

# **ASX RELEASE**

## 30 January 2015

#### About Globe

- Globe Metals & Mining Limited is a Perth based company listed on Australian Stock Exchange (ASX)
- The Kanyika Niobium Project is regarded as the 5<sup>th</sup> largest undeveloped niobium resource in the world.
- The Kanyika Niobium Project is host to a 2004 JORC compliant Mineral Resource Estimate of 68.3M tonnes of  $Nb_2O_5$  using a 1,500 ppm  $Nb_2O_5$  cut-off (refer ASX announcement dated 7 January 2013).

#### **Investment Summary**

• 100% interest held on projects in Malawi (Africa) including niobium, graphite and rare earths

#### **Directors and Management**

Ms Alice Wong - Non-Executive Chairperson Mr Alistair Stephens - Managing Director Mr William Hayden - Non-executive Director Mr Bo Tan - Non-executive Directors Mr Alex Ko - Non-executive Directors

#### **Capital Structure**

Shares on Issue: 469,729,062 Options on Issue: 7,800,000 (various) 52 week range: \$0.03 - \$0.07 Last Price (29/1/2015): \$0.03 Market Capitalisation: \$14.092 million

#### **Substantial Shareholders**

Apollo Metals : 52.37% Ao-Zhong International Minerals: 25.15%

#### Contact

Alistair Stephens Managing Director <u>info@globemm.com</u> T: +61 (0)8 9327 0700

## December Quarter 2014 Review of Operations

## Highlights

#### Kanyika Niobium Project

• Globe applied for a Mining Licence for the Kanyika Niobium Project in December 2014.

#### **Chiziro Graphite Project**

- Trenching assays confirming greater than six kilometres strike of high-grade graphite mineralisation in two trends, referred to as the "Main Trend" and "Musinda Trend".
- Best Total Graphitic Carbon (TGC) intersections from trenching include:
  - o 6m @ 15.0% TGC
  - o 7m @ 12.2% TGC
  - o 5m @ 16.3% TGC
- Rock chip sampling confirms two new graphite Prospects within the Chiziro Project area, named "Chimutu East" and "Katengeza".

#### **Corporate & Finance**

- Cash at bank and in term deposits at 31 December 2014 of \$17.475 million.
- The Company's AGM was held on 28 November 2014, with Mr Alex Ko being re-elected as a Director.
- Mr Jinbing Tian ceased as a director on 28 November 2014.
- Ms Shasha Lu resigned as a director effective 18 November 2014.
- A total of 1,300,000 unlisted options expired unexercised during the quarter.



Globe Metals & Mining Limited (ASX Code: GBE) ("Globe" or "the Company") announces its activities report for the quarter ended 31 December 2014.

#### 1. Overview of Activities

Globe's focus of operations is in Malawi in southeast Africa of which the Company's most advanced project is the Kanyika Niobium Project (KNP). The KNP is considered a significant niobium (Nb) and tantalum (Ta) resource. These metals are key additives in steel manufacture, electronics and ceramics.

In addition to KNP, Globe has three other exploration projects in Malawi as follows:

- Chiziro Graphite Project in 2014 Globe completed 6,266 metres of trenching at its Chimutu Prospect and defined a six kilometres strike of high-grade graphite mineralisation. Mapping and rock chip sampling has located additional prospects. Initial preliminary metallurgical test work indicates encouraging recovery results.
- Machinga Rare Earths Project is an early stage exploration project with soil sampling programmes in 2013 and 2014 field seasons outlining substantial rare earth element (REE) and Nb-Ta anomalism that will require further exploration.
- Salimbidwe Rare Earths is an early stage exploration Project.

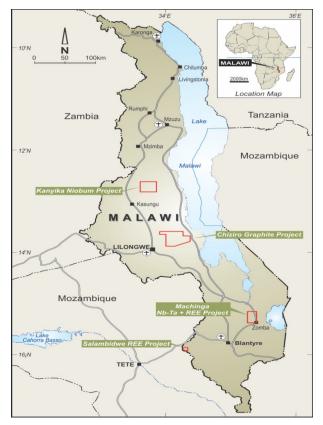


Figure 1- Malawi Projects Location Map.



## 2. Kanyika Niobium Project

#### 2.1 Overview

Globe has been undertaking exploration and resource development activities at Kanyika since 2007 and in 2011 made the decision to proceed to undertaking a Feasibility Study (DFS).

An updated Mineral Resource has been completed and on 7 January 2013 Globe made a release to the ASX stating a mineral resource inventory of 68.3M tonnes of  $Nb_2O_5$  using a 1,500 ppm  $Nb_2O_5$  cut-off (refer Table 1 & 2 below). No additions or changes have been made to this resource statement and it complies with the 2004 JORC guidelines for mineral resource statements as made in the release of 7 January 2013, (refer to the "Competent Persons Statement" page 17).

Category	Million Tonnes	Nb₂O₅ ppm	Ta₂O₅ ppm	
Measured	5.3	3,790	180	
Indicated	47.0	2,860	135	
Inferred	16.0	2,430	120	
Total	68.3	2,830	135	

#### Table 1: Mineral Resource Estimate for Kanyika using a 1,500 ppm Nb<sub>2</sub>O<sub>5</sub> lower cut

#### Table 2: Mineral Resource Estimate for Kanyika using a 3,000 ppm $Nb_2O_5$ lower cut

Category	Million Tonnes	Nb₂O₅ ppm	Ta₂O₅ ppm
Measured	3.4	4,790	220
Indicated	16.6	4,120	190
Inferred	2.8	4,110	190
Total	22.8	4,220	190

In addition to on-going exploration activities, the Company has completed a feasibility optimisation study. The company's Mining Licence application is in progress.



