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ASX/Media Announcement

March Quarter 2010 Activities Report

Globe Metals & Mining is pleased to present its March Quarter 2010 Activities Report:

<u>Highlights</u>

- Kanyika Niobium Project Bankable Feasibility Study (BFS):
 - Delays to metallurgical work programs due to dispute between Globe and Thuthuka
 - Other BFS work including Geotechnical and Resource Estimate nearing completion
- Machinga Rare Earth Project Joint Venture exciting initial trench results
- Three separate zones ranging in width from 5-7m each were intersected, with best results of:
 - o 7m @ 1.3% TREO (total rare earth oxides)
 - o inc. 2m @ 1.5% TREO
- High ratio of HREO:TREO compared to existing REO mines and deposits
- HREO prices continue to rise; individual HREOs are up to 100x the prices for light rare earth oxides (LREO)
- Drilling program planned for May 2010
- \$3.4m cash at bank (excludes ~\$700K in receivables)

1. Kanyika Niobium Project

1.1. Summary

In mid-April, Globe advised that it and its joint venture partner, Thuthuka, were in disagreement over aspects of the BFS, with the result that Thuthuka advised Globe that it suspended all work on the parts of the BFS it is undertaking, until these matters are resolved. Globe considers that, among other things, Thuthuka is not permitted to make such unilateral decisions under the terms of the Shareholder's Agreement between the parties.

The areas of disagreement relate primarily to the timing and mode of carrying out the concentrate optimisation program that has commenced (at Mintek, Johannesburg), and the planned 750 tonne bulk sample extraction (to feed the concentrate pilot program). In addition, Globe has decided to no longer use Thuthuka for the hydrometallurgical test work, which is outside of the scope of the BFS.



In these circumstances, the timing for completion of the BFS (previously forecast to be mid-2011) is uncertain. As new information becomes available in relation to this issue, the Company will update the market.

Globe's Executive Chairman, Mr. Mark Sumich said "this is clearly a setback for the Project; however, we are making every effort to obtain the best outcome for the Project and our shareholders, and to get there as soon as possible."

1.2. Resource Upgrade Drilling

During the Quarter Globe received further results from its 2009 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 upgraded resource estimate is due for completion in May/June 2010, having been slightly delayed. The new resource estimate 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, predominantly in the Milenje Zone. The significance of these high-grade mineralised zones is that they are likely to mined first, to enhance Project economics.

A number of the deeper RC drill holes in this program intersected wides zones of unexpectedly high grade material, particularly those between sections 6,200mN and 6,400mN, inclusive. It is expected this particular area of the resource will be significantly, positively influenced by these new wide, moderate to high grade drill intercepts.

Some of the better infill RC results from the twenty two holes drilled in the southern Milenje Zone and reported here are listed below:

KARC196	63m @	4,392ppm Nb ₂ O ₅ ,	244ppm Ta₂O₅,	103ppm U ₃ O ₈ (<i>from 32m</i>)
incl.	6m @	10,082ppm Nb ₂ O ₅ ,	455ppm Ta₂O₅,	265ppm U ₃ O ₈ (<i>from 78m</i>)
KARC202	50m @	4,093ppm Nb₂O₅,	178ppm Ta₂O₅,	103ppm U ₃ O ₈ (<i>from 0m</i>)
incl.	13m @	6,045ppm Nb₂O₅,	231ppm Ta₂O₅,	125ppm U ₃ O ₈ (<i>from 9m</i>)
KARC203	81m @	3,504ppm Nb₂O₅,	162ppm Ta₂O₅,	85ppm U ₃ O ₈ (<i>from 3m</i>)
incl.	8m @	7,710ppm Nb₂O₅,	247ppm Ta₂O₅,	186ppm U ₃ O ₈ (<i>from 49m</i>)
KARC205	69m @	3,546ppm Nb₂O₅,	198ppm Ta₂O₅,	85ppm U ₃ O ₈ (<i>from 33m</i>)
incl.	12m @	8,053ppm Nb₂O₅,	412ppm Ta₂O₅,	171ppm U ₃ O ₈ (<i>from 70m</i>)
KARC206	57m @	3,996ppm Nb₂O₅,	237ppm Ta₂O₅,	86ppm U ₃ O ₈ (<i>from 32m</i>)
incl.	13m @	6,664ppm Nb₂O₅,	339ppm Ta₂O₅,	124ppm U ₃ O ₈ (<i>from 66m</i>)

These grades are superior to the overall resource grade - the existing total JORC inferred and indicated resource is currently 55.1Mt @ 3,000ppm Nb_2O_5 , which includes 24Mt @ 3,800ppm Nb_2O_5 .

