

30 September 2014

## CANDONGA FEASIBILITY STUDY OUTLINES LOW-COST DSO OPERATION IN SOUTH-EAST BRAZIL

*A\$3.6M capital cost and operating costs of A\$14.9/tonne put Centaurus on track for near-term production*

### Highlights:

- **Positive Feasibility Study (FS) demonstrates strong returns from Candonga DSO Project, SE Brazil.**
- **Pre-production capital cost (including contingency) of just A\$3.6M for 300,000tpa operation.**
- **Mine gate cash operating costs (life-of-mine C1 cost plus royalties) of A\$14.9/tonne of ore sold.**
- **Life-of-mine revenue of A\$36.5M and EBITDA of A\$23.1M over 3-year mine life.**
- **Annual average operating cash flows of A\$7.7M: capital payback in just six months.**
- **High-grade lump and hematitinha (+62% Fe) and sinter feed (+64% Fe) products to be sold into the domestic Brazilian market: hematitinha in high demand in the local pig iron industry where economic product substitution is more challenging.**
- **Project approvals well advanced with Final Investment Decision on track for Q4 2014, paving the way for the start of construction in February 2015 and first production in early Q2 2015.**

Centaurus Metals (ASX Code: **CTM**) is pleased to announce that it is on track to become a low-cost, high-margin iron ore producer in south-east Brazil supplying high-grade products to the domestic market within six months after delivering a positive Feasibility Study on its 100%-owned **Candonga Iron Ore Project**.

The study confirms the technical and financial viability of a 300,000tpa project producing a suite of high-grade Direct Ship Ore (DSO) products to the local steel and pig iron industries. Key highlights of the Feasibility Study include **low forecast mine gate cash operating costs (C1 + Royalties) of A\$14.9/tonne and a very low pre-production capital cost of A\$3.6 million.**

The key financial parameters of the project include forecast revenues of **A\$36.5 million** and EBITDA of **A\$23.1 million** over a 3-year period (using an estimated mine gate life-of-mine domestic sale price of A\$41/tonne). The strong economics – generated from a modest A\$3.6 million capital investment – will enable Centaurus to establish a solid cash-flow business in Brazil in the short term. This will allow the Company to leverage its knowledge of the iron ore sector in Brazil to expand its production base through the development of other similar low-cost DSO opportunities which are currently being assessed or its fully-licensed Jambreiro Project.

The Company's Project Implementation Plan has been built around completing the mining contract in Q4 2014 and being in a position to commence site development activities in February 2015. The work undertaken during the Feasibility Study has put Centaurus in a position where it could very quickly move to order the required crushing and screening plant and establish the mining contract for the life of the Candonga Project.

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On-site development is planned to take around two months, enabling the commencement of production in April 2015 following the end of the 2014/2015 wet season in south-east Brazil.

Both the environmental and mining approvals processes are well advanced and on schedule. The Company lodged its combined Preliminary and Installation Licence (LP/LI) application in May 2014 and its trial mining licence in April 2014. Final approvals are expected to be received by Q1 2015.

Centaurus' Managing Director, Mr Darren Gordon, said the Candonga Project was shaping up as a very favourable entry point for the Company to quickly and cost-effectively make the transition to iron ore production in Brazil.

*"The standout attributes of Candonga are its exceptionally low capital and operating costs, which make it a unique proposition in the iron ore sector. At just A\$12 per annual tonne of production, there wouldn't be many less capital intensive projects anywhere in the world for the Company to start its life as an iron ore producer.*

*"Whilst the initial mine life is relatively short, Candonga can generate strong cash-flows and returns for shareholders even in the current depressed pricing environment. This is a quality niche project with strong technical fundamentals which will create a strong foundation for us to move forward and grow our iron ore business in south-east Brazil.*

*"Our team has done a great job in pulling the Feasibility Study together and putting the Company in a position where we can quickly become a quality supplier of high grade, low impurity lump, hematitinha and sinter feed products.*

*"On the strength of the Feasibility Study results, the Centaurus Board has endorsed the ongoing development activities associated with bringing the Candonga Project into production by Q2 next year."*

### Ore Reserve

The Company's total Measured, Indicated and Inferred Resource at Candonga presently stands at 9.4Mt grading 43.7 % Fe including 3.9Mt grading 47.2% Fe in the Measured and Indicated categories. The total JORC 2012 Proved and Probable Ore Reserve estimate for the Candonga Project is **1.2 million tonnes at an average grade of 60.5% Fe.**

As lump products (lump and hematitinha) fetch a healthy pricing premium in the Brazilian domestic market, a simple blending strategy has been designed to optimise their recovery. The ore is categorised into:

- **Direct Shipping Ore (DSO)** – ore that requires no beneficiation to produce saleable lump, hematitinha or sinter feed products; and
- **Lump Blending Ore (LBO)** – ore that produces lump and hematitinha products within market specifications after blending with appropriate DSO products.