#### **2.2** Development Agreement (DA) Negotiations

Globe held Development Agreement (DA) negotiations with representatives of the Government of Malawi during December 2014.

In December 2014 a development agreement meeting was held for the benefit of the new government officials and senior government personnel after the change in government in May. At this meeting these officials were brought up to date with the DA progress as part of the ongoing DA negotiation process. Negotiations will continue in 2015.

#### 2.3 Kanyika Definitive Feasibility Study

Globe has progressed discussions with several groups interested in purchasing niobium and tantalum products from Kanyika, with the view to develop long-term product off-take agreements.

The Kanyika Technical Economic Return (TER) model has been revised to include results from the 2014 Kanyika concentrator pilot plant programme. Currently the TER model remains incomplete until costed product off-take agreements are established.

#### 2.4 Mining Licence Application

The Kanyika Exclusive Prospecting Licence (EPL0188) expired at the end of December 2014, consequently Globe has applied for a Mining Licence (ML) to cover the Kanyika Nb-Ta resource, and all areas covering proposed mine infrastructure and prospective exploration areas.

The ML application was submitted to the Ministry of Mines in December 2014 and Globe is awaiting Ministerial approval.

#### 2.5 Kanyika Exploration Activities During This Quarter

No field work was completed during the December Quarter at Kanyika.

Assays were received for 208 soil samples collected during the September Quarter from south of the Kanyika Nb-Ta resource but there was no apparent Nb or Ta anomalism.

In addition, 121 soil samples from the same area were assayed for rare earths and zircon with no significant assays returned.



## 3. Chiziro Graphite Project

Exploration activity continued at Chiziro throughout the December Quarter up to the Christmas break, and involved geological mapping and reconnaissance rock chip sampling in the main.

All the Chimutu Prospect trench assays were completed during the Quarter and these assays further demonstrated the potential of the Prospect, with greater than six kilometres strike of high-grade graphite mineralisation now demonstrated.

## 3.1 Trenching

Assays have been completed for the following trenches at the Chimutu Prospect; CZTR001 to CZTR011, CZTR014 to CZTR016 & CZTR005A with encouraging graphite mineralised intersections based on a grade greater than 5% Total Graphitic Carbon (TGC) being returned.

Trench CZTR004 was also extended to the west to cover additional graphite mineralisation and the results of that extension are also included here. The trenching has demonstrated graphite mineralisation over at least 6,000 metres strike length and widths in excess of 250 metres at greater than 5% TGC within two mineralised trends named the Main and Musinda Trends respectively. Furthermore, the Main Trend mineralisation remains open-ended to the northeast and the Musinda Trend mineralisation remains open-ended to the south.

The results in CZTR005A would indicate that there is potentially a third graphite mineralised trend to the north of, and parallel to, the Main Trend. This requires further trenching to confirm.

Within the 5% TGC envelope are significantly higher grade intersections (>10%) confirming the high grade tenor of the mineralisation.



Figure 2 below illustrates where the Chimutu trenches are located within Chiziro project area and the location of the Main and Musinda Trends.

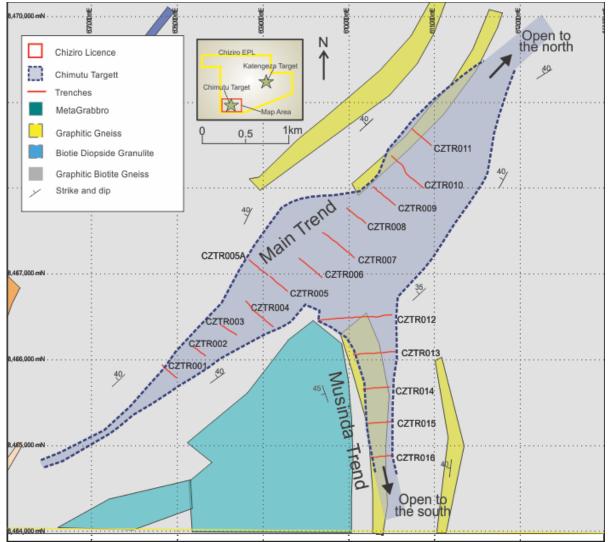


Figure 2: Plan showing location of Chimutu Prospect trenches within the Chiziro Project area.



Figures 3 & 4 below show the locations of the TGC intersections within the respective trenches, including the high-grade intersections.

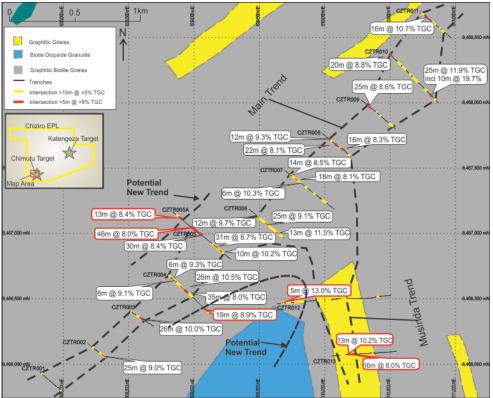


Figure 3: Plan showing location of the Main Trend at Chimtu illustrating the high-grade TGC intersections.

