



### Globe confirms very high grade Memba rock-chip results

Globe Metals & Mining (“**Globe**” or “**the Company**”; ASX: GBE) wishes to confirm the very high grade titanium grades returned from the recently acquired titanium-vanadium-iron (Ti-V-Fe) project at Memba, Mozambique. (See attached release).

As reported on 11 November 2011, Globe announced it had entered into a new joint venture in a high-grade Ti-V-Fe project (refer to ASX release overleaf). As part of the Company’s strict internal quality assurance and quality control guidelines, and in light of the spectacular results reported from the Project’s initial rock-chip sampling program, additional verification of results was sought from Genalysis Laboratory Services (Genalysis) prior to their release. Subsequent to the initial release, the Company received a number of queries in relation to the very high titanium grade; the Company can reaffirm their veracity.

Separate assay splits from the pulps were taken and re-analysed at Genalysis using the XRF total fusion method. Receipt of the re-submitted batch confirmed the impressive grades of the Memba Ti-V-Fe Project (Table1).

**Table 1: Confirmed significant Ti-V-Fe rock-chip results, Memba.**

Sample ID	TiO <sub>2</sub> %		Fe%		V <sub>2</sub> O <sub>5</sub> %	
	Original	Umpire	Original	Umpire	Original	Umpire
N004139	48.78	49.16	35.36	35.61	0.381	0.385
N004145	47.69	48.06	34.56	34.81	0.330	0.333
N004165	45.97	46.15	33.52	33.57	0.349	0.351
N004141	43.89	43.76	35.38	35.19	0.411	0.409
N004158	1.41	1.39	67.17	67.11	0.163	0.164
N004150	1.12	1.13	66.47	66.89	0.211	0.214



## About Globe Metals & Mining

Globe is an African-focused resource company, specialising in rare metals such as niobium, tantalum and rare earths, as well as other commodities including fluorite, uranium and zircon. Its main focus is the multi-commodity Kanyika Niobium Project in Malawi, Africa, which will commence production of ferro-niobium in 2014, a key additive in sophisticated steels.

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, and the Company can earn up to a 90% interest in the Mount Muambe REE - Fluorite Project in Mozambique. Initial drill programs on both projects were undertaken in 2010.

Globe's corporate head office in Perth, Australia is supported by regional offices in Lilongwe, Malawi, as well as Maputo and Tete, Mozambique. The Company has been listed on the ASX since December 2005 (Code: GBE).

In April 2011, the Company entered into a strategic partnership with East China Minerals Exploration and Development Bureau (ECE), a Chinese State Owned Enterprise with extensive mining operations in China and overseas. ECE is now the largest shareholder in Globe, and a key partner for Globe's growth ambitions in Africa.

*Competent Person: The contents of this report relating to geology and exploration results are based on information reviewed by Dr. Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director of 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 reviewed by him in the form and context in which they appear.*

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## Globe acquires highly prospective titanium-vanadium-iron project at Memba, Mozambique

Globe Metals & Mining (“**Globe**” or “**the Company**”; ASX: GBE) is pleased to announce it has entered into a new joint venture in a high-grade titanium-vanadium-iron (Ti-V-Fe) project at Memba in Nampula Province, Mozambique.

### Highlights

- **Globe to acquire up to 90% through staged exploration**
- **Potential for a large, high-grade Ti-V-Fe deposit**
- **Very high grades of titanium with additional vanadium were returned from rock-chip samples taken in Globe’s recent due diligence program:**
  - **Average 47% titanium dioxide (TiO<sub>2</sub>)**
  - **Average 0.38% vanadium oxide (V<sub>2</sub>O<sub>5</sub>)**
- **Mineralised zone ranges in thickness from 6m - 20m and has a strike length of more than 10km**
- **Additional, separate high-grade magnetite zone identified with two samples averaging 66.8% Fe**

The joint venture agreement with Mihandzu Minerai SA allows Globe to earn up to 80% interest in the Memba licence over five years through staged expenditure on exploration programs, with an option to purchase an additional 10% after five years.

