

### 12 April 2011

# MARCH 2011 QUARTERLY ACTIVITIES REPORT

## **HIGHLIGHTS**

- Jambreiro beneficiation test work delivers high grade hematite product grading 66.2% Fe with low impurities.
- 5,000 metre drilling program commences at Jambreiro to upgrade and extend current 77Mt JORC resource.
- Drilling on existing resource areas to be completed in April with updated resource expected in May 2011.
- In country personnel in Brazil strengthened ahead of move into iron ore production.
- Favourable independent broker coverage received following site visit.

## **DOMESTIC IRON & STEEL BUSINESS IN BRAZIL**

During the March Quarter, Centaurus continued to progress the development of its Domestic Iron & Steel Business in south-east Brazil's "Iron Quadrangle" region (figure 1), where it is targeting initial iron ore production of 3Mtpa by the end of 2013, to be sold into the domestic steel industry.

In order to meet this production target, the Company has been developing three iron ore projects located in this region – Jambreiro, Itambé and Passabem, which collectively host JORC compliant resources totalling 126 million tonnes at a grade of 30% Fe.

Beneficiation test work completed on the itabirite mineralisation at each project indicates that the current JORC resource base should produce over **50Mt of high grade (+63% Fe) hematite product** for sale to the domestic steel industry.

Most of the Company's focus during the March Quarter has been on the Jambreiro Iron Ore Project due to its larger resource base, its potential to be a 2Mtpa producer in its own right, and its simplified land ownership structure compared to the other projects.



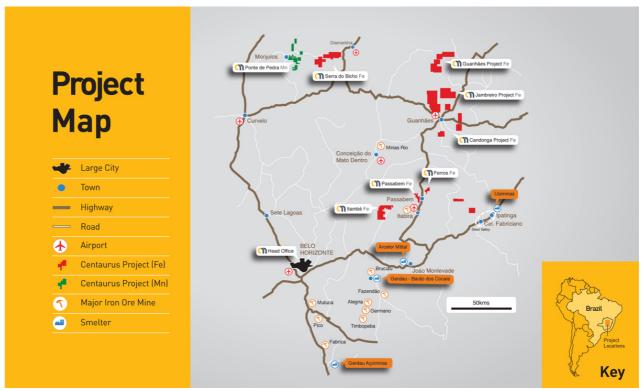


Figure 1: Location Map of Centaurus' Iron Ore Projects in South East Brazil

## JAMBREIRO IRON ORE PROJECT (CTM 100%)

### **Beneficiation Test Work**

The Jambreiro Iron Ore Project took another important step forward during the Quarter with beneficiation test work demonstrating that a **high-grade hematite product grading 66.2% Fe** with low impurities can be produced from the in-situ compact itabirite ore using a low-cost magnetic separation process.

The results of the first beneficiation test work undertaken on the Company's behalf by UFMG in Minas Gerais on low-grade (25% Fe) compact itabirite drill core from the Jambreiro Project show that a **65.2% Fe hematite product** can be produced with very low impurities using a two-stage, rougher and cleaner, Wet High Intensity Magnetic Separation (WHIMS) process (*see Table 1*).

In addition to this, when a re-cleaner process was added to the flowsheet, the iron grade of the final product **increased to over 66% Fe** with a corresponding reduction in silica levels. These results are very encouraging and provide Centaurus with confidence that the Company will be able to tailor its final product specification to meet future customers' particular requirements in relation to iron grade and impurity levels.

A summary of the beneficiation test work results is set out in Table 1 below:



Table 1 – Summary of the Beneficiation Test Work on Jambreiro Drill Core

	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Р%	Mn%	Mass	Metal
						Recovery	Recovery
						%	%
Low Grade Sample – Core							
Head Grade	25.0	55.9	2.24	0.07	0.07		
Beneficiated Product - Cleaner	65.2	4.6	0.92	0.01	0.11	36.6	87.1
Beneficiated Product – Re-Cleaner	66.2	3.7	0.89	0.01	0.11	35.0	84.1

Beneficiation test work results based on 5,000 gauss and 20% solids using rougher and cleaner stage WHIMS process

Wet High Intensity Magnetic Separation (WHIMS) is a well-known process that is used extensively throughout Brazil to beneficiate itabirite mineralisation.

