting in much better definition of high-grade material in these areas.
5. **Next Steps** – Coffey Mining will now undertake Whittle pit shell optimisation and preliminary mine design and scheduling based on the new resource model.

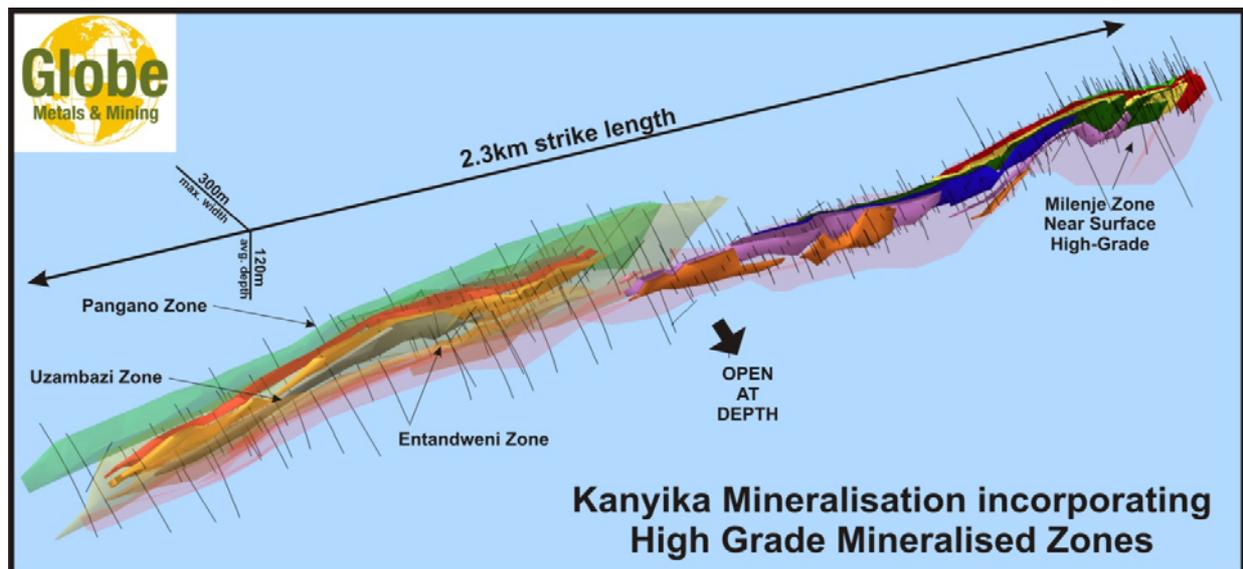


Figure 1. Depiction of the four discrete mineralised zones at Kanyika which strike towards 020° and dip between 40° and 80° to the west. The mineralised zones were defined using a nominal 2,000ppm Nb_2O_5 equivalent cut-off, guided by the local geology.

