

Jaguar: a globally significant nickel sulphide project for a clean energy future

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78% ∎∮

Developing a long-life nickel project in the heart of Brazil's premier Carajás Mineral Province

RIU Sydney Resources Roundup | May 2021 Darren Gordon, Managing Director

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- The Scoping Study referred to in this presentation has been undertaken for the purpose of initial evaluation of a potential development of the Jaguar Nickel Sulphide Project. It is a preliminary technical and economic study (±40%) of the potential viability of the Jaguar Nickel Sulphide Project. The Scoping Study outcomes, Production Target and forecast financial information referred to in this presentation are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the Production Target itself will be realised. Further exploration and evaluation work and appropriate studies are required before Centaurus will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.
- Assumptions also include assumptions about the availability of funding. While Centaurus considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to
  be correct or that the range of outcomes indicated by this study will be achieved. To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in the order of US\$178M will likely be
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  affect the value of Centaurus's shares. It is also possible that Centaurus could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Jaguar Nickel Sulphide Project.
- The information in this report that relates to Exploration Results is based on information compiled by Mr Roger Fitzhardinge who is a Member of the Australasia Institute of Mining and Metallurgy. Mr Fitzhardinge is a permanent employee and shareholder of Centaurus Metals Limited. Mr Fitzhardinge has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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 Reserves'. Mr Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- The information in this report that relates to the March 2021 Jaguar Mineral Resources is based on information compiled by Mr Lauritz Barnes (consultant with Trepanier Pty Ltd) and Mr Roger Fitzhardinge (a permanent employee and shareholder of Centaurus Metals Limited). Mr Barnes and Mr Fitzhardinge are both members of the Australasian Institute of Mining and Metallurgy. Mr Barnes and Mr Fitzhardinge have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Fitzhardinge is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus completed the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Barnes and Mr Fitzhardinge consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.
- The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the competent persons findings have not been materially modified from the original announcement.
- This presentation contains information extracted from the Company's ASX market announcement dated 29 March 2021 which is available on the Company's website at <u>www.centaurus.com.au</u>. The Company confirms that that all material assumptions underpinning the Jaguar Project Scoping Study as detailed in the ASX market announcement of 29 March 2021 continue to apply and have not materially changed.

### Centaurus Metals Our vision



Underpinned by a high-quality asset at Jaguar, we are well placed to deliver on our aspiration to be a clean and efficient **20,000-plus tonne per annum nickel** producer by the end of 2024 to assist in the global transition to electrification and to meet anticipated surging demand for key battery metals.

### **Centaurus Metals** A compelling nickel investment for an inevitable clean energy future

Infrastructure rich, World-class Carajás Mineral Province, Brazil	Post Tax NPV <sub>8</sub> <b>A\$604 Million</b> with IRR of 54%	Low C1 Cash Costs US\$2.41/lb	Payback – after tax <b>1.9 years</b>		
JORC Mineral Resource 58.9Mt @ 0.96% Ni for 562,600t Ni Metal	Mill Feed 24.0Mt @ 1.08% Ni for 260,300t Ni Metal	Total Revenue <b>US\$2.42 Billion</b> @ US\$7.50/Ib nickel price	Development Capital <b>US\$178 Million</b> (incl US\$24M contingency)		
Jaguar is set to d clean and low-co in	MRE growth opportunities: 65,000m of Drilling in 2021 with 2/3 being Step-Out & Greenfields Drilling				

## Brazil's Carajás Mineral Province A Tier-1 global mining province



The Carajás contains one of the world's largest known concentrations of large-tonnage mineral deposits

- One of the world's most prolific mining regions – effective industrial zone of Brazil
- Extensive infrastructure to support project development
- 10 IOCG deposits with resources of +100Mt Cu-Au for +4.0Bt of Cu-Au resources, including Vale's giant Salobo Mine
- Hosts the largest high-grade iron ore deposits on the planet, plus multiple large nickel laterite mines and deposits

#### AND NOW

 Hosts one of the largest near-surface undeveloped nickel sulphide resources globally – <u>the Jaguar Nickel Sulphide</u> <u>Project</u>

# **Brazil's Carajás Mineral Province Outstanding infrastructure and logistics**



- 40km north of Tucumã and Ourilândia do Norte (pop ~70,000) skilled workforce
- High-Voltage (138kV) grid power to be accessed from Tucumã sub-station 80% of power generation in Brazil is from renewables (mainly hydro and solar) resulting in low cost, clean power (less than US\$0.10/kWh)
- Mining Lease Application lodged
- Two Land Possession Agreements completed covering 85% of the area where Mineral Resources are presently defined