The DSO component of the Ore Reserve estimate is 726,000 tonnes at an average grade of 64.8% Fe.

The LBO component of the Ore Reserve estimate is 483,000 tonnes at an average grade of 53.9% Fe. Sinter feed product from the LBO ore is not intended to meet immediate sales specifications and will be stockpiled as "Low Grade Fines" for future processing.



Full details of the Ore Reserve estimate were released separately earlier today. A summary of the Ore Reserve estimate is provided in Table 1 below:

**Table 1 – Candonga Ore Reserves and Mineral Resources, September 2014**

Ore Reserve Classification	Ore Category	wmt (000's)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI %
Proved	DSO*	446	64.8	4.5	0.03	1.3	0.2
	LBO**	362	53.9	17.9	0.04	2.5	1.4
<b>Total</b>		<b>808</b>	<b>59.9</b>	<b>10.5</b>	<b>0.03</b>	<b>1.9</b>	<b>0.7</b>
Probable	DSO*	280	64.8	5.2	0.03	0.9	0.1
	LBO**	121	53.9	18.0	0.04	2.5	1.2
<b>Total</b>		<b>401</b>	<b>61.5</b>	<b>9.1</b>	<b>0.03</b>	<b>1.4</b>	<b>0.4</b>
	DSO*	726	64.8	4.8	0.03	1.2	0.1
	LBO**	483	53.9	17.9	0.04	2.5	1.3
<b>Total</b>		<b>1,209</b>	<b>60.5</b>	<b>10.0</b>	<b>0.03</b>	<b>1.7</b>	<b>0.6</b>
<b>Mineral Resource Classification (Friable + Compact)</b>							
Measured		795	60.4	10.1	1.7	0.03	0.58
Indicated		3,088	43.8	29.0	3.5	0.08	2.74
Inferred		5,511	41.3	30.9	4.1	0.08	3.28
<b>Total</b>		<b>9,394</b>	<b>43.7</b>	<b>28.5</b>	<b>3.7</b>	<b>0.07</b>	<b>2.87</b>

*\*61.3% Fe cut-off grade applied; \*\*45.0% Fe cut-off grade applied; Mineral Resources are inclusive of Ore Reserves*

The in-situ Ore Reserve produces 0.9Mt of high grade product over the 3-year mine life of the Project. Lump and hematitinha products make up approximately 50% of the total product at an average grade of 62.8% Fe. The balance of production is sinter feed product with an average grade of 64.0 % Fe.

The average strip ratio over the first two years of the operation is 0.25 tonnes of waste for 1 tonne of ore, with the life-of-mine strip ratio being only 0.6:1.

### FS Background and Assumptions

Significant work has been undertaken in the following areas to facilitate the completion of the FS, including:

- Estimating Measured and Indicated Resources;
- Pit designs and mine sequencing;
- Geotechnical, water and waste management studies;
- Converting Resources into Proved and Probable Ore Reserves;
- Definition of mine fleet requirements and costs over the life of the Project;
- Detailed classification test work and process flow sheet design;
- Detailed costing of a crushing and screening plant suitable for the needs of the Project;
- Earthworks and civil estimation and competitive pricing;
- Evaluation of mining contractor proposals for the entire mining and associated activities of the Project;
- Financial assessment including detailed work on the Brazilian tax regime; and
- Direct market information with the support of CRU Strategies for the price of iron ore in the domestic market.

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The Study was prepared in conjunction with Micromine do Brasil Consultoria e Sistemas Ltda (Micromine), who completed the estimation of the Mineral Resources and Ore Reserves, mine planning and sequencing, overall mine design and assessment of the required mining fleet.

The key assumptions used in the FS are set out in Table 2 below with key financial outcomes set out in Table 3. The Site Layout Map for the Candonga Project is shown in Figure 1:

**Table 2 – Key FS Assumptions**

Key Assumption	
DSO Ore Reserves	1.2Mt
Grade	60.5% Fe
Reserve – Final Product	0.9Mt
Grade	62-64% Fe
Waste Movement	0.7Mt
Total Material Movement (including pre-strip)	1.9Mt
Waste to Ore Ratio (LOM)	0.57 to 1
Production Rate	300,000tpa
LOM Exchange Rate AUD to BRL	2.05
LOM Exchange Rate AUD to USD	0.89
LOM Exchange Rate USD to BRL	2.30
Average Sales Price – FOB Mine Gate	A\$41/wmt

**Table 3 – Key FS Financial Outcomes**

Key Financial Outcome	Total
Total Revenue	A\$36.5 million
EBITDA	A\$23.1 million
Capital Costs	A\$3.6 million
Annual Average Operating Cash Flow Pre Tax	A\$7.7 million
C1 Operating Cash Cost plus Royalties (per tonne of Product)	A\$14.9/t

### Pre-Production Capital Costs

The total pre-production capital costs for the Project have been estimated at a very modest A\$3.6 million at an AUD: BRL exchange rate of 2.05, which equates to a very attractive A\$12 per tonne of annual production.

