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RESOURCES

## RESOURCE STATEMENT No. 1:

### BAOBAB EXPANDS MASSAMBA GROUP GLOBAL INVENTORY TO OVER 150Mt

30<sup>th</sup> AUGUST 2011

Baobab Resources Plc ("Baobab" or the "Company") is an iron ore, base and precious metals explorer with a portfolio of exploration projects in Mozambique. The Company is pleased to present a resource update at the Massamba Group of its Tete iron / vanadium / titanium project.

#### HIGHLIGHTS

- 113Mt Inferred Mineral Resource at South Zone, calculated by international consultancy Coffey Mining Limited in accordance with the JORC code, brings global inventory to c.161Mt.
- South Zone resource reports head grades of 28% Fe, 0.2% V<sub>2</sub>O<sub>5</sub> and 10% TiO<sub>2</sub> with an indicative average magnetite concentrate grade of 61% Fe, 0.7% V<sub>2</sub>O<sub>5</sub> and 7.7%TiO<sub>2</sub> at a mass recovery of 23%.
- The resource remains open along strike and at depth. Zones of intersected mineralisation remaining unclassified due to drill density and will be the focus of 2012 drilling campaigns.
- Drilling completed at Chitongue Grande Extensions with resource estimation due to commence shortly.
- Drilling nearing completion at Ruoni North and South. First analytical results due out in the coming weeks and resource estimates scheduled for October.
- Sites prepared and camp erected at Tenge in preparation for resource drilling due to commence in early September.

**Commenting from the Massamba Camp today, Ben James, Baobab's Managing Director, said:** *"This excellent outcome from the South Zone drilling campaign is above expectation and reinforces our belief in the prospectivity of the whole district. 160Mt is the tipping point to our milestone 300Mt. With the resource drilling programmes at Chitongue Grande finalised, and all but complete at both Ruoni North and South, we remain confident of delivering on our stated objective for 2011. In addition to these, Tenge also has the potential to add substantial upside – an indication of how much should become apparent before the year end."*

#### Resource Estimate

Internationally respected consultant, Coffey Mining Limited, has completed a resource estimate based on the completed drilling programme at South Zone. Their estimate of an Inferred Mineral Resource compiled in accordance with the JORC Code is tabulated below. Notes on estimation parameters are presented as Annexure 1.

In many areas the resource blocks remain open along strike and at depth, requiring extensional drilling programmes in 2012. Some areas of intersected mineralisation remain unclassified due to insufficient drilling density and will also require further drill definition.

The mineralised horizons contain internal partings of non-mineralised waste material which have not been sampled. Some of this material may not be preferentially mineable and would therefore act as a dilutant. Without sampling the intermediate waste partings, it has not been possible to predict what

the expected weight recovery and recovered grades might be. However, based on the completed estimation, the expected average recovery (DTR) for the magnetite portion of the mineralised material will be in the order of 23.1% with the average concentrate grade in the order of 61.4% Fe, 0.66% V<sub>2</sub>O<sub>5</sub>, 7.72% TiO<sub>2</sub>, 1.47% SiO<sub>2</sub>, 3.15% Al<sub>2</sub>O<sub>3</sub>, 0.01% P and 0.33% S.

<p><b>Table 1</b></p> <p><b>Baobab Mining Services Pty Limited</b></p> <p><b>Tete Iron Ore Project</b></p> <p><b>South Zone Titano-Magnetite Prospect</b></p> <p><b>Mineral Resources</b></p> <p><b>Grade Tonnage – 29<sup>th</sup> August 2011</b></p> <p><b>Whole Rock Grade Estimates Derived by Ordinary Kriging</b></p> <p><b>No Lower Grade Cutoff Applied</b></p> <p><b>Resource Classification Based on JORC Code (2004) Guidelines</b></p>														
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Resource Classification	Tonnage (Mt)	Fe (%)	V <sub>2</sub> O <sub>5</sub> (%)	TiO <sub>2</sub> (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	LOI (%)	CaO (%)	K <sub>2</sub> O (%)	MgO (%)	Mn (%)	Na <sub>2</sub> O (%)	S (%)
Inferred	113.0	27.5	0.2	10.14	25.85	8.00	0.29	-0.67	5.22	0.34	6.87	0.31	1.19	0.31

### Tete Project Overview

The Tete Project, covering an area of 632km<sup>2</sup>, is located immediately north of the provincial capital of Tete and shares licence boundaries with Vale and Rio Tinto's mega coal projects. The project is strategically located to access abundant, low tariff hydro-electric power from existing and developing schemes on the Zambezi River. The ports of Beira and Nacala are being refurbished, as are the rail corridors through to Tete.