The results from the testing of the compact ore are very robust and have provided confirmation that a high-grade, high-quality product can be achieved from both the compact and friable itabirite ore at the Jambreiro Project. This is an important observation given that more than three quarters of the existing resource comprises compact itabirite mineralisation.

In addition to the beneficiation test work on the compact ore from Jambreiro, a new round of test work on a larger sample of friable ore from the Project is currently underway. Centaurus has previously achieved a +63% Fe product using a simple rougher gravity (spirals) separation process and expects a further improvement in the iron grade and reduced silica levels once the new sample is processed with a cleaner gravity separation process and potentially a magnetic separation process.

## **Exploration Program – Trenching**

An extensive trenching program was completed at the Jambreiro Project during the Quarter. The program, which comprised a total of 32 trenches for 1,500 metres, was successful in defining the ore contacts over most of the current 77Mt resource base as well as extending the ore contacts to the south east, where drilling has not yet been undertaken nor a resource defined (*see Figure 4*).

Highlights of the trenching assay results include:

Trench ID	Trench Interval	Fe%*	SiO₂%	Al <sub>2</sub> O <sub>3</sub> %	Р%			
TR 0001	34.00	35.7	44.0	2.8	0.027			
TR 0006	36.00	33.8	48.2	1.9	0.015			
TR 0007	64.00	33.6	45.9	3.7	0.021			
TR 0012	14.00	35.5	44.5	3.0	0.020			
TR 0014	48.00	35.3	45.0	2.6	0.017			
TR 0022	36.00	34.1	48.9	1.3	0.021			
TR 0024	10.00	38.1	39.9	3.2	0.024			
TR 0025	40.00	33.3	48.7	2.6	0.022			
	*20% cut-off; continuous intervals							

The results confirmed the highly friable nature of the Jambreiro ore at surface, the comparatively higher grade nature of this friable ore and the location of the footwall and hangingwall contacts for each prospect within the Project area.



With the trenching program targeting the footwall and hangingwall contacts of the prospect areas at Jambreiro, most trenches either commenced or finished in mineralisation.

Trench TR007, which returned a continuous interval of **64 metres at an average grade of 33.6% Fe**, did however, intersect the footwall contact and hangingwall contact in the same trench (*see Figure 3*). This interval demonstrates particularly well the continuous nature of the friable surface mineralisation found within the 1.1 kilometre long Tigre Prospect.

## **Exploration Program – Resource Upgrade Drilling**

During the Quarter a 5,000 metre diamond and reverse circulation (RC) percussion drill campaign commenced at the Jambreiro Project to upgrade the status of the existing 77.1Mt JORC compliant resource estimate from the Inferred to the Indicated category and to test new targets along strike from the current JORC resource (see Figure 2).

The drilling program follows completion of the trenching work outlined above, a new detailed ground magnetic survey and geological mapping at Jambreiro completed in the December 2010 Quarter.

The magnetic survey work has confirmed the location of previously undrilled targets, some of which are scheduled to be drilled in the upcoming work campaign.

Analysis of the recent work programs, combined with the detailed drill information obtained from the Company's previous drill program, has provided Centaurus with a high level of confidence that the current drill campaign will, at a minimum, allow the Company to upgrade the majority of the existing 77.1 Mt resource estimate at Jambreiro from JORC Inferred to Indicated category, and may also result in the addition of further tonnages to the JORC compliant resource estimate.

This drill campaign on the existing resource areas, particularly the main Tigre Prospect, will conclude during April with assays due late April and a resource upgrade expected in mid-May. Drilling will continue into May on the new target areas at Jambreiro. If this extension drilling is successful, the Company should be able to increase the overall size of the Jambreiro resource base.