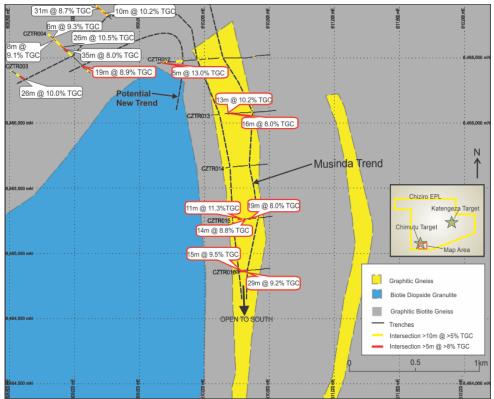


Figure 4: Plan showing location of the Musinda Trend at Chimtu illustrating the high-grade TGC intersections.



Tables 3 & 4 below summarise the high-grade and >5% TGC intersections.

Table 3: Summary of the high-grade TGC intersections at the Main & Musinda Trends.	
ruble of building of the high grude roe intersections at the main a masinal rienasi	

Trench Identity	Selected intervals	s of the best graphite	mineralisation (in 9	«тGC)	
CZTR002	3m @ 13.9%		-	-	
CZTR003	9m @ 13.7%	3m @ 10.7%			
CZTR004	4m@ 11.0%	4m @ 11.9%	15m @ 11.0%	5m @ 12.4%	5m @10.1%
CZTR005	3m @ 12.2%	4m @11.3%	4m @11.7%	4m @ 12.7%	
CZTR005A	3m @ 12.3%	3m @ 13.1%	5m @ 11.7%		
CZTR006	13m @ 11.5%				
CZTR007	4m @ 12.0%	6m @ 10.3%			
CZTR008	4m @ 11.8%	5m @ 11.2%	4m @ 14.5%	5m @ 16.3%	
CZTR009	7m @ 10.7%				
CZTR010	25m @ 11.9% incl	luding 10m @ 19.7%			
CZTR011	8m @ 14.0%				
CZTR012	3m @ 11.5%	5m @ 13.0%			
CZTR013	3m @13.7%	4m @ 12.6%	3m @ 13.8%	7m @ 12.2%	
CZTR015	11m @ 11.3%	6m @ 11.9%			
CZTR016	7m @ 11.9%	6m @ 15.0%			



#### Table 4: Summary of all Chimutu Prospect Trench Intersections >5% TGC

Trench	Easting	Northing	Azimuth	Length	Intersectio	n	Interval	Grade TGC	Highest assay	Trend
No			(TN)	m	From (m)	To (m)	(m)	(%)	(%)	
C7TD001	607025	0465041	122.0	225.0	12	24	12	5.4	8.6	A 4 min
CZTR001	607825	8465941	132.0	225.0	202	224	22	5.2	7.4	Main
					45	56	11	5.7	11.6	
CZTR002	608187	8466155	127.0	180.0	117	179	62	6.3	19.5	Main
					incl 148	173	25	9.0		
					13	20	7	5.1	10.4	
CZTR003	608505	8466409	123.0	222.0	67	87	20	5.0	10.6	Main
					114	140	26	10.0	24.9	
					7	25	18	7.7	12.6	
					47	71	24	7.1		1
					incl 47	53	6	9.3		1
					incl 62	70	8	9.1		1
	600 <b>-</b> 55	0.4665555	100.5		89	158	69	7.3	18.5	1
CZTR004	608799	8466685	133.0	440.0	incl 129	155	26	10.5		Main
					174	209	35	8.0	13.8	-
					212	244	32	7.0	14.9	
					364	383	19	8.9	11.9	
					409	422	13	7.1	10.0	
					6	36	30	8.4	18.8	_
					139	250	111	6.6	16.2	
					incl 157	188	31	8.7		
CZTR005	609034	8467007	130.0	324.0	incl 211	221	10	10.2		- Main
					254	266	12	7.0	23.2	
					277	287	10	5.6	13.4	-
					30	43	13	6.2	7.8	
CZTR005A	608838	8467164	129.0	253.0	62	75	13	8.4	18.0	Main
					201	247	46	8.0	14.1	-
					83	336	253	5.4	20.9	
			100 -		incl 83	95	12	9.7		1
CZTR006	609419	8467187	130.0	350.0	incl 214	239	25	9.1		Main
					incl 279	292	13	11.5		1
					57	161	104	5.4	18.3	
					incl 75	89	14	8.5		1
					incl 109	127	18	8.1		1
CZTR007	609693	8467482	128.0	482.0	incl 155	161	6	10.3		Main
					202	233	31	5.0	10.7	1
					278	293	15	7.5	16.2	1
					370	397	27	6.2	16.6	1