Globe’s Managing Director, Mr. Mark Sumich, commented “the Company is excited to be involved in this project, and it suits our exploration model perfectly: we are already operating in Mozambique, the potential upside on the project is enormous and the initial ‘look and see’ phase 1 exploration spend is negligible.”



## Overview

The rock-chip sampling to date has shown that the mineralised horizon is very high-grade, being almost pure ilmenite. Additionally, a number of very high-grade, near-pure magnetite samples with Fe values averaging 66.8% were returned and highlight additional potential for iron mineralisation in the area. Further, both the ilmenite and magnetite samples are enriched in vanadium, a potentially valuable by-product.

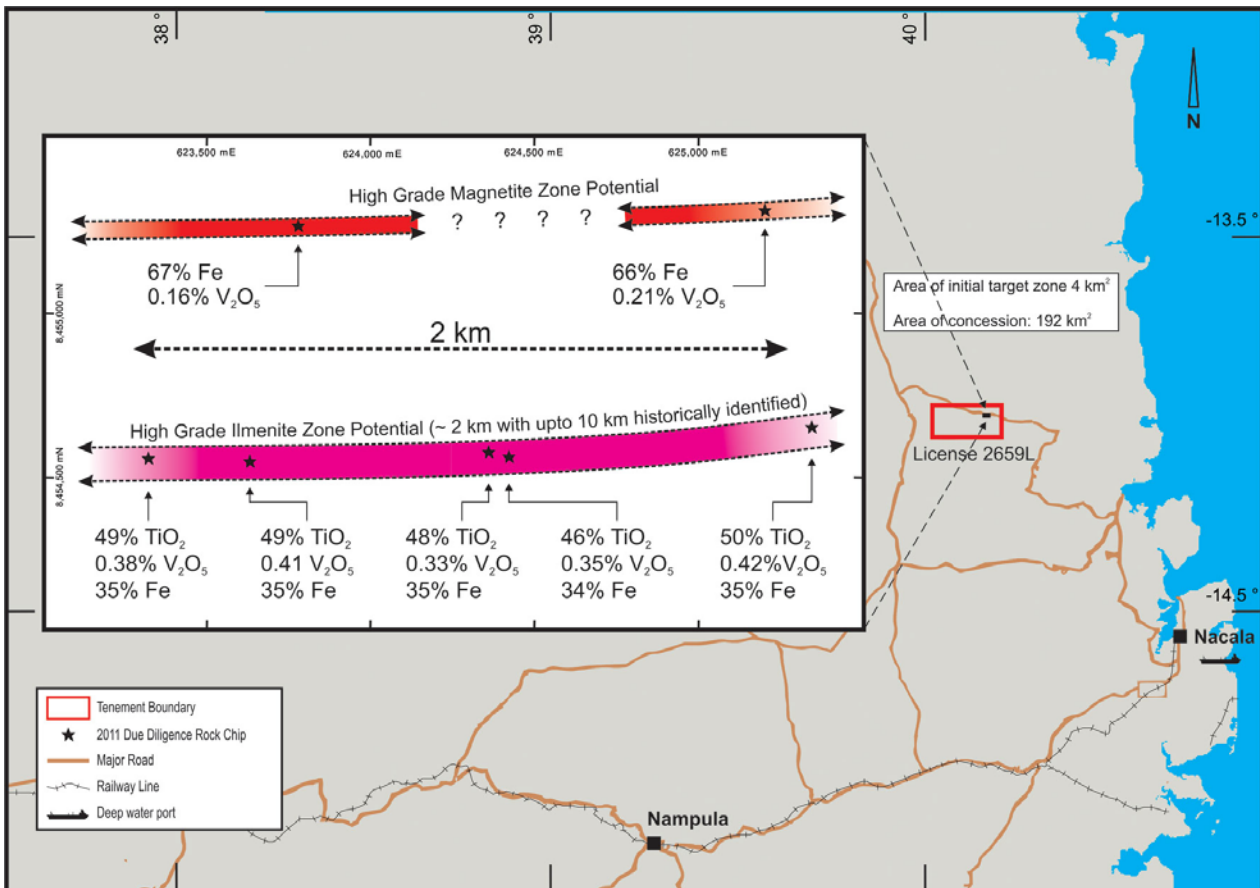


Figure 1: Due diligence rock-chip results indicating high-grade ilmenite and magnetite zones.