## **Environmental and Mining Approvals**

During the Quarter, work continued on the collection of data for the EIA/RIMA, the key document required to be prepared to gain the relevant environmental approvals for the Jambreiro Project. The data collection was particularly important during the March Quarter as this period is the key wet season in south-east Brazil and provides information that cannot be collected at any other time during the year.

The key areas of data collection include flora, fauna, surface water and ground water.

Water monitoring will continue over the course of the year with the EIA/RIMA to be lodged with the environmental agency, SUPRAM, by the end of 2011.

In addition to the environmental monitoring work, significant work is underway to allow Centaurus to convert the existing Exploration Licences at Jambreiro into Mining Leases. The main step in this process is to complete Feasibility Study work and lodge an Economic Exploitation Plan (PAE) with the Department of Mineral Production (DNPM).



## ITAMBÉ PROJECT (CTM 100%)

#### **Beneficiation Test Work**

Beneficiation test work is continuing on drill core from on the Itambé Project with results expected to be received in the next Quarter. There was no detailed field work undertaken during the Quarter.

## **Environmental and Mining Approvals**

In line with the environmental work being undertaken on the Jambreiro Iron Ore Project, similar data collection took place for the Itambé Iron Ore Project during the Quarter. This data collection, in the areas of flora and fauna and water monitoring, will form the basis of the EIA/RIMA document required to be completed to secure the necessary environmental approvals for the Project.

It is expected that the EIA/RIMA document for the Itambé Project will also be ready for lodgement around the end of the 2011.

A PAE document is required to be lodged with the DNPM by late June 2011 to progress the granting of the Mining Lease at Itambé.

## PASSABEM IRON ORE PROJECT (CTM 100%)

No field work was undertaken at Passabem during the Quarter. The final research (exploration) report for the Project is due to completed by September 2011.

During the Quarter, the Company completed its obligations to the original vendor of Passabem and agreed the final consideration to be paid (from Centaurus' existing cash balance over the first three quarters of this calendar year) in order to remove the previously disclosed advanced royalty from the Project. The buy-out of the advanced royalty is the subject of a confidentiality agreement and is commercially sensitive with regards to negotiations with other parties in the region.

The completion of the Company's obligation provides Centaurus the flexibility it needs to bring this Project on stream as part of its wider business plans without any further involvement from the original vendor.

## REGIONAL IRON ORE PROJECTS IN BRAZIL

The Company holds a number of regional projects which it plans to explore over the coming six months to determine their ability to deliver on the Company's export goals. To meet the Company's export targets, Centaurus plans to define, through either exploration or acquisition, a project of sufficient size to allow it to justify the capital necessary to develop a production profile of 12-15Mtpa of high-grade hematite with a mine life of at least 10 years. The Company's current Regional project base that could contribute to the Company's export targets are in areas outside the Iron Quadrangle, and include the Rio Pardo, Itamarandiba, Serro do Bicho and Guanhães Projects.



## RIO PARDO IRON ORE PROJECT (CTM 100%)

At Rio Pardo, previously completed ground magnetic data, surface mapping and rock chip sampling has been used to define a number of drill targets. These targets have been ground tested and the Company is now in the process of securing the required approvals to undertake drilling.

Subject to drill rig availability, the Company expects to be able to commence drilling of the Rio Pardo targets in May 2011.

## **CORPORATE**

## Strengthening of In Country Personnel in Brazil

The Company's Operations Director, Mr Peter Freund, relocated from Australia to the Centaurus office in Belo Horizonte in Brazil during the Quarter to head up the in-country team that will oversee the completion of Feasibility Studies across the Company's project portfolio and enable it to make the transition to become an iron ore producer over the coming 18-month period. Mr Freund remains a Director on the Company's Board.

In addition, Mr Roger Fitzhardinge was promoted to the position of General Manager – Exploration & Evaluation whilst Mr Bruno Scarpelli joined the Company in the role of General Manager – Environment & OH&S. Dr Klaus Peterson took on the role of Chief Geologist – New Projects.