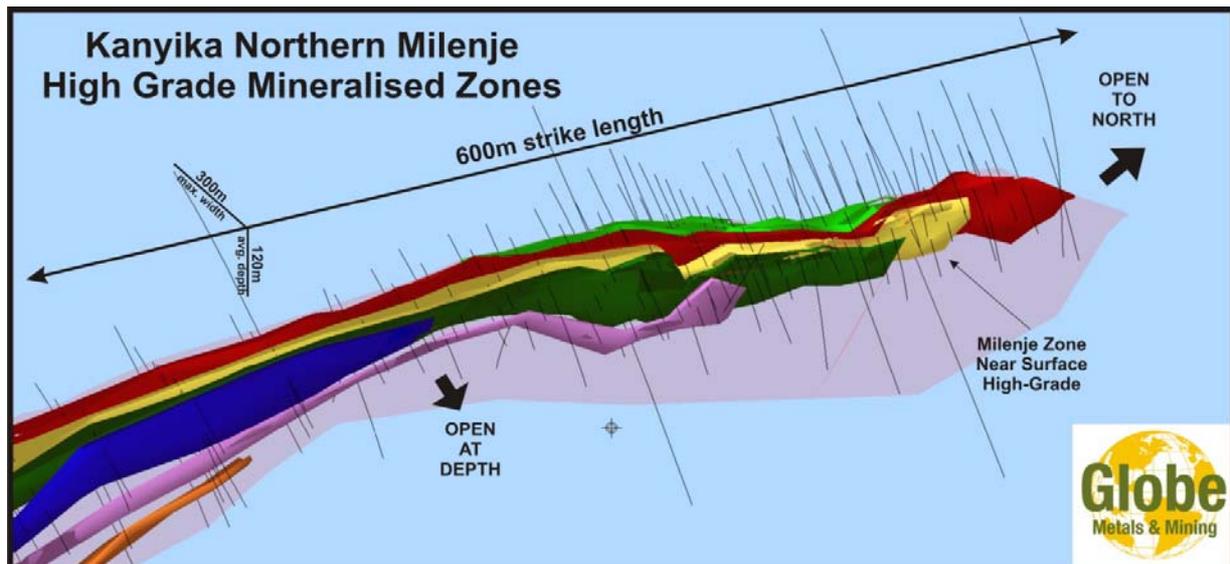


Figure 2. Depiction of continuous high grade shoot wireframes within the Milenje mineralised zone from 6,896,700mN to 6,897,300mN. A 4,250 ppm Nb_2O_5 equivalent cut-off was used to define the domain boundaries.

About Globe Metals & Mining Limited

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.

For further information please contact:

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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.

Competent Person: The contents of this report relating to the Mineral Resource Estimate are based on information compiled by Mr Michael Job, Member of the Australasian Institute of Mining and Metallurgy, and a consultant employed by Quantitative Group.. Mr Job 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.

MINERAL RESOURCE ESTIMATE FOR THE KANYIKA NIOBIUM DEPOSIT, MALAWI.

A total Mineral Resource of 60 million tonnes at 2,900 ppm Nb₂O₅, 140 ppm Ta₂O₅, 90 ppm U₃O₈ and 5,000 ppm ZrSiO₄ has been estimated, containing approximately 390 million pounds Nb₂O₅, 18 million pounds Ta₂O₅, 11 million pounds U₃O₈ and 664 million pounds ZrSiO₄. These figures are reported above a 1,500 ppm Nb₂O₅ cut-off.

This estimate includes 23 million tonnes at 3,300 ppm Nb₂O₅, 150 ppm Ta₂O₅, 90 ppm U₃O₈ and 4,900 ppm ZrSiO₄, containing approximately 166 million pounds Nb₂O₅, 8 million pounds Ta₂O₅, 5 million pounds U₃O₈ and 253 million pounds ZrSiO₄ in Measured and Indicated Resources. These figures are reported above a 1,500 ppm Nb₂O₅ cut-off.

Dr Julian Stephens, Executive Director - Exploration of Globe Metals and Mining Limited (GBE, Globe), has provided this statement conforming to the Joint Ore Reserves Committee (JORC, 2004) Code for the reporting of mineral resource estimates, for a Mineral Resource estimate prepared by Mr Michael Job of Quantitative Group (QG) for the Kanyika project.

Resources have been classified by QG under the Joint Ore Reserve Committee (JORC, 2004) code as follows:

Table 1: Mineral Resource Estimates for Kanyika as at June 25, 2010 (above 1,500 ppm Nb₂O₅).

| Category | Million Tonnes | Nb ₂ O ₅ ppm | Ta ₂ O ₅ ppm | U ₃ O ₈ ppm | ZrSiO ₄ ppm |
|--------------|----------------|------------------------------------|------------------------------------|-----------------------------------|------------------------|
| Measured | 5 | 3,900 | 180 | 110 | 5,300 |
| Indicated | 18 | 3,100 | 140 | 80 | 4,800 |
| Inferred | 37 | 2,700 | 130 | 80 | 5,100 |
| Total | 60 | 2,900 | 140 | 90 | 5,000 |

Table 2: Mineral Resource Estimates for Kanyika as at June 25, 2010 (above 3,000 ppm Nb₂O₅).

| Category | M Tonnes | Nb ₂ O ₅ ppm | Ta ₂ O ₅ ppm | U ₃ O ₈ ppm | ZrSiO ₄ ppm |
|--------------|-----------|------------------------------------|------------------------------------|-----------------------------------|------------------------|
| Measured | 3 | 5,400 | 250 | 160 | 6,600 |
| Indicated | 7 | 4,400 | 200 | 110 | 5,900 |
| Inferred | 11 | 3,600 | 160 | 90 | 5,600 |
| Total | 21 | 4,100 | 180 | 110 | 5,800 |

Note that the figures in Table 1 and 2 have been rounded appropriately, as advised by JORC.

Kanyika lies in central Malawi, approximately 140km north of the capital city, Lilongwe and within Exclusive Prospecting Licence EPL0188/2005. Globe applied for the area in late 2005 to cover uranium anomalism outlined by a 1984-85 United Nations Development Programme

regional airborne survey. Exploration started soon after the license was granted in March 2006, and discovery of the Kanyika deposit was announced in November that year.