1.3. Open Pit Geotechnical Program

The open-pit geotechnical study, conducted by Mining One consultants, is near complete, with the final draft report received by the Company and under review.

1.4. Mining – Pit Design and Scheduling

Coffey Mining has been appointed to conduct the pit optimisation and scheduling work. This will commence once the new resource estimate is complete.

1.5. Environmental Impact Study

Baseline sampling and monitoring, including land use and land capability, aquatic biodiversity, noise monitoring, dust monitoring and water sampling continued throughout the March Quarter.

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

1.6. Social Impact Study

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

1.7. Pre-Feasibility Study – Hydrometallurgical Testwork

The pre-feasibility hydrometallurgical testwork program, on the 46kg of concentrate, has been suspended whilst Globe negotiates with its joint venture partner, Thuthuka Group, on the issues outlined in section 1.1 above.

1.8. BFS Pilot Plant

The plans for the extraction of the ~750 tonne pilot plant sample are currently on hold, until the Company's issues with its joint venture partner, Thuthuka Group, are resolved.

1.9. Development Agreement with the Government of Malawi

Globe expects to submit the first draft of the Development Agreement to the Government of Malawi in the near future.

1.10. Marketing

Globe Metals & Mining has entered into its third Memorandum of Understanding for the supply of niobium from the Company's Kanyika Niobium Project in Malawi.

The new MOU is for the supply of 500tpa of niobium oxide (Nb_2O_5) .

The 500t of niobium oxide equates to 350t of niobium metal. The new MOU also increases the total annual production from the Project that is subject to a Customer Supply MOU to 45%. The Company expects to conclude further supply arrangements as it progresses the development of the Kanyika Niobium Project. All MOU's signed to date are non-binding, and are subject to further agreement in relation to price, duration and product specification.

MOU #	Product	Nb Metal Content
1. (January 2009)	500tpa Nb₂O₅	350t
2. (June 2009)	1000tpa FeNb	660t
3. (February 2010)	500tpa Nb2O5	350t
Total		1,360t

The niobium oxide is to be supplied to a sophisticated end-user of niobium oxides, metals and alloys. The supply from Globe may be in the form of a concentrate, in which case there would be intermediate processing via a third party, or alternatively, direct supply by Globe of a high purity oxide (> \sim 98-99% Nb₂O₅), provided it can meet the end-user's product specifications.

Globe considers the identity of the customer to be highly commercially sensitive, and therefore to be treated as confidential.

1.11. Comments on the March Quarter Cash Flow Statement

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

- ~\$500,000 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.
- The company expects a cash tax rebate of ~\$200,000 in the next Quarter as a result of the Company's research and development (R & D) activities.

2. Machinga Rare Earths Project – Malawi

2.1. Soil Sampling Results

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.

In February, the Company announced initial soil sampling results from the Machinga.

The soil sampling program presented here was completed by RSL in November 2009, with those laboratory results having 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 larger mineralised system than originally envisioned by the Company.

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 below
- Peak results: 2,727ppm TREO, 5,567ppm Nb₂O₅ and 327ppm Ta₂O₅
- Average of all 4 major anomaly clusters (26 of 136 soil samples): 1,864ppm TREO, 1,912ppm Nb_2O_5 and 126ppm Ta_2O_5
- Average of all 136 samples: 1,145ppm TREO, 712ppm Nb₂O₅ and 43ppm Ta₂O₅

	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 ₂ O ₅ (ppm)	5,567	1,239	1,796	3,420			
Avg. Nb ₂ O ₅ (ppm)	2,416	1,111	1,721	2,046			
Peak Ta₂O₅ (ppm)	327	78	111	244			
Avg. Ta₂O₅ (ppm)	148	73	108	139			

Table 1: Summary of Significant Machinga Orientation Soil Sampling Results

* 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.