Mr Fitzhardinge has considerable Brazilian experience and a very strong geological background, having worked at the Santa Rita Nickel Project of Mirabela, in the Brazilian State of Bahia, for over 5 years. Mr Scarpelli brings a wealth of environmental approvals experience in Brazil to Centaurus. He joins the Company from Vale where he was Environmental Coordinator of the S11D Iron Ore Project, part of the world class Carajas Iron Ore Operations in State of Para, Brazil. In this role, he was responsible for securing all relevant project environmental approvals.

## **Site Visit**

The Company continues to receive favourable coverage in investment markets, with a broker and institutional investor site visit conducted in March resulting in updated independent research reports by broking firms Ord Minnett and Southern Cross Equities, both of which maintain Buy recommendations. These research reports are available on the Company's website.

### **Cash Position**

At 31 March 2011, the Company held cash reserves of approximately A\$12.1 million.



### **Shareholder Information**

At 31 March 2011, the Company had 848,998,637 shares on issue with the Top 20 holding 36.5% of the total issued capital. Directors and Senior Management held 11% of the total issued capital.

Darren Gordon

**MANAGING DIRECTOR** 

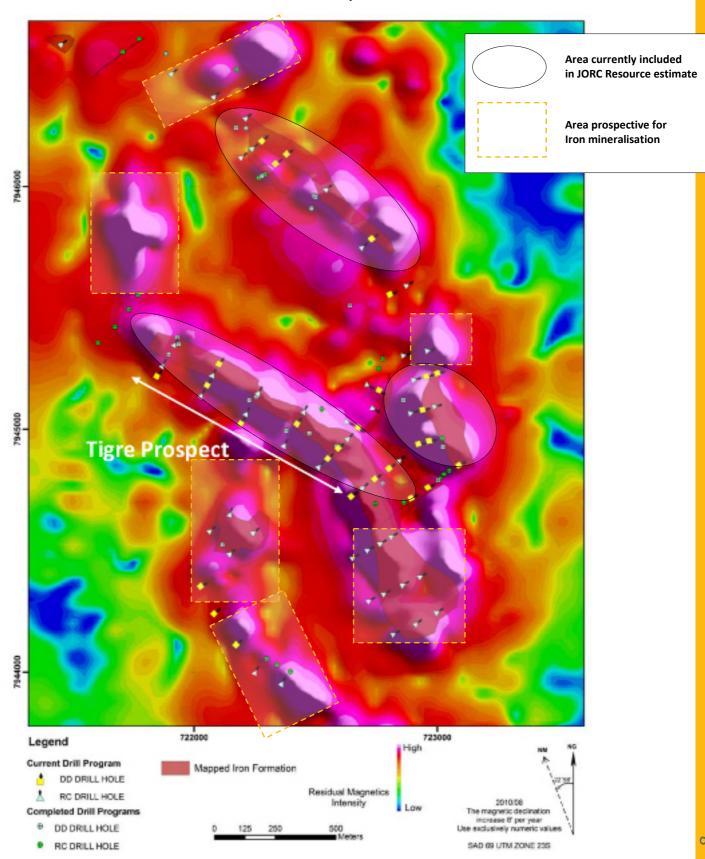
#### **Competent Person's Statement**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Roger Fitzhardinge who is a Member of the Australasia Institute of Mining and Metallurgy and Volodymyr Myadzel who is a Member of Australian Institute of Geoscientists. Roger Fitzhardinge is a permanent employee of Centaurus Metals Limited and Volodymyr Myadzel is the Senior Resource Geologist of BNA Consultoria e Sistemas Limited, independent resource consultants engaged by Centaurus Metals.

Roger Fitzhardinge and Volodymyr Myadzel have sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which they are undertaking 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 Reserve'. Roger Fitzhardinge and Volodymyr Myadzel consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.



Figure 2 – Jambreiro Iron Ore Project Showing Drill Hole Locations and Prospects over Initial Ground Magnetic Survey



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Figure 3 – Photos Showing Trenching across the Ore Zone at Tigre Prospect, Jambreiro





Figure 4 - Map of the Jambreiro Iron Ore Project Showing Trench Locations

