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ASX/Media Announcement

December Quarter 2009 Activities Report

Globe Metals & Mining is pleased to present its December Quarter 2009 Activities Report.

Highlights

- **Kanyika Niobium Project Bankable Feasibility Study (BFS) well underway:**
 - Resource upgrade drilling completed
 - Formal Project Brief for Environmental Impact Study submitted to the Government of Malawi
 - Appointment of BFS Project Manager
- **Machinga Rare Earth Project Joint Venture – Globe to earn 80%:**
 - Average of top 25% of 126 rock chip samples - 1.1% TREO, 8,400ppm Nb₂O₅ & 472ppm Ta₂O₅
 - Very high ratio of heavy rare earths (HREO) – avg. 25-28% (of TREO)
- **\$5.0m cash at bank**

1. Kanyika Niobium Project

1.1. Summary

During the December Quarter, Globe Metals & Mining Limited (Globe) and its joint venture partner, Thuthuka Group Limited (Thuthuka), advanced the BFS in a number of areas; this Activities Report sets out those key developments during the Quarter. Overall, substantive progress was a little slower than planned, especially in relation to some key metallurgical milestones, as both parties focussed on the appointment of key personnel and establishing joint venture operating protocols. Nevertheless, the December Quarter was a busy one for the Company, as evidenced below.

Globe intends to update the market in the near term on the plans and time frames for the BFS during 2010 and beyond.

1.2. Appointment of BFS Project Manager – Mr. Mick Ryan

Mr. Michael (Mick) Ryan was appointed as the BFS Project Manager for the Kanyika Niobium Project in November 2009.

Mr. Ryan has over 30 years experience in the metallurgical field as a practitioner, consultant and project manager in the fields of mine operations, project development and process plant commissioning. He has developed, operated and consulted widely on a large variety of projects, including heap leach, CIP, flotation, roasting and hydrometallurgy across a range of metals.



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Most recently, since 1995, he has been principally involved with nickel laterite developments in Australia with a number of feasibility studies including the Murrin Murrin and Syerston Projects, and detailed design for Murrin Murrin. Previous employers (in the in the metallurgical field and as project manager) include Resolute Mining, GME Resources, WMC and Anaconda Nickel.

1.3. Appointment of Chairman, Globe Metals & Mining (Africa) Limited – Mr. Dye Mawindo

Mr. Dye Mawindo was appointed as Chairman of Globe's Malawian subsidiary company, Globe Metals & Mining (Africa) Limited, in November 2009, being the sole purpose vehicle for the Kanyika Niobium Project.

Mr. Mawindo is a Malawian national with degrees in law and business administration. He currently operates as a legal and business services consultant, and has served on the board of a number of major companies in Malawi, including Old Mutual (the largest life assurance company in Malawi), National Bank of Malawi (the largest bank in Malawi), Malawi Property Investment Company Limited (listed and largest real estate business in Malawi), Nedbank (Malawi) and Illovo (South Africa).

Prior to working in the private sector, Mr. Mawindo's career involved an extensive period of service in the public service, including as Deputy General Manager of the Malawi Development Corporation, CEO of the Privatisation Commission for 5 years, and Governance Adviser in the Office of the Vice President. He also served as Chief of Party of a Millennium Challenge Corporation supported project that sought to help the Malawi Parliament.

1.4. Sole Purpose Joint Venture Company – Globe Metals & Mining (Africa) Limited

Under the Shareholder's Agreement between Globe and Thuthuka, Globe's former wholly-owned Malawian subsidiary, Globe Metals & Mining (Africa) Limited, is to become the sole purpose joint venture company for the Kanyika Niobium Project. Thuthuka will acquire 25% of the issued capital in this entity.

As a consequence of the above, Globe is in the process of transferring out of Globe Metals & Mining (Africa) Limited all non-Kanyika assets and liabilities into a new, wholly-owned Malawian subsidiary, Globe Metals & Mining (Exploration) Limited, which is newly incorporated.

The board of Globe Metals & Mining (Africa) Limited is now made up of six representatives of Globe and two representatives of Thuthuka, the latter being their Managing Director, Mr. Bill Pullen, and Chief Financial Officer, Mr. Etienne Meyer.

1.5. Renewal of Kanyika Exclusive Prospecting Licence

Globe Metals & Mining (Africa) Limited has been granted a renewal of the Kanyika EPL, being for a further two years from 29 December 2009. The EPL is for all of the minerals known to be potentially economically present at Kanyika.