## Geology and mineralisation

The Memba licence area is dominated by Proterozoic gneissic rocks of various compositions that have an overall E-W strike and moderate northerly dip. A historical report by a Serbian geological team documented an outcropping ilmenite (FeTiO<sub>3</sub>) unit over a 10km strike length with widths ranging between 6m-20m.

Recent due diligence field work by Globe's geological team located the mineralised layer at numerous points within a central 2km portion of the 10km long unit. In outcrop, the mineralised layer appeared to contain >90% ilmenite with some minor quartz and iron oxides. This was supported by the assays for all five of the rock-chip samples taken from this layer showing an average titanium grade of 47% TiO<sub>2</sub>, which indicates an average ilmenite content of 92% (Table 1). Additionally, the layer showed highly elevated grades of vanadium, averaging 0.38% V<sub>2</sub>O<sub>5</sub>. All five samples were also remarkably consistent in their titanium and vanadium grades.

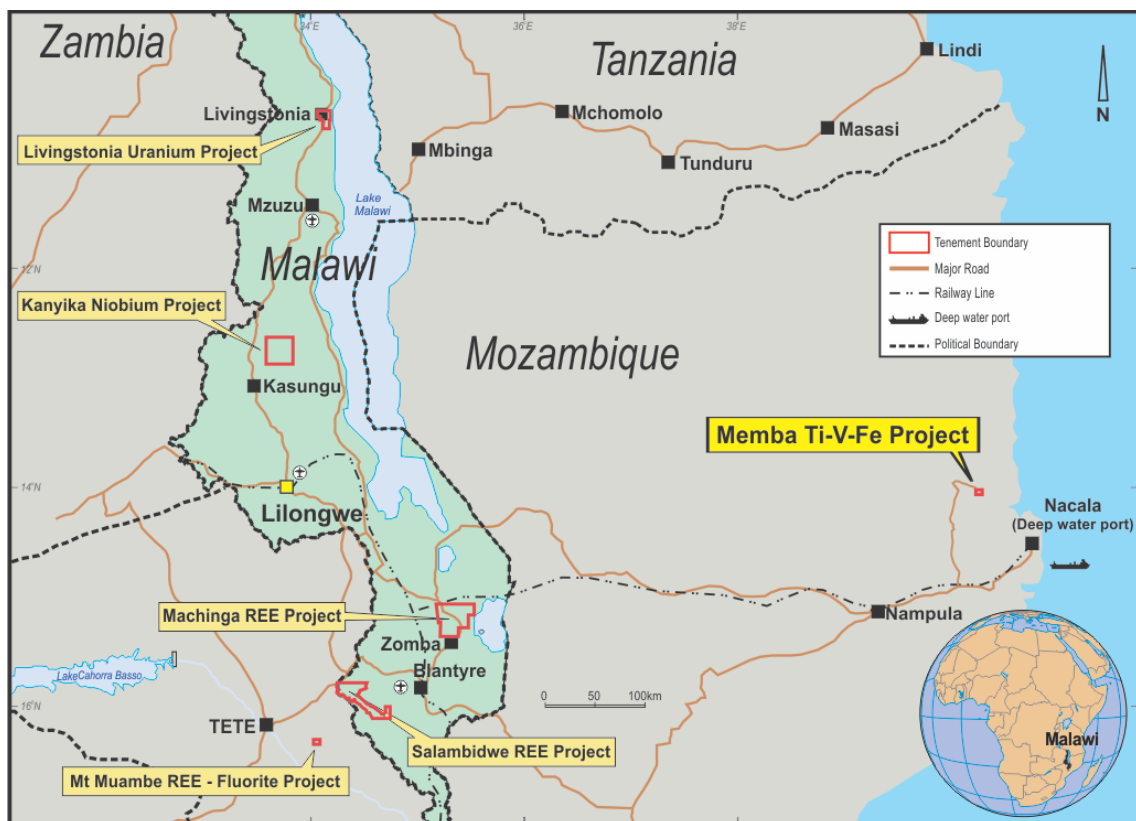
Globe also located a poorly exposed, high-grade magnetite layer approximately 1.5km to the north of the ilmenite unit. The thickness and continuity of the magnetite unit(s) were not able to be determined due to poor exposure and time constraints. However, two rock-chip samples taken approximately 2km apart both returned high-grade iron, averaging 66.8% Fe, as well as anomalous vanadium, averaging 0.19% V<sub>2</sub>O<sub>5</sub>.