Trench	Easting	Northing	Azimuth	Length	Intersectio	n	Interval	Grade TGC	Highest assay	Trend		
No	Ū		(TN)	m	From (m)	To (m)	(m)	(%)	(%)			
					73	85	12	9.3	13.6			
					89	103	14	6.9	10.5			
6770000	600075	0467760	120.0	200.0	137	159	22	8.1	14.4			
CZTR008	609975	8467769	129.0	290.0	173	188	15	7.5	17.8	Main		
					201	217	16	8.3	18.1			
					268	280	12	7.9	15.4			
					72	97	25	8.6	17.4			
C7TD000	C10270	0460000	120.0	245.0	145	158	13	7.0	11.4	1.4 min		
CZTR009	610279	8468022	130.0	345.0	186	193	7	5.3	9.3	Main		
					272	326	54	5.7	10.8			
					2	22	20	8.8	18.3			
					99	124	25	6.9	11.3	1		
					138	165	27	7.6	13.2			
	610493				212	235	23	6.9	12.2			
CZTR010		8468377	135.0	535.0	266	309	43	6.0	8.5	Main		
					397	412	15	8.0	16.6			
							438	463	25	11.9	31.5	
					incl 451	461	10	19.7		-		
					476	486	10	7.2	10.2			
					19	30.5	11.5	7.4	14.4	-		
					50	66	16	10.7	23.1			
CZTR011	610729	8468694	129.0	312.0	127	150	23	7.5	14.5	Main		
					196	207	11	7.1	10.5			
					218	239	21	6.5	15.8			
					39	59	20	7.9	16.8			
					incl 43	48	5	13.0		-		
					66	109	43	6.2	12.6	-		
C7TD010	c000000	9466469	005	000.0	131	206	75	6.6	13.9	NA		
CZTR012	609636	8466460	085	900.0	316	354	38	6.9	17.4	Musinda		
					374	401	27	7.9	14.2	-		
					487	521	34	6.2	14.0			
					758	779	21	6.2	12.1			
					63	94	31	7.7	17.9			
C7TD043	610053	9466064	096	504.0	130	143	13	10.2	18.0	Musical-		
CZTR013	610052	8466061	086	504.0	156	172	16	8.0	13.9	Musinda		
					244	254	10	5.5	8.6			
C7TD044	C101C0	0465656	005	222.0	37	58	21	7.3	13.8	NA		
CZTR014	610160	8465656	085	332.0	145	156	11	6.0	9.7	Musinda		
C7TD045	(10342	0465350	005	216.0	10	73	63	7.0	15.3	NAustral		
CZTR015	610213	8465258	085	316.0	incl 40	51	11	11.3		Musinda		



Trench	Easting	Northing	Azimuth Length				Interval	Grade TGC	Highest assay	Trend		
No					(TN)	m	From (m)	To (m)	(m)	(%)	(%)	
					incl 57	71	14	8.8				
					87	106	19	8.0	15.0			
					181	193	12	5.3	9.9			
					16	31	15	9.5	14.8			
CZTR016	610250	8464860	084	256.0	35	64	29	9.2	17.6	Musinda		
					incl 42	48	6	15.0				

NB: Intersections shown in Italics were reported in the September Monthly Report.

#### 3.2 Mapping & Sampling

Geological mapping and reconnaissance rock chip sampling programmes were carried out at other previously identified graphite prospect areas, named Chimutu East and Katengeza, as well as in close proximity of the Chimutu Prospect.

A total of 121 rock chip samples have been collected, 95 from the Chimutu and Chimutu East Prospects and a further 26 from the Katengeza Prospect.

By the end of the December Quarter, 27 assays had been returned of which 13 assayed greater than 10% TGC, with a highest assay of 21.1% TGC. A further 94 assay results are pending.

Figures 5 & 6 below illustrate the rock chip sample locations and TGC assays of the samples collected and Table 5 summarises the results to date.

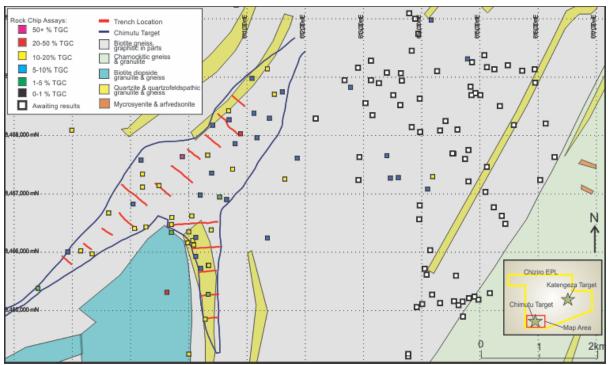


Figure 5: Plan showing location of rock chip samples and TGC assay values from the Chimutu and Chimutu East Prospect areas.



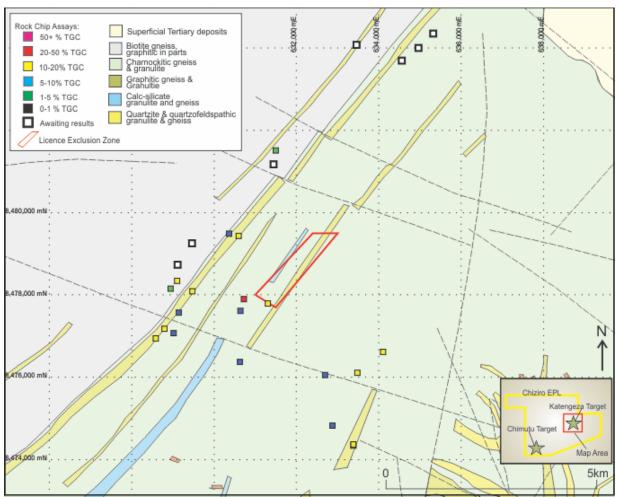


Figure 6: Plan showing location of rock chip samples and TGC assay values from the Katengeza Prospect ares.