1.6. Resource Upgrade Drilling

During the Quarter Globe completed its resource infill drilling program, being ~5,200m RC and 960m diamond drilling.

The purpose of the program was designed primarily to upgrade the resource category of selected areas of the deposit to the JORC Measured and Indicated categories. The existing total JORC inferred and indicated resource is currently 55.1Mt @ 3,000ppm Nb₂O₅, which includes 14Mt in the Indicated category.

The upgrade resource estimate is due for completion by the end of Q1 2010. This will feed directly in to the pit optimisation, mine design and scheduling components of the BFS.

In addition to upgrading the resource category, a secondary purpose of the program was to further define high-grade mineralisation at relatively shallow depths, predominantly in the northern Milenje Zone. The significance of these high-grade mineralised zones is that they are likely to be mined first, to enhance Project economics.

Some of the better infill RC results from eleven holes reported from the northern Milenje Zone during the Quarter are listed below:

KARC156	18m @ 6,230ppm Nb₂O₅,	159ppm Ta₂O₅,	178ppm U₃O₈ (from 63m)
incl.	5m @ 8,589ppm Nb₂O₅,	183ppm Ta₂O₅,	248ppm U₃O₈ (from 74m)
KARC158	5m @ 11,988ppm Nb₂O₅,	769ppm Ta₂O₅,	442ppm U₃O₈ (from 45m)
	5m @ 6,774ppm Nb₂O₅,	482ppm Ta₂O₅,	268ppm U₃O₈ (from 55m)
KARC166	22m @ 5,194ppm Nb₂O₅,	316ppm Ta₂O₅,	189ppm U₃O₈ (from 29m)
incl.	9m @ 8,257ppm Nb₂O₅,	464ppm Ta₂O₅,	281ppm U₃O₈ (from 32m)
KARC167	23m @ 11,331ppm Nb₂O₅,	561ppm Ta₂O₅,	393ppm U₃O₈ (from 46m)
incl.	9m @ 24,119ppm Nb₂O₅,	1,187ppm Ta₂O₅,	838ppm U₃O₈ (from 46m)
incl.	2m @ 84,428ppm Nb₂O₅,	4,400ppm Ta₂O₅,	2,996ppm U₃O₈ (from 46m)

These grades are markedly superior to the overall resource grade - the existing total JORC inferred and indicated resource is currently 55.1Mt @ 3,000ppm Nb₂O₅, which includes 24Mt @ 3,800ppm Nb₂O₅.

1.7. Geotechnical Drilling

The 960m diamond drilling program doubled as the open pit geotechnical drilling program for the BFS. Mining One Ltd are completing the Kanyika Geotechnical Study as part of the BFS. All rock strength testing is now complete, and the final report is expected in February 2010.

1.8. Environmental Impact Study

A Project Brief has been submitted to the Government of Malawi, which formally commences the environmental impact approval process set out under the relevant Malawian legislation.

In addition, initial baseline work has been completed, including land use and land capability, aquatic biodiversity and baseline noise monitoring.

The Environmental Impact Study is being managed by Synergistics Environmental Services, based in Johannesburg, South Africa.

1.9. Social Impact Study

An initial scoping study has been completed, and a Project Brief submitted to the Government of Malawi.

1.10. Pre-Feasibility Study – Hydrometallurgical Testwork

Globe reported during the Quarter that it had successfully produced approximately 46kg of concentrate grading 26.0% Nb₂O₅ from the initial 6 tonnes of feed material.

Concentrate production work was conducted at Nagrom and Ammttec laboratories in Perth and at SGS in Lakefield, Canada. Spiral separation work was conducted at Nagrom, with flotation work conducted at both Ammttec and SGS Lakefield.

Further downstream hydrometallurgical testwork was to have commenced during the Quarter; however, this did not occur due to delays in obtaining export permits from Canada and import permits to the Republic of South Africa. The concentrate is currently awaiting collection in Johannesburg.

Thuthuka, in conjunction with the University of Pretoria, will carry out the acid leach and solvent extraction work to produce Nb_2O_5 , Ta_2O_5 and U_3O_8 from the concentrate, once the program is underway. Keech Furnace Technologies will conduct the smelting work to produce steel grade ferro-niobium (FeNb) from the Nb_2O_5 . Production of approximately 5kg of FeNb and lesser amounts of Ta_2O_5 and U_3O_8 is targeted from the program.