2.2. Geological Model

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

2.3. Trenching Program

2.3.1. Summary

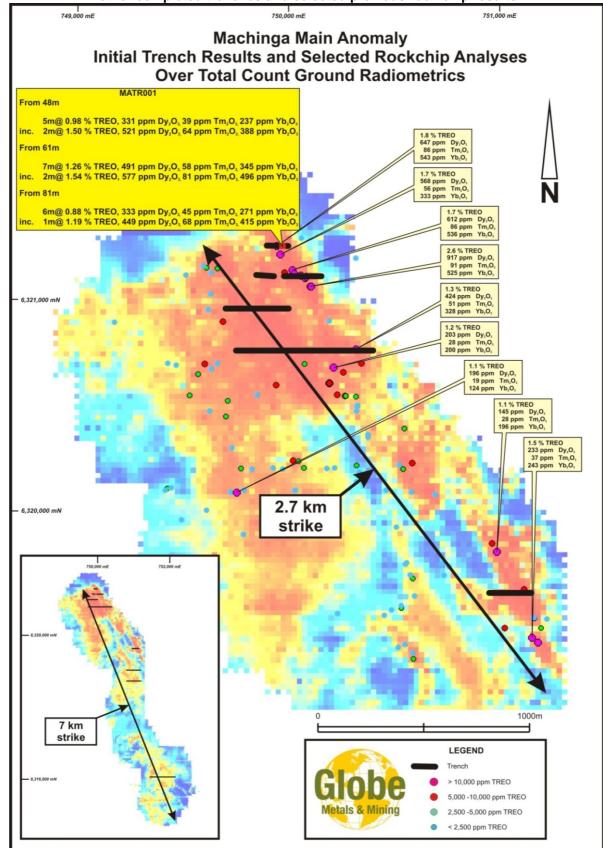
The first laboratory chemical results for the initial trenching program, comprising 8 trenches in total, at the Machinga Rare Earth Project in southern Malawi, were received and reported in mid-April.

Results show high grades of heavy rare earth elements such as dysprosium, thulium and ytterbium, which are priced orders of magnitude higher than the more common light rare earths such as cerium and lanthanum. Multiple intercepts, each ranging in width from 5-7m over a broader anomalous zone of 39m, were encountered in the first trench.

In addition, significant grades of niobium, tantalum and zirconium accompany the rare earth mineralisation, which all add to the value of the project.

Globe's Executive Chairman, Mr Mark Sumich, said "These results demonstrate the significant heavy rare earth potential of the Machinga Rare Earth Project. Significantly, very high grades of dysprosium have been encountered. Japanese motor vehicle manufacturers such as Toyota and Mitsubishi, among others, are currently actively seeking long term, secure primary supplies of this particular element, and we are well positioned to potentially fulfil a portion of this demand."

Figure 1: Northern Machinga Main Anomaly showing trench MATR001 results, other completed trenches and selected previous rock-chip results



2.4. Initial Results

The Company's initial trenching program of 8 trenches is currently well advanced, with 7 of the 8 being completed. The trenches were planned to test REE-Nb-Ta-Zr targets identified by previous mapping, radiometric surveys, rock-chip and soil sampling programs.

The first five trenches, MATR001-005, were designed to test the Machinga North Anomaly, where previously the highest grade rock-chip samples were encountered. These areas are dominated by pegmatite-hosted REE-Nb-Ta-Zr mineralisation. Trenches MATR006-008 were designed to test the anomalous margin of the Malosa Pluton, with trench 6 having intersected broad, but lower tenor radiometric anomalism hosted in the alkaline granitoid pluton, with subordinate pegmatite dykes.

Laboratory geochemical results for trench MATR001, which targeted high-grade REE-Nb-Ta-Zr mineralisation hosted in pegmatite at the northern tip of the Machinga North anomaly, have been received and are listed in Table 2 below.

It is currently unknown whether there is any surficial enrichment or depletion of REE-Nb-Ta-Zr in the trenches at these shallow depths.