Assay Range (% TGC)	No of Samples Katengeza	No of Samples Chimutu East
0-2	0	0
2-5	0	0
5-10	5	9
10-20	7	4
>20	1	1
Total	13	14

Table 5: Summary of rock chip TGC assay results collected in the December Quart	er.
· · · · · · · · · · · · · · · · · · ·	



#### 4. Machinga Rare Earths Project

A follow up soil sampling programme comprising 58 samples was completed and despatched in September, with the results being returned in October 2014. The object of the programme was to extend the Nb-Ta and Total Rare Earth Oxides (TREO) anomalism to the west of the existing coverage. The assay results indicate that the anomalism for both Nb-Ta and TREOs has now been defined. The results of all the soil sampling completed to date will be reviewed during the first quarter of 2015 and follow-up exploration is to be planned. Figures 7 & 8 illustrate the total soil sampling coverage and results for the respective commodity groups.

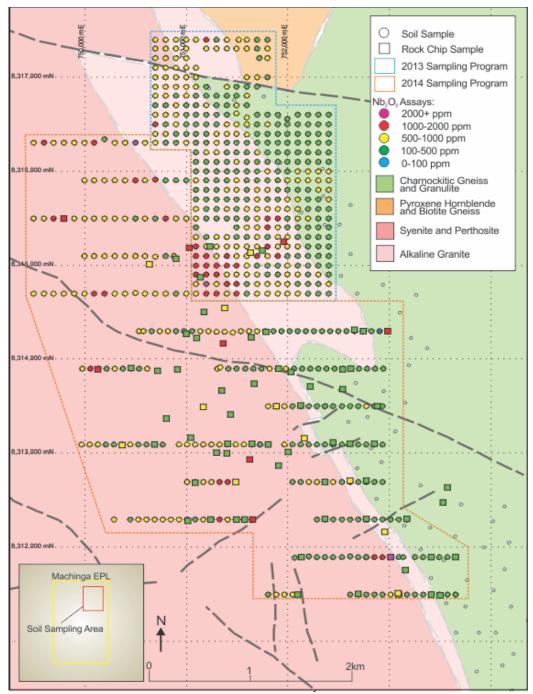


Figure 7: Summary of soil sampling assay results for  $Nb_2O_5$  completed at Machinga during 2013 & 2014.



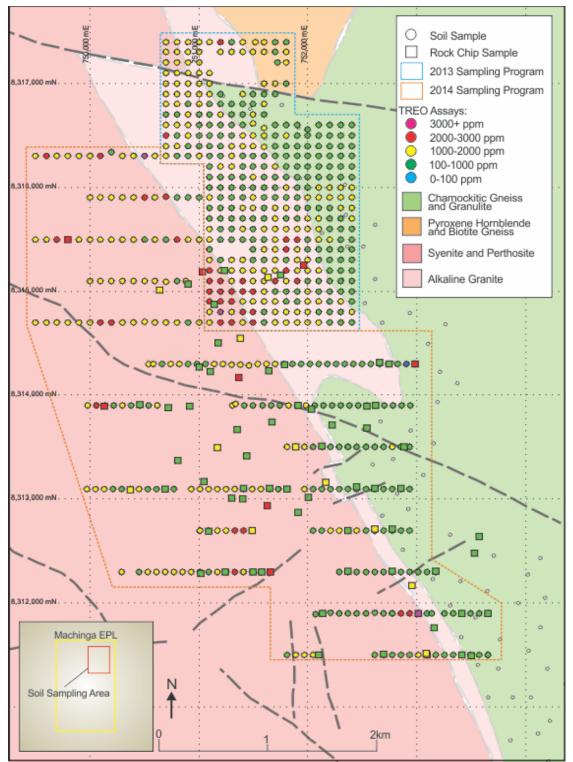


Figure 8: Summary of soil sampling assay results for TREOs completed at Machinga during 2013 & 2014.



## 5 Salimbidwe Rare Earths Project

Reconnaissance geological mapping and rock chip sampling over two low order radiometric anomalies defined during field work in November was completed and the results were finalised in December. The two low-order anomalies defined measure 1300m x 400m and 700m x 500m respectively.

In all 81 rock chip samples were collected and the assays indicated low order Rare Earth Element (REE) anomalism but not of a tenor considered worth following up on. The highest rock chip assay was 5567ppm TREEs, with all the remaining assays were below 3000ppm TREEs. Figure 9 below illustrates the area sampled.

Future exploration will be planned on other areas within Salimbidwe licence.

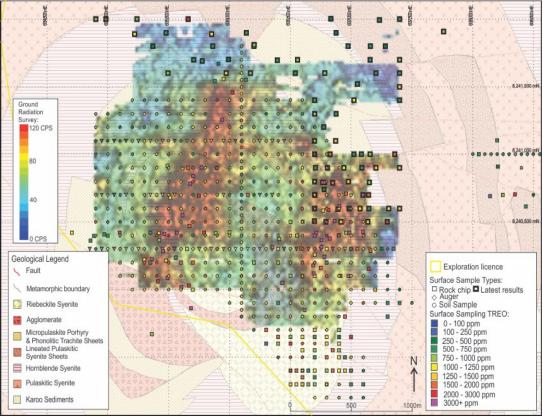


Figure 9: Plan summarising rock chip sampling programme completed at Salimbidwe.