1.11. BFS Pilot Plant

Plans are very advanced in order to facilitate the mining of a 750 tonne bulk sample, which will form the run of mine material for the BFS pilot plant. These plans includes identification of representative material to be mined in the initial years, provision of information to local communities via regular meetings, obtaining the requisite permits and organising third party mining contractors.

1.12. Development Agreement with the Government of Malawi

In December 2009, a number of representatives of Globe and Thuthuka met with representatives of the Government of Malawi and various non-government organisations.

The objectives of these meetings were two-fold: firstly, to ensure the Government of Malawi and non-government organisations remain fully informed and consulted in relation to developments taking place with the Kanyika Niobium Project. This is in addition to Globe's normal periodic consultations and meetings with local communities and the Traditional Authority surrounding the Kanyika Niobium Project.

The Second objective was to progress discussions specifically with the Government of Malawi in relation to the proposed Development Agreement between Globe Metals & Mining (Africa) Limited and the Government of Malawi. This is expected to be a comprehensive agreement between the parties encompassing all of the miner's rights and obligations pertaining to the Kanyika Niobium Project.

A first draft agreement will be submitted by Globe to the Government of Malawi in February 2010.

1.13. Tantalum & Niobium International Studies Centre (TIC) Annual Conference – Tallin, Estonia, October 2009

Globe's Executive Chairman, Mr. Mark Sumich, attended the TIC in October 2009, being the peak industry body for niobium producers.

The purpose of the Conference for Globe is to gain insights into future demand for niobium, establish contact with potential advisers and technical partners and lastly, to seek out future customers.

It is expected that tangible results arising from the Conference will be announced during the course of 2010.

1.14. Comments on the December Quarter Cash Flow Statement

Total cash outflows for the Company for the Quarter were both higher than expected, and also higher than what should be "normal" for the Company during 2010:

- ~\$200,000 of BFS related costs were incurred by Globe which are expenses ultimately payable by its joint venture partner, Thuthuka Group Limited, and therefore effectively loans.
- ~\$100,000 of capital purchases.
- Globe completed in excess of 6,000m of drilling during the Quarter, being one of its principal items of responsibility under the BFS.

2. Machinga Rare Earths Project

Globe entered into a joint venture agreement to acquire up to 80% interest in the Machinga Rare Earth Project from Resource Star Limited, an Australian company.

2.1. Geology

The licence area is dominated by rocks of the Mesozoic Chilwa Alkaline Province. These consist of granite, syenite and nepheline-syenite plutons and have associated volcanic vents characterised by carbonatite and agglomerate. The alkaline plutons intrude gneissic rocks of the Malawi Basement Complex.

The project area contains four alkaline plutons, three of which, the Chinduzi, Mongolowe, and Chaone ring-complexes are composed of nepheline-syenite and occur in an east-west string across the north of the project area. The fourth and largest Malosa Pluton forms the northern portion of the Zomba-Malosa Massif. It is composed of a heterogeneous mixture of syenitic and granitic rocks.

The REE-Nb-Ta mineralisation at Machinga is associated with the eastern margin of the Malosa Pluton of Chilwa Alkaline Province age (Figure 1). Uranium and thorium anomalies are also associated with the REE-Nb-Ta mineralisation.

The Machinga Main Anomaly, highlighted by the UNDP airborne geophysical survey has a NNW-SSE strike length of approximately 7km. The anomaly occurs on the eastern margin of the Malosa Pluton. Ground radiometrics show this anomaly to be 7km long with >2x background. The main target is zone of >5x background covering an area of 2.7km by up to 0.3km wide at the northernmost end of the 7km anomaly.

Mapping and rock-chip sampling over the Machinga Main Anomaly by Resource Star Limited and previous workers shows the area is characterised by several generations of pegmatite dykes that host the majority of REE-Nb-Ta mineralisation. Several sets of bifurcating and anatomising pegmatite zones, with strike directions of between NW-SE and N-S, and dips of generally 30-45° to the NE and E, occur in the area. Each pegmatite zone is made up of a number of individual pegmatite veins ranging in width from 1cm to 15cm. Such zones typically have widths of 1-3m. Between each vein are transitional zones of altered gneiss which are also mineralised.

The REE-Nb-Ta mineralisation with associated U, Th and Zr occurs in the minerals pyrochlore, thorite, monazite, xenotime and zircon.