The project contains two areas of titano-magnetite / ilmenite mineralisation; the Singore area to the south and the Massamba Group trend in the north. The Massamba Group is composed of a series of five prospects (Chitongue Grande, Pequeno, Caangua, Chimbala and South Zone) forming an 8km long trend and the 3.5km long, arcuate Tenge / Ruoni prospect to the east.

Baobab has entered into a strategic partnership with International Finance Corporation (IFC), the commercial arm of the World Bank, at both the corporate and project equity levels.

### Tete Exploration Summary

The Company commenced exploration initiatives in mid 2008 and has focused its efforts to date on the Massamba Group area. The Singore area remains largely untested, but highly prospective.

Work completed by the Company during 2009 culminated in the estimation of a 47.7mt maiden Inferred Mineral Resource over a 500m portion of the Chitongue Grande prospect and a 400mt to 700mt Exploration Target over the broader Massamba Group area. Independent scoping metallurgical studies and financial modelling indicate positive project economics in the production of high quality titano-magnetite/vanadium and ilmenite (titanium) concentrate commodities.

A scout drilling programme, designed to assess the Chimbala and South zone prospects of the Massamba Group trend, has been completed during 2010 for an aggregate total of approximately 7,500m. The purpose of the campaign has been two-fold: to improve confidence in the Company's Exploration Target and to clarify geological domains for continued metallurgical test-work.

As well as completing the resource drilling at South Zone, 2011 exploration programmes have focused on resource definition at Chitongue Grande Extensions and Tenge/Ruoni:

- The expansion resource drilling campaign at Chitongue Grande has been completed with thirty six reverse circulation (RC) holes drilled for an aggregate total of 6,275m. Down dip and along strike projections of the existing resource have been intersected. Consultants are expected to commence a resource estimation shortly.
- Drilling at Tenge/Ruoni is progressing rapidly. Drilling has intersected a heavily mineralised package varying in thickness from 60m to 150m. Mineralisation has been synformally folded with the fold hinge plunging gently to the west-northwest. Exploration campaigns in the prospect area have been divided into three resource blocks:

- Ruoni North: representing 1km of strike along the northern limb of the fold. Twenty five RC and diamond holes have been completed to date across seven traverses for an aggregate total of 4,610m. Drilling has intersected a robust package of mineralisation from surface dipping at 25° to 45° to the southwest. An additional five drill holes need to be completed before resource estimation work may commence.
- Ruoni South: representing 1.2km of strike along the southern limb of the fold and located approximately 1km south of Ruoni North. Twenty five RC and diamond holes have been completed for an aggregate total of 4,718m. Mineralisation in the Ruoni South area is generally steeper dipping (c.65° to the north).
- Tenge: representing the hinge zone of the fold and covering an area of approximately 0.5km<sup>2</sup>. Drill sites are being constructed in preparation for two diamond rigs scheduled to commence drilling in early September. Approximately 3,000m has been designed to assess the Tenge area.

### **Metallurgical / Scoping Studies & Pre-Feasibility Planning**

Coffey Mining Limited was commissioned to complete a metallurgical study of typical ore domains identified in the Massamba Group. This study is complete and is undergoing peer review with engineering consultants ProMet. The Company will be updating its 2009 scoping study/viability analysis to include the more detailed resource and metallurgical characteristics of the deposit.

Baobab is also receiving tenders for the completion of the various aspects of the Pre-Feasibility Study (PFS) and has retained a consultant to assist with scheduling and cost estimation.

*The information in this release that relates to Exploration Results is based on information compiled by Managing Director Ben James (BSc). Mr James is a Member of the Australasian Institute of Mining and Metallurgy, is a Competent Person as defined in the Australasian Code for Reporting of exploration results and Mineral Resources and Ore Reserves, and consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

*The information in the report which relates to the Mineral Resource is based on information compiled by Iain Macfarlane who is a Member of The Australasian Institute of Mining and Metallurgy and is employed by Coffey Mining Ltd. Mr. Macfarlane has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Reserves". Mr. Macfarlane consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

**A COPY OF THIS ANNOUNCEMENT IS AVAILABLE FOR DOWNLOAD FROM THE COMPANY'S NEW WEBSITE [www.baobabresources.com](http://www.baobabresources.com)**

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## **Annexure 1: Resource Statement Notes**