Overall, the project appears to have remarkable and unique mineralisation. Initial results indicate consistent high-grades and the potential for a 10km strike length of the main ilmenite layer. Additional potential for magnetite mineralisation warrants further investigation, whilst the potential for vanadium is also significant.

**Table 1: Significant Ti-V-Fe rock-chip results, Memba.**

Sample ID	Easting	Northing	TiO <sub>2</sub> %	Fe%	V <sub>2</sub> O <sub>5</sub> %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P%	S%
N004154	625341	8454654	<b>50.0</b>	35.9	<b>0.42</b>	0.4	0.9	0.003	X
N004139	623319	8454558	<b>48.8</b>	35.4	<b>0.38</b>	0.5	1.6	0.002	X
N004145	624357	8454574	<b>47.7</b>	34.6	<b>0.33</b>	0.4	3.2	0.004	X
N004165	624420	8454562	<b>46.0</b>	33.5	<b>0.35</b>	0.7	5.0	0.004	X
N004141	623626	8454549	<b>43.9</b>	35.4	<b>0.41</b>	0.6	4.4	0.003	X
N004158	623773	8455267	1.4	<b>67.2</b>	0.16	1.3	1.1	0.007	X
N004150	625198	8455312	1.1	<b>66.5</b>	0.21	1.5	1.7	0.004	0.002

\*A total of 25 rock-chip samples were taken in the program, of which the seven reported represent mineralised zones identified in the field. 'X' denotes below detection limits.



**Figure 2: Project location plan.**

## About the Agreement

Timing	Requirement	Globe's ownership
Year 1	Spend US\$200,000 on exploration	20%
Year 2	Spend an additional US\$500,000 on exploration	51%
Year 3	Define and report JORC compliant mineral resource	75%
Year 5	Issue a Feasibility Study within 24 months of the end of Year 3	80%
Any time after Year 5	Option to purchase a further 10% interest in the Tenement for a mutually agreed amount	90%

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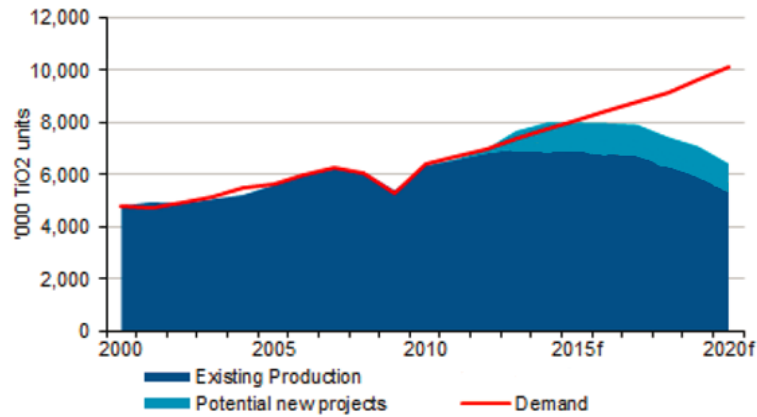
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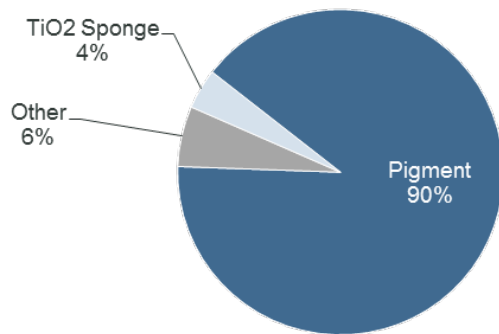
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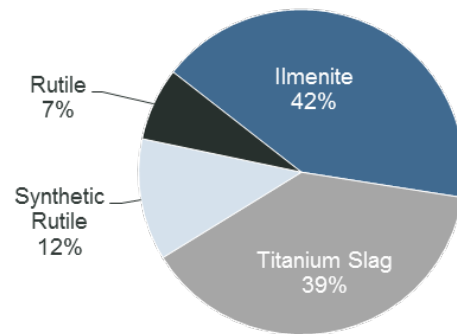
## Appendix A - Titanium markets and prices