## Jaguar Project – Resource A large-tonnage, high-quality resource at surface

JORC Mineral Resource Estimate : 58.9Mt @ 0.96% Ni for 562,600 tonnes of contained nickel metal



- JORC MRE based on +74,000m of diamond drilling
- 80% of MRE is within 200m of surface
- 40% of MRE (contained metal) is now in Indicated Category
- Mineralisation remains open at depth and along strike
- Significant potential to increase size of MRE with further drilling
- 4 x Diamond rigs operating double shift.
- New RC drill contractor mobilising to site

### Jaguar Project – Mining Low-cost open pit & underground operations

Production Target: 32.8Mt @ 0.84% Ni for 275,600 tonnes of contained nickel over initial 10 year mine life



\*Ore-sorter product has been processed pre-concentrator; Totals are rounded to reflect acceptable precision, subtotals may not reflect global totals.  Independent Mining & Geotech studies were completed by Entech (Australia) & ReMetallica (Brazil);

- +80% of mill feed from open pit,
- LOM strip-ratio of 6.0:1;
- +60% of Mill Feed in Indicated Resource Category;
- UG presently only at Jaguar South & Onca Preta (starting year 4)
- Outstanding opportunity to grow mine life from multiple sources

Mill Feed: 24.0Mt @ 1.08% Ni for 260,300 tonnes of contained nickel

### Jaguar Project – Processing Plant Base Case – Conventional flotation plant to treat 2.7Mtpa



#### Study Partners

- DRA Global Independent plant engineering
- ALS Metallurgical testwork
- Steinert ore sorting pilot tests
- Pre-concentration ore-sorter stage to process low-grade material (~12Mt)
- Pilot testwork shows 0.47%Ni feed upgraded to 1.09% Ni with a 25% mass-recovery
- Metallurgy Results
- LOM mill recovery of **78%**
- High-quality ~16% nickel concentrate grade
- High Fe:MgO ratio (+9) and low impurities

Deposit	% Ni Feed	% Non-sulphide Ni in Feed	Sulphide Ni Recovery	Total Ni Recovery
Jaguar South	1.08	0.14	90%	78%
Jaguar Central	1.03	0.15	90%	77%
Jaguar North	0.96	0.14	90%	77%
Onça Preta	1.17	0.13	90%	80%



### Jaguar Project – Non-Processing Infrastructure World's best-practice tailings management

- Tailings storage conceptual study completed by industry expert Chris Lane (L&MGSPL)
- Integrated Waste Landform (IWL) chosen as Tailings storage solution as this:
  - Optimises use of mine waste; and
  - Highest safety factor against
     embankment failure
- Power to be supplied to site by a 138kV transmission line from the national energy grid at Tucumã, <u>**39km**</u> from the Project
- More than **80% of grid power in Brazil generated from renewable sources**, mainly hydro power
- 40km access road between Tucumã and the project site to be upgraded





20.0

15.0

10.0

5.0

9.3

2024

2025

2026

Y

A\$604 Million US\$2.45 Billion with IRR of 54% @US\$7.50/lb nickel price

LOM Average Annual Free Cash (pre-tax) US\$109 Million C1 Cash Costs US\$2.41/lb

Development Capital
US\$178 Million
(incl US\$24M contingency)

Payback – after tax

**1.9 years** 

Presently defined Resources to Initially Deliver 203kt of Class-1 Nickel in Concentrate over 10 Year mine life

2029

2030

2028

2027

At US\$9/lb LOM nickel price, post tax NPV<sub>8</sub> lifts to A\$1.01 billion with an IRR of 80%

19.0

2033

2032

2031

6.1

2034

## Jaguar Project – Value-Add Case Scoping Study In Progress

### Value-adding opportunities

- Scoping Study to consider value-adding opportunities including Pressure Oxidation (POx) to produce nickel metal or nickel sulphate
- POx testing at ALS delivered excellent results extractions of nickel, copper and cobalt all exceeding 99%
- Key economic drivers to the viability of the POx value-adding route are the Project's location in north-eastern Brazil, which means:
  - Access to low-cost energy (< US\$0.10/kWh)</li>
  - and clean energy (+80% renewables)
  - Relatively low-cost skilled labour market
  - Access to low-cost residue neutralisation material
  - Availability of high-quality fresh water