#### 6. Memba Titanium-Iron Ore Project

This project is the only one Globe has in Mozambique, and outside of Malawi. No exploration activities were completed at Memba during the December Quarter.



## 7. Corporate

## 7.1 Annual General Meeting

The Company held its Annual General Meeting on 28th November 2014.

The results of the meeting are summarised below with all resolutions polled.

Resolution	Description	Result
1	Remuneration report	Not Carried
2	Re-election of Mr Jingbin Tian	Not Carried
3	Withdrawn	
4	Election of Mr Alex Ko	Carried
5	Withdrawn	

Mr Jingbin Tian ceased as a director on 28 November 2014.

## 7.2 Resignation of Director

Ms Lu resigned as a director effective 18 November 2014.

## 7.3 Cash at Bank

Cash at bank for the Company remains robust with A\$17.475m at bank on call or in term deposit.

As outlined by the Chairperson in the annual report, the Company is focused on reducing costs and optimising opportunities for the generation of cash flow. To this end, the Company moved into new offices in January 2015 reducing office costs by 70%. The Company is focused on additional cost reductions and cash flow generation activities.



	Project	Status	Tenement	Interest held by Globe
	Kanyika	Granted	EPL0188-2005R3	100%
Malawi	Salambidwe	Granted	EPL0289/10R	100%
Malawi	Machinga	Granted	EPL0230/07R2	100%
	Chiziro	Granted	EPL0299/10R	100%
Mozambique	Memba	Granted	4832L, 4831L	100%

#### 8. Schedule of Mineral Tenements as at 31 December 2014

Table 4: Summary of Globe's Exploration Tenements

#### NB:

- EPL Exclusive Prospecting Licence (Malawi)
- L Exclusive Prospecting Licence (Mozambique)

**Competent person:** The contents of this report relating to the Mineral resource Estimate are based on information compiled by Mr Michael Job, Fellow of the Australasian Institute of Mining and Metallurgy, and a consultant employed by Quantitative Group at the time the Mineral Resource Estimate was completed. Mr Job had sufficient experience related to the activity 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 consented to the inclusion in reports of matters compiled by him in the form and context which they appear. The Mineral Resource Estimate was first reported to the ASX on 7 January 2013 and has not been updated since.

**Competent person:** The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Fergus Jockel, a competent person who is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Fergus Jockel is a full-time employee of the company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Fergus Jockel consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Contact: Alistair Stephens Managing Director Globe Metals & Mining Ltd Tel: +61 (0) 8 9327 0700



## JORC TABLE 1

## Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Criteria Sampling techniques	<ul> <li>Explanation</li> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Ground radiometric surveys were conducted using a handheld ThermoScientific RadEye brand scintillometer integrated with a GPS (GARMIN GPSMAP 78s). Soil sampling was carried out in a grid pattern with approximately 2 kg samples collected at each point. Rock chip samples were collected where outcropping rock occurs. Trenches were dug to the depth of bedrock, or 1.5m and 2kg samples were taken over a 1m length.</li> <li>Careful bagging of samples in individual plastic bags and accurate numbering and labelling of samples was carried out in the field. QAQC procedures such as the use of field duplicates, were carried out to ensure sample representivity. Re-sampling was carried out where necessary. Hand held GPS units (GARMIN GPSMAP 78s) were used to locate sampling locations, which undergo regular checks. Hand held ThermoScientific RadEye brand scintillometer is regularly calibrated.</li> <li>For graphite analysis at the Chiziro project, trenching was carried out to obtain 1m samples of 2kg each, soil sampling was carried out to obtain 1m samples of 2kg each, soil sampling of outcrops was carried out. Samples were pulverised, acidified and roasted for total combustion analysis of total graphitic carbon. For all analysis at Kanyika, Machinga and Salambidwe projects, soil sampling of outcrops was carried out. The samples were pulverised and 120-150g</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what</li> </ul>	<ul> <li>was analysed by the ICP-MS technique.</li> <li>No drilling was carried out in this quarter</li> </ul>



Criteria	Explanation	Commentary
	method, etc).	
Drill sample recovery Logging	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> <li>Whether core and chip samples have</li> </ul>	<ul> <li>No drilling was carried out in this quarter</li> <li>No drilling was carried out in this quarter.</li> </ul>
	<ul> <li>been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>No drining was carried out in this quarter. Trenching was geologically logged over 1m length intervals to an appropriate level of detail.</li> <li>Geological logging of trenching was qualitative in nature.</li> <li>The entire length of all trenches was logged.</li> </ul>
Sub-sampling	• If core, whether cut or sawn and whether quarter half or all core taken	No drill core
techniques and sample preparation	<ul> <li>whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples greater than 3kg were riffle split in to two 50/50 samples by the laboratory to create a sub-sample that can be milled in one operation. Samples were dried at 121°C for 8 hours, until devoid of moisture, by the laboratory.</li> <li>Samples from Kanyika, Salambidwe, and Machinga were submitted at the ISO 17025 accredited Genalysis Laboratory Services in South Africa for sample preparation. Samples from Chiziro were submitted at the SANAS accredited laboratory, Inspectorate Metals and Minerals, a Bureau Veritas Group company in Rustenburg, South Africa, for sample preparation.</li> <li>At Genalysis Laboratories, samples were received by the laboratory and allocated a unique job number, then sorted. The samples were dried, and then crushed if required to either 2mm or 10mm as appropriate. Large samples were riffle split and the excess stored. Samples were pulverised in a closed pulveriser to 85% 75µm. 120- 150g analytical split was taken for export to Australia and the pulp residue was retained and stored.</li> <li>At Bureau Veritas Laboratory, samples</li> </ul>