Trench ID	From (m)	To (m)	Width (m)*	TREO (ppm)	HREO (ppm)	Dy ₂ O ₃ (ppm)	Tm ₂ O ₃ (ppm)	Yb ₂ O ₃ (ppm)	Nb ₂ O ₅ (ppm)	Ta₂O₅ (ppm)	ZrO ₂ (ppm)
MACH001	48	53	5	9,797	3,216	331	39	237	6,042	217	13,029
Incl.	48	50	2	15,038	5,090	521	64	388	9,124	441	18,511
MACH001	61	68	7	12,630	4,645	491	58	345	6,310	354	18,103
Incl.	61	63	2	15,417	5,784	577	81	496	9,351	538	25,029
MACH001	81	87	6	8,845	3,412	333	45	271	4,456	250	16,782
Incl.	81	82	1	11,911	4,763	449	68	415	5,972	347	26,804

Table 2: Significant REO-Nb-Ta-Zr results from MATR001

*Estimated true widths are 60-70% of intercept widths. Dysprosium, thulium and ytterbium are heavy rare earth elements and therefore included also in the TREO and HREO totals in the above table, whilst HREO are also included in the TREO total.

TREO = Total Rare Earth Oxides (La through Lu + Y); HREO = more valuable Heavy Rare Earth Oxides (Eu through Lu + Y). The reader is cautioned that these are trench results all from approximately 2m depth. The "From" and "To" columns indicate lateral distances at surface, not depths.

2.5. Prices, Values and Markets

1. **High Total Metal Content** – The reader is reminded that niobium and tantalum are not rare earth elements (but are rare metals) and therefore do not contribute to the total rare earth oxide (TREO) content, but are separate and additional valuable elements. Trench MATR001 also shows significant grades of niobium, tantalum and zircon.

For comparison, the average Nb₂O₅ grade at Globe's Kanyika Niobium Project is 3,000ppm.

- High Heavy Rare Earth Oxide (HREO) Content Trench MATR001 intersected multiple zones of high-grade REE-Nb-Ta mineralisation. The mineralisation can be termed high grade because it contains high amounts of dysprosium (Dy₂O₃), thulium (Tm₂O₃) and ytterbium (Yb₂O₃), all of which are HREOs.
- High HREO:TREO Ratio The REO mineralisation intersected in trench MATR001 at Machinga has higher heavy rare earth ratio (HREO/TREO) at 32-38% than most of the major operating mines and deposits worldwide. For example, Avalon Rare Metals' Nechalacho Deposit (Canada) has a HREO ratio of 20%, Kvanefjeld (Greenland) has 14%, Mt Weld (Australia) has 3% and Bayan Obo (China) 2%.

Notably, Machinga also has a very high ratio of the high value element dysprosium (Dy), at 3.3-3.7% Dy_2O_3 :TREO. Most major REE deposits worldwide, with the exception of Nechalacho (average ~2% Dy_2O_3 :TREO), have much lower dysprosium oxide ratios between 0.1 and 0.5%.

4. **REO Prices** – the significance of the HREO mineralisation at Machinga is made evident by the price differentials between the HREO and LREO prices, set out below in Table 2. The dysprosium oxide spot price has seen significant appreciation in the last 6 months, rising in the order of 50%.

Rare Earth Oxide		US\$/kg*
¹ Lanthanum Oxide – La ₂ O ₃	light	6.30
³ Cerium Oxide – CeO ₂	light	5.85
¹ Praseodymium Oxide – Pr ₂ O ₃	light	28.60
¹ Neodymium Oxide – Nd ₂ O ₃	light	26.70
¹ Samarium Oxide – Sm ₂ O ₃	light	3.40
³ Europium Oxide – Eu ₂ O ₃	heavy	524.00
² Gadolinium Oxide – Gd ₂ O ₃	heavy	7.86
¹ Terbium Oxide – Tb ₂ O ₃	heavy	490.00
³ Dysprosium Oxide - Dy ₂ O ₃	heavy	<u>197.50</u>
² Holmium Oxide – Ho ₂ O ₃	heavy	25.38
² Erbium Oxide – Er ₂ O ₃	heavy	25.50
² Thulium Oxide - Tm ₂ O ₃	heavy	<u>790.00</u>
² Ytterbium Oxide – Yb ₂ O ₃	heavy	<u>155.30</u>
² Lutetium Oxide – Lu ₂ O ₃	heavy	238.00
² Yttrium Oxide – Y ₂ O ₃	heavy	10.01

 Table 2: Summary of +99% Purity Individual REO Prices

¹Sourced from Lynas Corporation, February 2010; ²Sourced from Stans Energy Corporation, December 2009; ³Sourced from <u>www.asianmetal.com</u> – spot prices, April 2010