The Kanyika project is situated within granitoids and gneisses of the Precambrian and Lower Palaeozoic Basement Complex, within the Malawi Province of the Mozambique Orogenic Belt. Mineralisation at Kanyika occurs from surface as disseminated pyrochlore, a Nb-Ta-U mineral, concentrated in four discrete zones within an elongate alkalic syenitic granitoid intrusive body. Higher grade mineralisation is generally associated with nepheline, zircon and pyrochlore-rich pegmatite segregations and veins.

Two resource estimates have been published by Globe previously for this project however the density of drilling for the March 2008 estimate was such that the entire resource was classified as Inferred. The 2008 estimate was based on 78 reverse circulation (RC) holes drilled in 2007, with holes drilled at 40m to 80m centres on 100m spaced east-west lines. The 2008 estimate totalled 56 million tonnes at 2,600 ppm Nb₂O₅.

The April 2009 estimate used an additional 76 RC holes and 16 diamond core holes (DD), drilled at 20m to 40m centres on 50m spaced east-west lines. This extra drilling increased the confidence in the resource estimate, resulting in 24% of the total resource tonnage able to be classified as Indicated. The 2009 estimate totalled 55 million tonnes at 3,000 ppm Nb₂O₅.

This new estimate (June 2010) uses an additional 82 RC and 16 DD holes, with many of these holes infilling the drilling grid to 20m spaced centres on 25m spaced east-west lines. This in turn has greatly increased the confidence in the geometry and continuity of the mineralisation, and 8% of the total resource tonnage is classified as Measured, and 30% of the resource classified as Indicated.

Data from 268 drill holes (236 RC and 32 DD holes) containing 22,380 metres of drilling was used for the June 2010 estimate.

Resources have been estimated within four discrete mineralised zones, striking towards 020° and dipping between 40° and 80° to the west. The mineralised zones were defined using a 2000 ppm Nb₂O₅ equivalent cut-off, guided by the local geology. Domain boundary analysis shows that the mineralised zones are robust, and the boundaries treated as 'hard' for estimation.

The Nb₂O₅ equivalent formula (used only for domain definition) is:

$$\text{Nb}_2\text{O}_5 \text{ ppm} + (\text{Ta}_2\text{O}_5 \text{ ppm} * 4) + (\text{U}_3\text{O}_8 \text{ ppm} * 4).$$

In addition, smaller but continuous high-grade shoots within some of the mineralised zones have been recognised. These high-grade shoots are defined by a 4250 ppm Nb₂O₅ equivalent cut-off.

Drillholes were composited to 1m intervals before estimation. Top-cuts were not applied to any of the variables.

Grades for the four variables (Nb₂O₅, Ta₂O₅, U₃O₈ and ZrSiO₄) have been estimated independently by Ordinary Kriging within each of the mineralised zones and high-grade shoots.

Tonnages were estimated by applying mineralised zone-wide bulk densities, which have also been sub-divided according to weathering.

Data verification

Michael Job of QG personally visited the project in June 2010, and carried out data verification and validation for selected RC and DD drillholes. Manual checking of the various data gathered from the drilling revealed no significant errors. The checks included activities such as:

- Physically locating drillhole collars in the field and checking co-ordinates with a hand-held GPS;
- Checking geological logging on paper against selected core holes, ensuring the same data was in the electronic database;
- Checking sample numbers from dispatch sheets were the same as those in the electronic database;
- Check bulk density data (determined using water immersion technique on core), and remove seven spurious values from a total of 630 determinations. Note that all the removed values were from the oxidised zone;
- Check downhole surveys in electronic database against original single-shot and multi-shot records;
- Gather check core samples from remaining half-core for selected intervals – these will be submitted to an independent assay laboratory soon.

In addition, geological inspection of outcrop was undertaken, which confirmed the size and orientation of the mineralised zones at surface.

The Kanyika deposit has the advantage that all the drilling has been completed by Globe in the last three years, and has been conducted under current industry best practise with regard to QA and QC controls for sampling, sample preparation, assaying and other data gathering. Consequently, there is no issue with older or 'historic' data.

Competent Persons Statement

The information in this announcement that relates to Globe Metals and Mining Limited's mineral resource estimates for the Kanyika project, is based on information compiled by Michael Job, who is a full time employee of Quantitative Group and a Member of the Australasian Institute of Mining and Metallurgy. Michael Job 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 JORC code. Michael Job consents to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.