Centaurus aspires to deliver a constant supply of **clean and sustainable Class-1 nickel** from the Jaguar Project over a **long mine life.** 



# Jaguar Project – Approvals and Land Access Environmental licensing advancing well

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### **Environmental Approvals On-Track**

- Significant amount of environmental data historically collected by Vale for use by CTM in approval process
- 100% of wet and dry season data collected for use in EIA/RIMA work
- Majority of the project footprint already disturbed (pasture land)
- Partnership in place with municipality to upgrade roads
- Very strong community support for the project
- Target date to lodge **EIA/RIMA Q2 2021**

### Land Access

- Secured possession of two key properties that cover an area of 1,500 hectares for the long term benefit of the Project.
- Significant de-risking step for the potential development of a future mining operation
- Negotiations well advanced for a further property



# Jaguar Project Targeted Development Timeline





#### Q3/2023 – Formal Decision to Mine

### Q4/2022 – Definitive Feasibility Study

Q1/2022 – Pre-Feasibility Study

Q2/2021 – Lodge Key Environmental Licence

Q1/2021 – MRE Upgrade & Scoping Study Results



## Jaguar Project – Growth and Upside 65km of development & growth drilling underway





### Jaguar Project – Growth and Upside Deep plumbing system remains open and untested



### Jaguar Project – Growth and Upside Near-mine greenfields exploration upside



### <u>25,000m</u> Greenfields RC drill program underway

- +10 untested prospects
- Coincident targets from
  - GeoTEM
  - Fixed Loop EM
  - Ground Mag
  - Geochem
- FLEM & DHEM ongoing
- Soil sampling & mapping ongoing

Targeting new discoveries that can come into the open pit mine plan

# **Corporate Summary**

Capital Structure	April 2021
Shares on Issue	333.1m
Listed Options (EP \$0.18, Exp 31/5/21)	24.1m
Unlisted Options	13.1m
Top 20 Holders	62.9%
Market Capitalisation (\$0.70)	A\$233.2m
Cash as at 31 March 2021	A\$19.7m
Other Significant Assets	Jambreiro Iron Ore Project

#### **Board and Management Team –** Extensive Brazil & Nickel Sulphide Experience

Didier Murcia	Chair
Darren Gordon	Managing Director
Bruno Scarpelli (Brazil)	Executive Director and Brazil Country Manager
Mark Hancock	Non-Executive Director
Chris Banasik	Non-Executive Director
Roger Fitzhardinge	<b>Operations Manager - Nickel</b>
John Westdorp	Chief Financial Officer
Gaudius Montresor (Brazil)	Exploration Manager
Antonio Kalil (Brazil)	Environmental Manager
Antonio Campos (Brazil)	OHS Manager
John Knoblauch	Principal Metallurgist
Rocky Osborne	Principal Geoscientist

Substantial Shareholders		
Sprott Inc.		10.6%
McCusker Holdings Pty Ltd		9.3%
Terrativa Minerais		5.2%
Dundee Corporation		5.1%
Board and Management		4.0%
Broker Research		Date
Sprott	Brock Salier	21 April 2021
Argonaut	George Ross	20 April 2021
Euroz Hartleys	Jon Bishop	30 March 2021



# Centaurus

- Nickel focus sustainable high-grade nickel sulphide asset leveraged to strong long-term Class-1 nickel market outlook
- Favourable infrastructure-rich project location the world-class Carajás Mineral Province
- Globally Significant Maiden JORC Resource 58.9Mt at 0.96% Ni for 562,600 tonnes of contained nickel including Indicated component of 20.1Mt at 1.12% Ni for 225,800t of contained nickel
- Base Case Scoping Study considers a conventional flotation plant to treat 2.7Mtpa with Mill Feed of 24.0Mt @ 1.08% Ni for 260,300t of nickel to produce +20ktpa of nickel in concentrate over an initial mine life of 10 years
- Low capital intensity (US\$178 million) and low operating costs (US\$2.41/lb);
- Strong returns: Post-tax NPV<sub>8</sub> of ~AS\$604 million (US\$453 million) with a post-tax IRR of ~54%
- Two Land acquisition agreements completed significant de-risking step for potential future development
- **Outstanding growth potential** deposits open at depth and along strike with further drilling underway; multiple greenfields prospects with walk-up drill targets (65km of drilling in 2021)
- Well funded ~\$20 million in cash at end of March 2021 with well ITM options of \$4.8 million

Centaurus represents a rare opportunity to invest in a rapidly unfolding high-grade nickel sulphide growth story in Brazil, at the perfect time in the nickel market cycle.