The CAPEX estimate for the FS predominantly relates to the acquisition of a new dry crushing and screening plant, some limited mine development works and other infrastructure requirements.

The low capital costs are predominantly a function of the fact that the Company is mining high grade ore and simply processing the ore through a dry crushing and screening plant to extract the various lump, hematitinha and sinter feed products.



**Table 4 – Candonga Project Capital Cost Schedule**

Capital Equipment	Total (A\$ M)
<b>DIRECT COSTS</b>	
Pre-Strip & Mine Preparation	0.4
Infrastructure	1.2
Crushing & Screening	1.6
<b>TOTAL DIRECT CAPEX</b>	<b>3.2</b>
<b>INDIRECT COSTS</b>	
Owner's Costs	0.2
<b>TOTAL INDIRECT CAPEX</b>	<b>0.2</b>
<b>CONTINGENCY</b>	<b>0.2</b>
<b>TOTAL CAPEX</b>	<b>3.6</b>

### Operating Cash Costs

The C1 operating cash costs plus royalties over the life-of-mine (LOM) at the mine gate are a very attractive A\$14.9 per wet tonne of product. A breakdown of the operating cash costs is provided in Table 5 below:

**Table 5 – Candonga Project Life-of-Mine Operating Cash Costs**

Operating Costs	A\$ per wet tonne product
Mining	8.7
Processing	2.1
General & Administration	1.7
<b>SITE OPERATING CASH COST (C1)</b>	<b>12.5</b>
Royalties – Government and Other	2.4
<b>TOTAL OPERATING CASH COSTS (C1 + Royalties)</b>	<b>14.9</b>

The mine operation costs are the largest part of the operating cost total. The Company will use a mining contractor for the mining operations. Detailed quotes have been received from a number of mining contract groups and these have been used to generate the mining costs of the project. There will be no drill and blast activities required on site.

In the plant area, the largest operating cost will be the diesel consumption used in the crushing and screening plant.

In addition to the operating cash costs, the FS has allowed for a Federal Government (CFEM) Royalty of 2%, a State-based mining fee of R\$2.63 per tonne of product sold and a production royalty of 0.85% relating to the original acquisition of the Project tenement.

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### Pricing Assumptions & Domestic Sales Market

Centaurus is constantly undertaking market analysis of the pricing framework for lump, hematitinha and sinter feed in the domestic market. For the purpose of the Candonga FS, the Company also received input from leading international market authority, CRU Strategies.

Hematitinha is predominantly sold to domestic pig iron producers who use the material in their mini blast furnaces (MBF). Pig iron producers have limited cost effective means of substituting out hematitinha for sinter or pellets in the MBF and as such there is a true domestic market pricing regime for hematitinha.

Lump and sinter feed is predominantly sold to the integrated steel mills but could also be sold to other mining groups as a quality enhancer for their own product mix. The pricing for lump and sinter feed is a function of the prevailing international export markets, overall product quality and a logistic cost netback.

For the purpose of the FS, Centaurus has estimated an average FOB mine gate price of A\$41 per wet tonne over the life of the project. The Company believes that this pricing profile is conservative even after allowing for the recent decline in global iron ore prices.

### Project Implementation Plan

The project site implementation program will start upon the approval of the Installation Licence (LI), which is expected before February 2015. Plant installation and mine preparation will then commence immediately, with commissioning planned for March 2015 and first production planned for April 2015.

The dry crushing and screening plant contemplated for the Candonga Project is “off-the-shelf” equipment in Brazil and procurement lead-times are short. The equipment can be easily transported to site and the time for order to installation is expected to be approximately two months. The Company will engage the operations team at the commencement of the plant installation.

The implementation team will comprise key Centaurus personnel and the mining contractor.

### Environmental Approvals and Project Development Timetable

The Company lodged a combined Preliminary Licence/Installation Licence application (LP/LI) in May 2014 and is now awaiting approval. The Company expects the relevant approval to be received before February 2015. The Company is not expecting any issues with the approval process as the area of the Project is pasture with no native vegetation removal required.

Furthermore, the strong social and economic benefits that will flow to the region from the development of the Candonga Project have also helped create a very positive relationship with local communities and stakeholders.

**-ENDS-**

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*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 Micromine do Brasil Consultoria e Sistemas Ltda, 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 2012 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.*

*The information in this report that relates to Ore Reserves is based on information compiled by Beck Nader who is a professional Mining Engineer and a Member of the Member of Australian Institute of Geoscientists. Beck Nader is the Managing Director of Micromine do Brasil Consultoria e Sistemas Ltda and is a consultant to Centaurus.*

*Beck Nader has 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserve'. Beck Nader consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.*

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Figure 1 – Candonga Project Site Layout Map