*Note: Prices quoted are, for comparative reasons, +99% pure, single rare earth oxides. However, it is unlikely the project would produce +99% single REOs, but rather some lower value intermediate concentrate such as REE carbonate or HREO and LREO carbonate concentrates. Primary rare earth operations typically have recoveries in the range of 50% to 75%

- 5. **Dysprosium Market Size** The global dysprosium oxide market is projected to be 1,600 tonnes in 2010. This is comparable to the global tantalum oxide market in terms of volume (2,400 tonnes, sold in both concentrate and oxide form) and value (approximately equal).
- 6. **End-User Demand** JOGMEC (Japan Oil, Gas and Metals National Corporation) recently reconfirmed, for example, at a rare earth conference in Perth, Australia that securing rare earths deposits is a major priority for the Japanese government, and that diversifying supply of rare earths is an "urgent matter", away from Chinese suppliers.

China controls around 95% of rare earth oxide production, and talk last year that the economic giant was considering restricting exports sparked concern in other manufacturing economies, as rare earth metals are vital to the production of many high-tech products – including hybrid vehicles, mobile phones, computers, television and even smart missiles.

JOGMEC has four exploration projects currently underway, and has advised that similar deals are likely to continue, as Japanese authorities continue to seek security of supply for rare earths. JOGMEC is primarily exploration focused, and would likely hand over projects to commercial partners for further development as they approach the feasibility stage.

3. Mount Muambe Fluorite Project – Mozambique

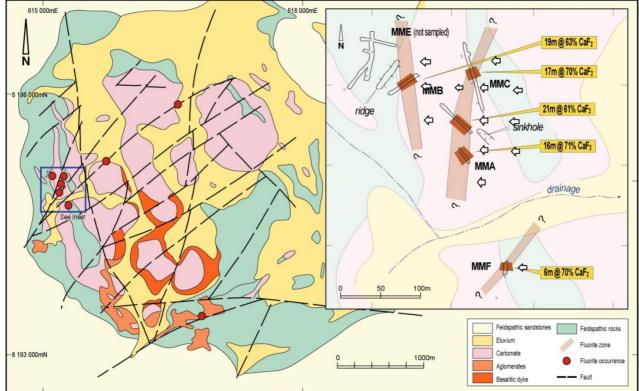
3.1. Introduction

The Company is making good progress toward beginning its maiden drill program on the Mount Muambe Fluorite Prospect in Mozambique. During the quarter the Company completed the following activities:

- 2 separate field visits to the project by Globe geologists
- Planning and surveying of proposed ~6km long access road
- Quotations from road-building contractors have been received and are being evaluated
- Planning of 1,000m of drilling (Figure 2)
- Quotations from drilling contractors have been received and are being evaluated
- Completion of independent statutory environmental study necessary for environmental permitting for road and drill-pad construction
- Historical data set purchased from geological consultancy that conducted previous work programs on the property

The Company expects to receive environmental permits by mid-May, with road construction to start immediately therefafter. Globe expects to begin its drilling program on this exciting target toward the end of May, 2010.

Figure 2: Geology of the Mount Muambe Carbonatite and Map of Re-Sampled Historical Trenches and Proposed 2010 Drilling Locations



Drilling locations and azimuth are indicated by the arrow symbols.

4. Appointment of CFO/Company Secretary

Mr. Brad Wynne was appointed as the Chief Financial Officer and Company Secretary of the Company, effective from 4th March 2010.

Brad is highly experienced in the mining, oil and gas and engineering industries. He has held senior financial management positions in the mining sector with companies including Xstrata Zinc and St Barbara Mines, and was previously Chief Financial Officer and Company Secretary with GME Resources.

Mr. Wynne replaces Mr. Stephen Hewitt-Dutton, who was interim Company Secretary. The Company thanks Mr. Hewitt-Dutton for his effort and contribution.

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. Mine life will be in excess of 20 years.

In August 2009 Globe announced that Thuthuka Group Limited (Thuthuka), a South African 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 is earning up to 80% interest in the Machinga Rare Earth Project in southern Malawi from Resource Star Limited (ASX: RSL). The Company has also commenced exploration work on the Mount Muambe Fluorite Project in Mozambique, in which it can earn up to a 90% interest from Mozambican company Bala Ussokoti. 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 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.