Criteria	Explanation	Commentary
		<ul> <li>were received, sorted and dried. Primary preparation was by crushing the whole sample, which was then pulverised in a vibrating disc pulveriser. The samples were acidified and roasted to remove carbonate and organic carbon.</li> <li>Appropriate industry standard quality control procedures were adopted at each stage of sub-sampling to maximise representivity of samples, such as laboratory repeat assays.</li> <li>Field duplicates were used at a rate of 5% and analysed to ensure representivity of in situ material.</li> <li>The field sample size of approximately 2kg greater is appropriate to the grain size of the material sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples from Kanyika, Salambidwe, and Machinga were submitted at the ISO 17025 accredited Genalysis Laboratory Services in South Africa for sample preparation and chemical analysis, applying the ICP-MS technique. Samples from Chiziro were submitted at the SANAS accredited laboratory, Inspectorate Metals and Minerals, a Bureau Veritas Group company in Rustenburg, South Africa, for sample preparation and chemical analysis using a total combustion analyser.</li> <li>A Thermo Scientific RadEye brand scintillometer was used to measure ground radiation levels and conduct surveys. The unit is regularly checked and calibrated. A calibration factor was not applied to the radiation counts per second data.</li> <li>A comprehensive quality control and quality assurance programme undertaken included the use of certified reference materials (CRMs), blanks (silica sand) and field duplicates at a 5% rate. The quality assurance data was analysed on an on- going basis. Re-assaying or umpire checks were undertaken as necessary. From the QAQC data review, it is reasonable to accept the levels of accuracy and precision were attained during the exploration program and laboratory testing.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>No drilling was carried out in this quarter therefore there were no significant intersections.</li> </ul>



Criteria	Explanation	Commentary
	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No drilling was carried out in this quarter, therefore no twinned holes.</li> <li>The collected field data was entered by the Exploration geologists into Excel spread sheets and emailed to the GIS and Database Geologist based at Globe Metals head office in Perth. All data was verified by the GIS and Database Geologist in Perth, and automatically verified by database software. Data entry errors were identified and returned to the Exploration Geologists for correction. The data was loaded into a Century Systems Fusion Database.</li> <li>Assay results were received by the Perth Office, directly from Genalysis Laboratories by email. The assay files were loaded into the database by the GIS and Database Geologist. A spread sheet containing assay data was sent to the Exploration.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Hand held GPS units (GARMIN GPSMAP 78s) are used to define field location of soil, rock chip samples, trenches and boreholes. These locations are considered accurate to 5m.</li> <li>The grid system used is UTM Zone 36S, WGS 84.</li> <li>The GPS has sufficient topographic control warranted for geochemical sampling. GPS data is downloaded via Map Source into MS Excel.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>No drilling was carried out in this quarter. Soil sampling was carried out on a grid pattern, where terrain allows, at a line spacing of 200m and station spacing of 50m. Rock chip samples were taken only where outcrops occur. Trenches were sampled over 1m length intervals.</li> <li>The data spacing and distribution of surface sampling is sufficient to delineate a mineralised target for further investigation.</li> <li>No sample compositing was applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</li> </ul>	<ul> <li>No drilling was carried out in this quarter</li> </ul>



Criteria		Explanation	Commentary
		should be assessed and reported if material.	
Sample security		• The measures taken to ensure sample security.	<ul> <li>Samples were collected from the Lilongwe office in Malawi by MANICA (freight company in Malawi) transport, who provide a secure service. Samples were delivered to Genalysis Laboratory in Johannesburg South Africa and securely stored. Chain of custody was overseen by the Geology Manager.</li> </ul>
Audits o reviews	or	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling techniques undergo regular review and improvements are made where necessary. No problematic sampling issues have been highlighted. Data undergoes regular review and auditing, along with QAQC checks. No problematic data issues have been highlighted.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Exploration was conducted within several licences in Malawi, there are:         <ul> <li>Kanyika EPL0188/07R3 which is 100% held by Globe Metals and Mining Ltd, and covers an area of 607 km<sup>2</sup>.</li> <li>Chiziro EPL0299/10 which is 100% held by Globe Metals and Mining Ltd, and covers an area of 2052.76 km<sup>2</sup>, with a small government exclusion zone of 1.14 km<sup>2</sup>.</li> <li>Machinga EPL0230/07R2 which is 100% held by Globe Metals and Mining Ltd, and covers an area 367.37 km<sup>2</sup>.</li> <li>Salambidwe EPL0289/10R which is 100% held by Globe Metals and Mining Ltd, and covers an area 367.37 km<sup>2</sup>.</li> </ul> </li> <li>All licences are in good standing and no known impediments exist.</li> </ul>