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RIU Sydney Resources Roundup | May 2021 Darren Gordon, Managing Director Contact us office@centaurus.com.au.au (+61) 8 6424 8420 Follow our communications: Linked in : Centaurus Metals twitter → : @CentaurusMetals



### **Centaurus** March 2021 JORC MRE & Scoping Study Production Target

Deposit	Resource Category	Tonnes Mt	onnes	Grade		Contained Metal kt			Mining Method	Material	Resource	Ore	Ni %	Ni Metal
			Ni %	Cu %	Co ppm	Ni	Cu Co	Туре	Category	Mt	INI 70	kt		
	IND	7.4	1.19	0.06	239	87.4	4.2	1.8	Open Pit	High-grade	IND	11.5	1.11%	127.1
Jaguar South	INF	11.3	0.83	0.04	184	93.9	4.3	2.1		>0.6% Ni	INF	5.6	0.93%	52.0
	Total	18.7	0.97	0.05	206	181.3	8.6	3.9			Mill Feed	<u>17.1</u>	<u>1.05%</u>	<u>179.1</u>
Jaguar Central	IND	8.4	0.99	0.06	267	83.1	5.2	2.2		Low-grade	IND	6.1	0.42%	25.5
	INF	1.8	1.06	0.06	269	19.3	1.1	0.5		0.3-0.6% Ni	INF	6.5	0.42%	27.3
	Total	10.2	1.00	0.06	268	102.4	6.3	2.7			Total	12.6	0.42%	52.8
	IND	2.3	1.08	0.14	349	24.5	3.2	0.8			IND	17.5	0.87%	152.6
Jaguar North	INF	1.0	1.12	0.28	353	11.4	2.8	0.4			INF	12.1	0.66%	79.2
	Total	3.3	1.09	0.18	350	35.9	6.0	1.2	Open Pit Production Target		Total	29.6	0.78%	231.8
Jaguar Central North	INF / Total	5.8	0.80	0.05	210	46.7	3.0	1.2	Underground		IND	0.9	1.51%	14.2
Jaguar Northeast	INF / Total	8.3	0.78	0.09	253	64.9	7.3	2.1			INF	2.3	1.30%	29.5
Jaguar West	INF / Total	5.7	0.80	0.04	150	45.2	2.1	0.9	Underground Production Target		Mill Feed	<u>3.2</u>	1.36%	43.7
Jaguar west											IND	18.5	0.90%	166.8
laguar Danasita	INF	18.0	1.08	0.07	266	195.0	12.6	4.8 7.1			INF	14.3	0.76%	108.8
Jaguar Deposits	IND Total	34.0	0.83	0.06	209	281.3 <b>476.3</b>	20.8		Total Production Target		Total	32.8	0.84%	275.6
	Total INF	<b>52.0</b> 2.1	<b>0.92</b> 1.47	<b>0.06</b> 0.11	<b>229</b> 762	30.9	<b>33.4</b> 2.3	<b>11.9</b> 1.6	Total Production Parget		Total	52.0	0.0470	275.0
Onça Preta	INF	1.6	1.47	0.11	236	27.0	0.8	0.4	Ore-sorter Product*		Mill Feed	<u>3.8</u>	0.98%	<u>36.9</u>
Oliça Preta	Total	3.7	1.71 1.58	0.03 <b>0.08</b>	230 536	57.8	0.8 <b>3.1</b>	0.4 <b>2.0</b>	LOM Mill Feed		Total			260.3
Onca Rosa	INF / Total	3.2	0.88	0.08	251	28.5	1.8	0.8	LOW WIII Feed		IOtal	<u>24.0</u>	<u>1.08%</u>	200.5
Oliça Kosa	INF / TOtal	20.1	1.12	0.08	318	225.8	1.8	6.4	*Ore-sorter product has been processe	ed pre-concentrato	r			
Jaguar MRE Total	IND	38.8	0.87	0.07	214	336.8	23.4	8.3						
Jaguar WINE TOtal	Grand Total	58.9	0.87	0.08	214	562.6	38.3	o.5 14.7						
	Granu rotal	50.9	0.90	0.07	249	502.0	20.2	14.7						

\* Within 200m of surface cut-off grade 0.3% Ni; more than 200m from surface cut-off grade 1.0% Ni; Totals are rounded to reflect acceptable precision, subtotals may not reflect global totals.