- The South Zone Prospect is part of the Tete Iron Ore Project in Mozambique. The project is located north of the Provincial capital of Tete in the central portion of the Tete Suite (a mafic complex), covering an area of approximately 632km<sup>2</sup>. The diamond (DD) and reverse circulation (RC) drilling recently carried out as part of a larger exploration programme, focussed on the South Zone Prospect.
- Exploration is ongoing with a target of defining 300Mt of iron, titanium and vanadium resource by the end of 2011.
- Mineralisation is cumulate-style, in massive or breccia form, part of the Tete Suite (a mafic complex), emplaced as stacks of mineralised layers separated by gabbro or anorthosite partings. Internal gabbro or anorthosite partings are also present within the mineralised layers. The general strike of the deposit is north-south. The cumulate body was subjected to a later igneous phase which resulted in the intrusion of numerous northeast-southwest oriented dolerite dykes.
- At the time of compilation of the resource estimate, there was drilling coverage on a nominal 100m by 50m grid over the target area, drilling being aligned along sections orientated either east-west or northwest-southeast. The host rocks were intersected by 126 RC (includes redrills) and nine DD drillholes.
- Mineralised horizons only, on the whole, were sampled (waste layers within the mineralised zones and low grade cross-cutting dolerite dykes were often not sampled). Where there was sufficient geological information, these waste layers and dykes were modelled independently from the mineralisation. These partings have a thickness, on average, of 2m and so may not be separable during the mining stage; as such they are a dilutant which should be accounted for in both metallurgical and mine planning. It is recommended further analyses are undertaken to obtain actual grade determinations for areas not sampled. Generally, sampling was based on 4m intervals.
- For head (whole rock) analysis, grade characteristics were based on assaying for Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI, CaO, K<sub>2</sub>O, MgO, Mn, Na, S and TiO<sub>2</sub> (a total of 13) using XRF analysis or thermogravimetric measurement (for LOI). A suitable quality (QAQC) monitoring program was implemented by Baobab.
- Statistical analyses on samples and 4m composites were completed. Variography was also conducted as input into grade estimation.
- Grade estimates were calculated for 25m (east-west) by 50m (north-south) by 5m (vertical) blocks. The method used to obtain grade estimates was Ordinary Kriging (OK).
- An in situ dry bulk density of 3.5t/m<sup>3</sup> was assigned to all mineralised materials. This is marginally less than the average obtained from density measurements carried out on core. Insufficient dry bulk density measurements have been taken to accurately model density. Coffey Mining recommends that additional density measurements are made, these being supplemented by the collection of downhole density measurements.
- Apart from the DD, oxidation observations were not provided, and so no material type other than 'fresh' has been defined. The lower density figure will, to a certain extent, balance this (oxidation effects result in a lowering of density). It is also noted that fresh magnetite-bearing rocks outcrop in many places along the zone of mineralisation, unaffected by oxidation. Nevertheless, Coffey Mining recommends that RC drillhole chips are routinely logged for oxidation effects, and that oxidised and transitional material types as well as fresh are modelled in any future resource estimation.
- Resource classification was developed from the confidence levels of key criteria including drilling methods, geological understanding and interpretation, sampling, data density and location, grade estimation and quality. The requirements for: deepening of drillholes to provide additional contact information; twin DD to check RC sampling; differentiating intrusive dyke material from internal cumulate gabbro; additional density measurements and additional drilling due to uncertainties in geological interpretation and mineralisation envelopes in the more structurally complex zones have resulted in the resource being classified as an Inferred Mineral Resource.
- Samples obtained from the existing drilling were composited to a nominal 4m interval and were submitted for Davis Tube testwork (DTT) as well as head analysis for many.
- DTT has been undertaken to determine the percent weight recovery (DTR) of magnetic material (concentrate). The concentrate has then been analysed in the same way as head samples to establish its grade characteristics.
- As the concentrate grades are representative of the recovered portion only, the estimation requires the use of service variables to ensure the blocks are appropriately weighted. Service variables are calculated as DTR multiplied Fe grade, DTR multiplied SiO<sub>2</sub>, DTR multiplied Al<sub>2</sub>O<sub>3</sub> and so on for the remaining grade items (13 in all).
- Statistical analyses were also completed on Davis Tube testwork samples, subsequent 4m composites and service variables. Variography was undertaken on DTR, concentrate grades and service variables as input into grade estimation.

- Ordinary Kriging was used to obtain estimates of DTR and service variables. The concentrate grades (Fe, V<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI, CaO, K<sub>2</sub>O, MgO, Mn, Na<sub>2</sub>O and S) were then back calculated from these estimates. Based on the completed estimation, the expected average recovery (DTR) for the combined mineralised and inseparable waste material will be in the order of 23.1% with the average concentrate grade in the order of 61.4% Fe, 0.66% V<sub>2</sub>O<sub>5</sub>, 7.72% TiO<sub>2</sub>, 1.47% SiO<sub>2</sub>, 3.15% Al<sub>2</sub>O<sub>3</sub>, 0.01% P, - 3.03% LOI, 0.21% CaO, 0.01% K<sub>2</sub>O, 1.11% MgO, 0.18% Mn, 0.01 Na<sub>2</sub>O, 0.33% S.