Criteria	Explanation		Commentary
Exploration	Acknowledgment and appraisal	of	Kanyika: Regional geological mapping was
done by other	exploration by other parties.	-	carried out by the Geological Survey
parties			Department of Malawi from 1967. An
			airborne magnetic and radiometric
			survey was carried out in 1984-85 by
			Hunting Geology and Geophysics Limited
			and interpreted by Paterson, Grant &
			Watson Limited ('PGW') for a United
			Nations sponsored Development
			Program. The Kanyika target was
			identified. In 1986 the Malawi
			Geological Survey conducted brief
			follow-up ground reconnaissance
			programs. However, in 1987 it was
			concluded in an internal Geological
			Survey Department report that the
			results were not encouraging.
			Machinga: The American Smelting and
			Refining Company and the Atomic
			Energy Division of the Geological Survey
			of Britain carried out preliminary
			geological work in 1955 (scintillometer
			survey, mapping, trenching, drilling).
			Radiometric anomalies were found but
			none of the generated data was made
			available to Globe Metals. Detailed
			geological mapping over the Malosa-
			Zomba mountains were completed by
			Bloomfield et al in 1965. In 1986, an
			airborne magnetic and radiometric
			survey was carried out by Hunting
			Geology and Geophysics Limited and
			interpreted by Paterson, Grant &
			Watson Limited ('PGW') in 1987 for a
			United Nations sponsored Development
			Program. It located Uranium channel
			radiometric anomalies in the region. In November 2009 Resource Star Limited
			completed an orientation soil sampling
			program over Machinga Main Anomaly, 136 samples were collected.
			Chiziro: The Geological Survey Department
			of Malawi conducted geological
			mapping and Cooper et al. identified the
			Chimutu and Katengeza targets in a
			1949 Annual report. Trenching and
			pitting was carried out by the Geological
			Survey Department in 1963, and
			indicated 15200 short tonnes of graphite
			to a depth of 6 feet, averaging 5.1%
			Graphite in weathered gneiss, in a zone
			200 yards wide by 2300 feet in length.
			This trenching is within the exclusion



Criteria	Explanation	Commentary
		zone of the Chiziro licence and not currently available for exploration by Globe. Salambidwe: In 1963 The Geological Survey Department of Malawi mapped the
		"Geology of the Salambidwe Ring Structure". This mapping was digitised for use by Globe. In 1986, an airborne magnetic and radiometric survey was carried out by Hunting Geology and Geophysics Limited and interpreted by Paterson, Grant & Watson Limited ('PGW') in 1987 for a United Nations sponsored Development Program. It located radiometric anomalies in the region.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Kanyika: The licence lies within the Malawi Province of the Mozambique Orogenic Belt. It is almost entirely underlain by Precambrian and Lower Palaeozoic Basement Complex, predominantly gneissic metamorphic rocks. Most of the rocks in the region are paragneisses originating from variable protoliths including pelites, sandstones and limestones. Several granitoid bodies of variable size have intruded the gneissic basement and may have originated wholly or in part by anatexis. A few small concordant bodies of alkaline syenitic rocks carrying nepheline are also present, including the strike-extensive body which hosts the Kanyika Nb-Ta-U- Zr deposit.</li> <li>Machinga: The licence area is dominated by rocks of the Mesozoic Chilwa Alkaline Province (granite, syenite and nepheline-syenite plutons and have associated volcanic vents characterised by carbonatite and agglomerate). The Malosa Pluton consists 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. Uranium and thorium anomalies are also associated with the REE-Nb-Ta mineralisation.</li> <li>Chiziro: The licence area is underlain by gneisses, schists and granulites which belong to the Basement Complex, and forming part of the Malawi Province of</li> </ul>



Criteria	Explanation	Commentary
		the Mozambique belt. Graphitic granulites and graphitic schists have been mapped throughout the licence area. This basement package was intruded by pegmatite bodies (dykes and sills). Metamorphosed mafic and ultramafic rocks have been observed in very few areas. Field evidence has supported that the basement rocks were subjected to upper amphibolite metamorphism as well as granulite facies conditions in several locations. In some areas the rocks are well exposed but for the most part they are covered by thick surficial deposits including residual soils, alluvium and colluvium. The basement rocks are complexly deformed but the pegmatite bodies are massive and undeformed. Salambidwe: The Salambidwe ring complex is dominated by Karoo-aged sedimentary units (carbonaceous shale, arkose, sandstone and mudstone). Carbonatite and associated alkaline rocks (syenite, pyroclastics, nephelinite and phonolite plugs, alkaline dykes, dolerite and granophyre dykes) form part of the Chilwa Alkaline Province. The Mount Salambidwe complex is a 6 km ring structure, emplaced along faults related to the East African Rift valley during the Cretaceous. Altered metasediments surround the ring and the structure is characterised by an outer ring of nepheline syenite with an inner core of agglomerate.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this</li> </ul>	<ul> <li>No drilling was carried out in this quarter</li> </ul>



Criteria	Explanation	Commentary
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No drilling was carried out in this quarter</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>No drilling was carried out in this quarter</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Appropriate maps and diagrams are included in the preceding report.</li> </ul>
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Reporting of results in this report is considered balanced.</li> <li>All results have been reported</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating	<ul> <li>All meaningful and material exploration data has been reported.</li> </ul>



Criteria	Explanation	Commentary
	substances.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Planned further work includes follow up or reported results.</li> </ul>