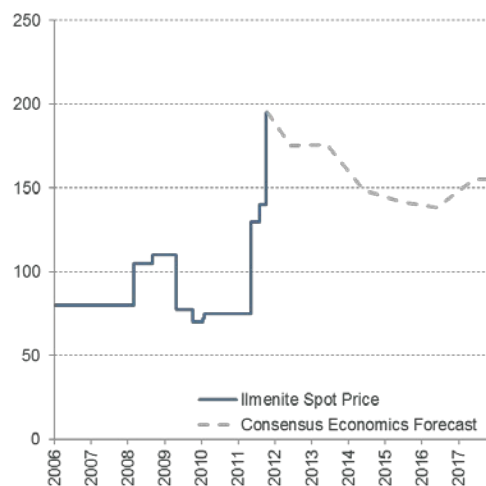
\*Figure 1: TiO<sub>2</sub> Forecast demand / supply



\*Figure 2: Feedstock consumption



\*Figure 3: Supply by product



\*\*Figure 4: Ilmenite price, min 54% TiO<sub>2</sub> (US\$/t FOB Europe, nominal)

\*Source: Figure 1, 2, 3 - Iluka Mineral Deposits Limited, \*\*Source: Figure 4 - Bloomberg

Project	Location	Owner	Resources				End Products
			Ore (Mt)	Grade (% Fe)	Grade (% TiO <sub>2</sub> )	Grade (% V <sub>2</sub> O <sub>5</sub> )	
Lac Tio	Quebec, Canada	Rio Tinto Fer et Titane	125	39%	34%	0.41%	<ul style="list-style-type: none"> <li>SORELSLAG (80% TiO<sub>2</sub>)</li> <li>UGS (95% TiO<sub>2</sub>)</li> <li>RTCS (90% TiO<sub>2</sub>)</li> <li>Sorelmetal, Sorelsteel and iron and steel powders</li> </ul>
Tellnes	Rogaland, Norway	Titania AS (Kronos Worldwide)	400	?	18%	?	<ul style="list-style-type: none"> <li>Ti concentrate (45% TiO<sub>2</sub>)</li> <li>Fe concentrate (60% Fe)</li> <li>Sulphide concentrate (5% Ni, 2% Cu, 0.7% Co and 30% S)</li> </ul>
Various	Sichuan, China	China VTM Mining Co Ltd	419	25%	10%	0.21%	<ul style="list-style-type: none"> <li>Fe concentrate</li> <li>Fe pellets</li> <li>Medium and high grade Ti concentrates</li> </ul>
Balla Balla	Pilbara, WA	Atlas Iron	456	45%	14%	0.66%	<ul style="list-style-type: none"> <li>Fe concentrate (57.7% Fe, 0.8% V<sub>2</sub>O<sub>5</sub>, 14% TiO<sub>2</sub>)</li> <li>Ti concentrate (45% TiO<sub>2</sub>)</li> <li>Ferro-vanadium</li> </ul>
Barrambie (Eastern)	Meekatharra, WA	Reed Resources	33	29% <sup>1</sup>	20%	0.49%	<ul style="list-style-type: none"> <li>Ti slag (70% TiO<sub>2</sub>)</li> <li>Semi steel</li> <li>V<sub>2</sub>O<sub>5</sub> slag (25% V<sub>2</sub>O<sub>5</sub>)</li> <li>AMV</li> </ul>

**Figure 5: Hard-rock titanium project benchmarking**

Source: Company reports, Intierra

<sup>1</sup>: Fe<sub>2</sub>O<sub>3</sub> grade of 41% converted to Fe grade