Highlights of previous rock-chip sampling programs conducted by Resource Star Limited over the Machinga Main Anomaly include:

- Peak result of 2.64% TREO (total rare earth oxides)
- Peak of 29,900% Nb₂O₅ and 1,673ppm Ta₂O₅
- 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% Dy₂O₃:TREO
- Average of top 25% of 126 rock chip samples - 1.1% TREO, 8,400ppm Nb₂O₅ & 472ppm Ta₂O₅

The Machinga REE mineralisation therefore appears to have higher heavy rare earth ratio (HREO) at 25-28% than all 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 has 14%, Mt Weld has 3% and Bayan Obo 2%.

Machinga also has a very high ratio of the high value element dysprosium (Dy), at 2.5-2.7% Dy₂O₃:TREO. Most deposits worldwide have dysprosium oxide ratios between 0.1 and 0.5%.

A number of other, less significant REE-Nb-Ta anomalies occur on the licence outside of the main 7km long Machinga Main anomaly, and will require further investigation.

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

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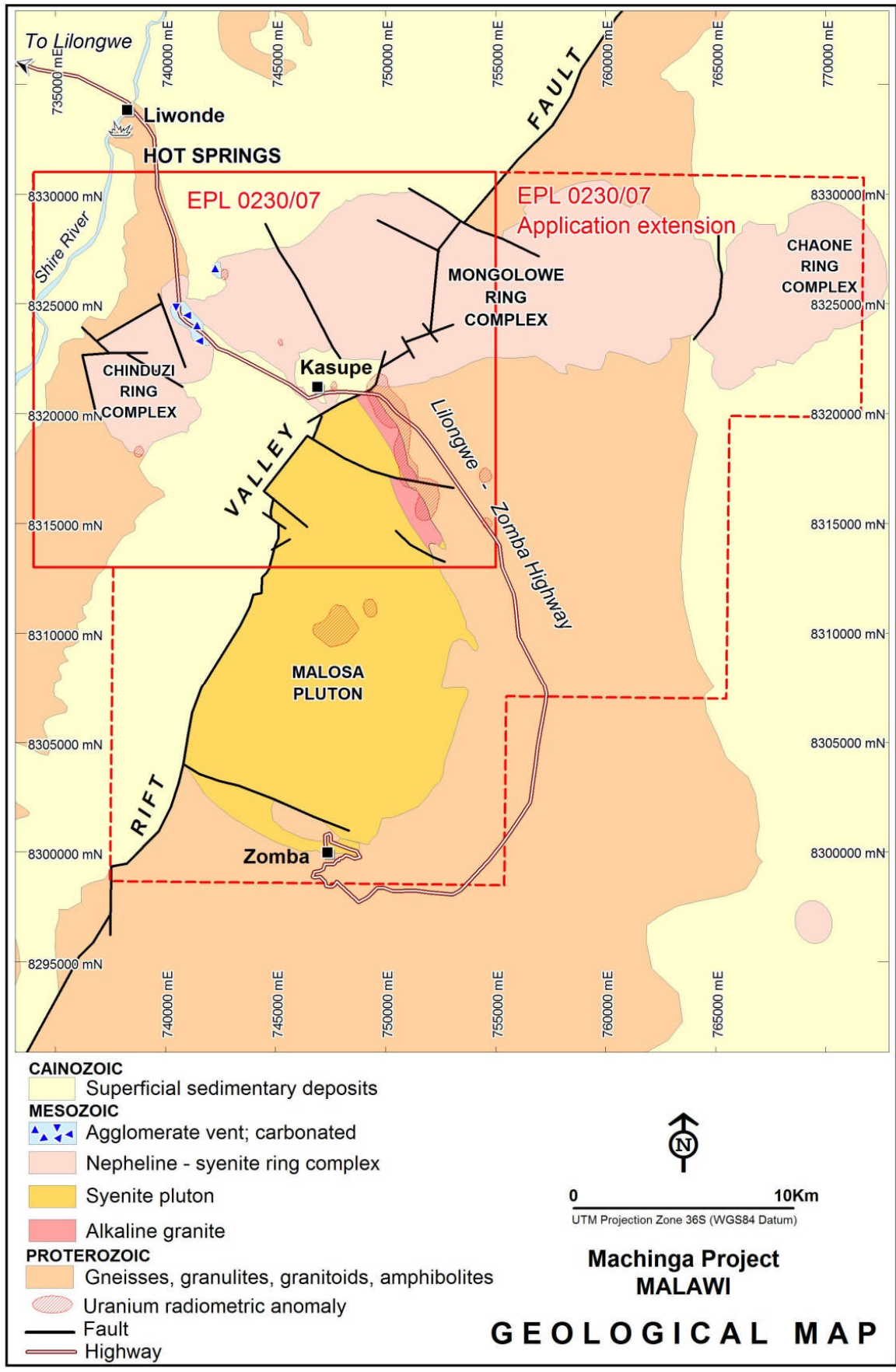


Figure 1: Simplified geology of the Machinga area. The Machinga Main Anomaly is located just west of the town of Kasupe, along the Lilongwe-Zomba Highway.

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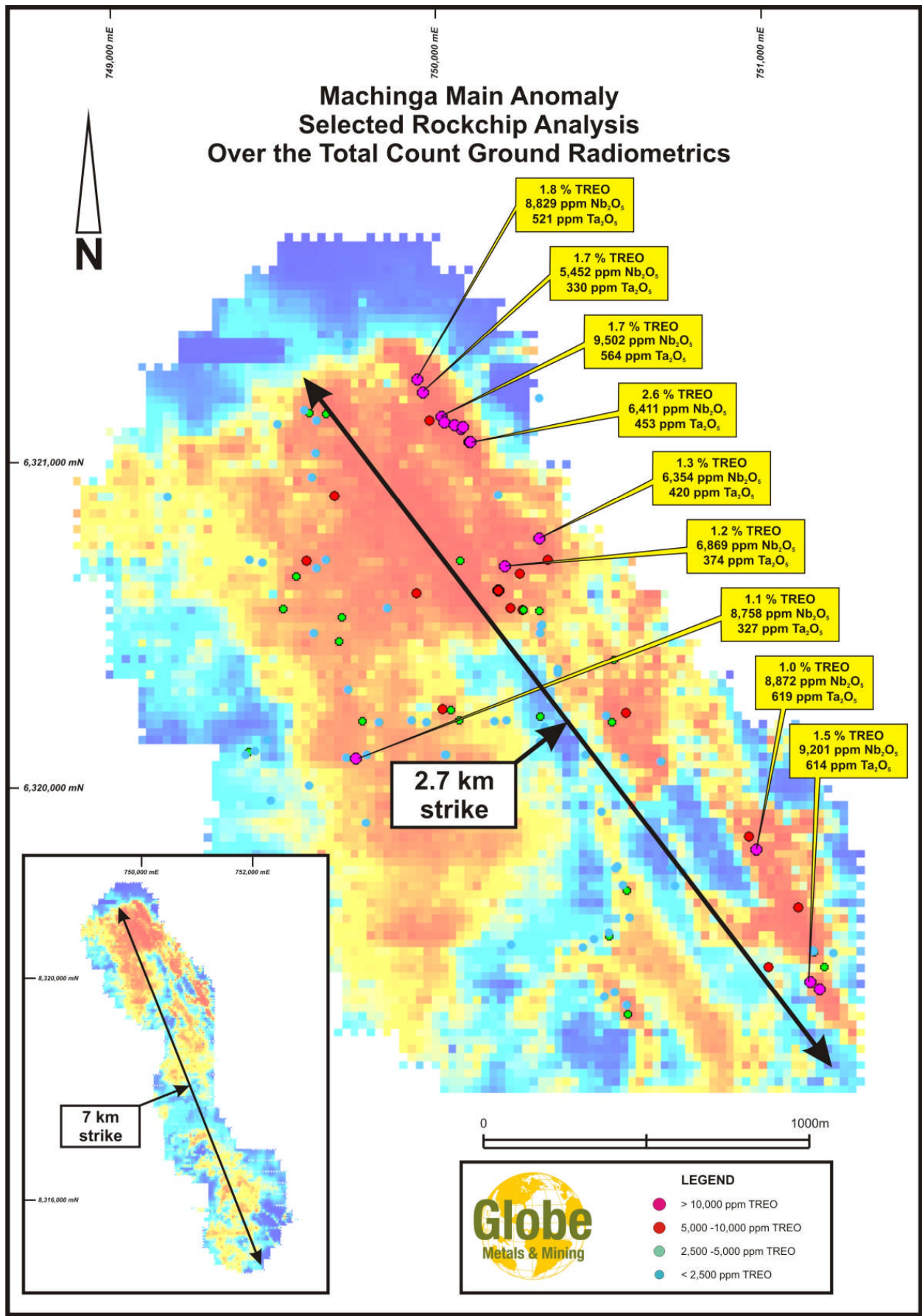


Figure 2: Northern part of Machinga Main Anomaly with rock-chip sample results.

2.2. Agreement

Globe will sole fund exploration, up to the completion of a feasibility study ($\pm 25\%$ accuracy), and in doing so earn staged equity through the achievement of defined exploration and assessment hurdles over a maximum 8 year period. Work will be directed by an Operating Committee, of which Resource Star will be a member.

The agreement also provides Resource Star a right of first refusal over an exploration joint venture on Globe's sandstone-hosted Livingstonia Uranium Project in northern Malawi, with an agreement to be discussed in detail after a technical review.

Staged equity is earned by Globe under the Machinga JV agreement through sole-funding exploration and assessment as follows:

Phase 1 – Exploration (1yr):	20%	US\$250k exploration expenditure
Phase 2 - Exploration (3yrs):	51%	A further US\$2.25M exploration expenditure
Phase 3 – Delineation (2yrs):	70%	JORC Resource >45kt contained Nb ₂ O ₅ -equivalent*
Phase 4 – Feasibility (2yrs):	80%	Feasibility study costed to $\pm 25\%$ accuracy

**Nb₂O₅-equivalent calculated as: Nb₂O₅ eq = 1 x Nb₂O₅ + 4 x Ta₂O₅ + 0.42 x TREO. Nb₂O₅ chosen as benchmark commodity due to its price stability.*

It is expected that Phase 1 will include trenching and an initial drill program. Globe also plans to undertake mapping and trenching over the summer wet season to be in a position to drill-test the already defined northern end of the Machinga Main anomaly in 2010.

Resource Star recently lodged an application with the Malawian Department of Mines & Minerals to extend Machinga's lease (EPL0230/07) to the south and the east, to cover the strike continuation and/or potential repetitions of the known mineralisation. The additional area applied for amounts to approximately 450km², compared to the currently granted area of some 485km². The final area granted may be subject to change by the Department due to pre-existing land uses.

The transfer of the registered title to Globe under the agreement, after expenditure of US\$2.5M (i.e. Globe 51% economic interest), will require the approval of the Minister of Natural Resources, Energy and Environment in Malawi. It is not expected that this permission will be unreasonably withheld.

2.3. 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 recently successfully raised approximately \$600,000 with the assistance of Allegra Capital who have been engaged as lead managers for a Public Offer of up to 25,000,000 fully paid ordinary shares at an issue price of 20 cents per Share, to raise up to \$5,000,000. The Offer will be made pursuant to a prospectus, which will assist with the Company's re-compliance with Chapters 1 and 2 of the ASX Listing Rules in order to re-list on the ASX.

3. Appointment of Director – Mr. Bill Hayden

Mr. William (Bill) Hayden was appointed as a non-executive director of the Company in November 2009.

Bill holds a Bachelor of Science (Hons.) in Geology from Sierra Nevada College, Nevada, USA. He is a geologist with over 33 years experience in the mineral exploration industry, much of which has been in Africa and the Asia-Pacific region. Bill was the founder and President of Ivanhoe Nickel and Platinum (formerly African Minerals Ltd.), a Canadian company which has assembled extensive mineral holdings in South Africa, Zambia, and the Democratic Republic of Congo. Since 1986 Bill has worked in a

management capacity with several exploration and mining companies both in Australia and overseas. Bill is President of Ivanhoe Philippines, Inc. (an Ivanhoe Mines wholly owned subsidiary). He is also a director of Pan Palladium South Africa Ltd, GoviEx Niger Holdings Ltd., Ivanhoe Nickel and Platinum Ltd (and its Australian subsidiaries), and Ivanhoe Australia Ltd.

4. Completion of Due Diligence – Mount Muambe Fluorite Project, Mozambique

During the Quarter Globe completed its technical and legal due diligence on the Mount Muambe Fluorite Project, located in the Tete Province of Mozambique, and elected to proceed with the project. Globe can earn up to a 90% interest in the project.

Two of Globe's experienced geologists visited Mount Muambe for a two day period to conduct technical due diligence that included confirmation of trench locations and rock-chip sampling to confirm historical fluorite grades.

All of the main historical trenches were located and surveyed. A total of 26 selected, representative rock chip samples were taken to confirm historical fluorite grades.

A peak grade of >76% CaF₂ was obtained, with an average of >58% CaF₂ over the 26 samples.

5. Relinquishment of Nthalire EPL

During the Quarter Globe relinquished the Nthalire EPL in northern Malawi, as it is not considered prospective.

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.*