

Jaguar Value-Add Scoping Study: Plugging directly into the global lithium-ion battery boom

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

Investor Update | 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\$288M will likely be required. There is no certainty that Centaurus will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise 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. This could materially reduce Centaurus's proportionate ownership 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 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 announcements dated 29 March 2021 and 31 May 2021 which are 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 Studies as detailed in the ASX market announcements of 29 March 2021 and 31 May 2021 continue to apply and have not materially changed.

#### Centaurus Metals Our vision



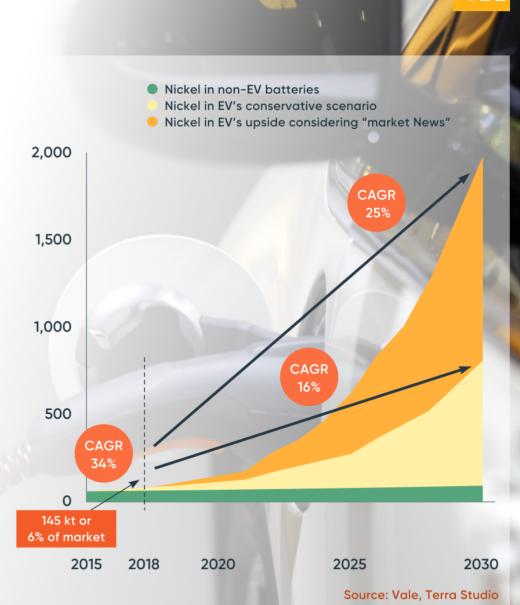
Underpinned by a high-quality asset at Jaguar, we are well placed to deliver on our aspiration to be a clean and efficient **20,000-plus tonne per annum nickel** producer by the end of 2024 to assist in the global transition to electrification and to meet anticipated surging demand for key battery metals.

# A New Era of Nickel Sulphide Demand The looming clean energy revolution

- Current nickel market size ~2.5Mtpa
- Nickel demand for batteries growing strongly but from a low base – still only 145,000tpa or 6% of market
- Depending on the scenario for the EV rate of adoption, nickel volumes to meet this additional demand vary between 750,000 tonnes and 2 million tonnes per annum
- Market looking for "green" nickel CTM can deliver this

#### WHERE IS THE NEW SUPPLY COMING FROM?

- EV's require Class-1 nickel
- To achieve green nickel production, Class-1 requirement will preferably come from sulphide sources – secondly from HPAL sources
- Unlikely any green EV battery maker will source its nickel from NPI
- Carbon footprint of Jaguar Project significantly lower than any HPAL/NPI Laterite Project



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

JORC Mineral Resource 58.9Mt @ 0.96% Ni 562,600t Ni Metal	Post Tax NPV <sub>8</sub> <b>A\$1.11 billion</b> with IRR of 52%	Low C1 Cash Costs <b>US\$3.29/lb Ni</b>	Payback – after tax <b>1.8 years</b>		
Mill Feed 33.7Mt @ 1.01% Ni	Total Revenue <b>US\$4.53 billion</b> @US\$7.50/lb nickel price +US\$0.50/lb sulphate premium	High Operating Cash Margin US\$4.27/lb Ni	Development Capital <b>US\$288 million</b> (incl US\$42M contingency)		
Ni Sulphate Production 262,100t Ni Metal	Jaguar is set to be a <u>l</u> producer of +20,000 t <u>class-1 battery grad</u> over initial <u>13-</u>	MRE growth opportunities: 65,000m of drilling 4 DD + 1 RC rig on site 3 further DD Rigs arriving in June			

# **Centaurus Metals**

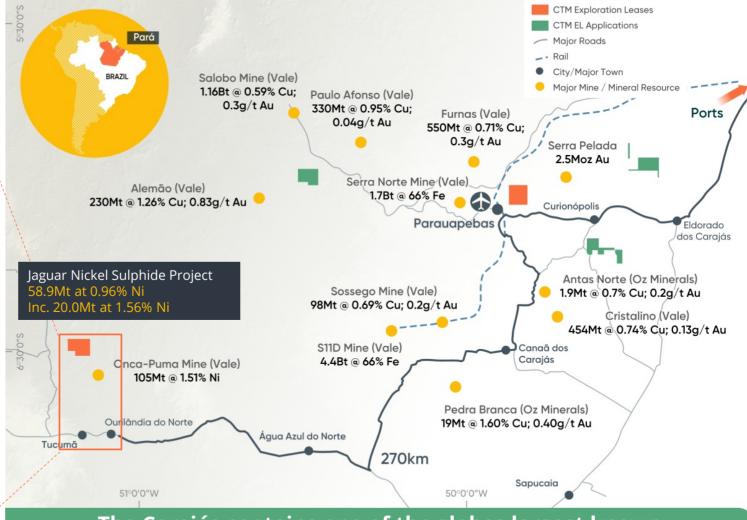
#### Investing in downstream processing adds significant value



<u>Base</u> Case:	Mill Feed 24.0Mt @ 1.08% Ni for 260,300t Ni Metal	Total Revenue US\$2.42 billion @ US\$7.50/lb Ni price & 75% Payability	Post Tax NPV <sub>8</sub> <b>A\$604</b> <b>million</b> with IRR of 54%	Cash Operating Margin US\$2.74/lb Ni	
O <u>Value-</u> <u>Add:</u>	Mill Feed 33.7Mt @ 1.01% Ni for 341,300t Ni Metal	Total Revenue US\$4.53 billion @ US\$7.50/lb Ni price +US\$0.50/lb sulphate premium	Post Tax NPV <sub>8</sub> <b>A\$1.11 billion</b> with IRR of 52%	Cash Operating Margin <b>US\$4.27/lb Ni</b>	
	<b>6</b> <b>81,000t Ni</b> + Zn/Co/Ni MSP	<b>O</b> US\$2.11 billion	<b>C</b> A\$505 million	<b>(</b> +US\$1.53/lb Ni	

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



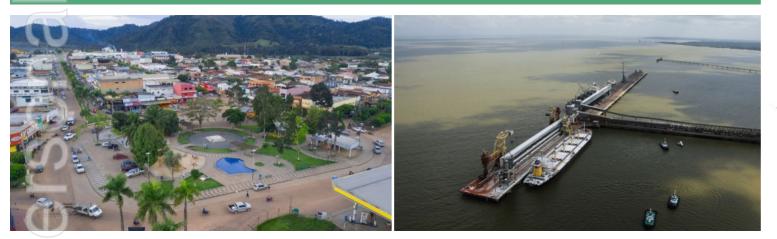


The Carajás contains one of the globes largest known concentrations of large-tonnage World-Class mineral deposits

# Brazil's Carajás Mineral Province Outstanding infrastructure and logistics

- High-Voltage (138kV) grid power **40km line** from Tucumã to site
- Brazil's national power grid runs on +80% renewables
- Low cost, clean power less than US\$0.10/kWh

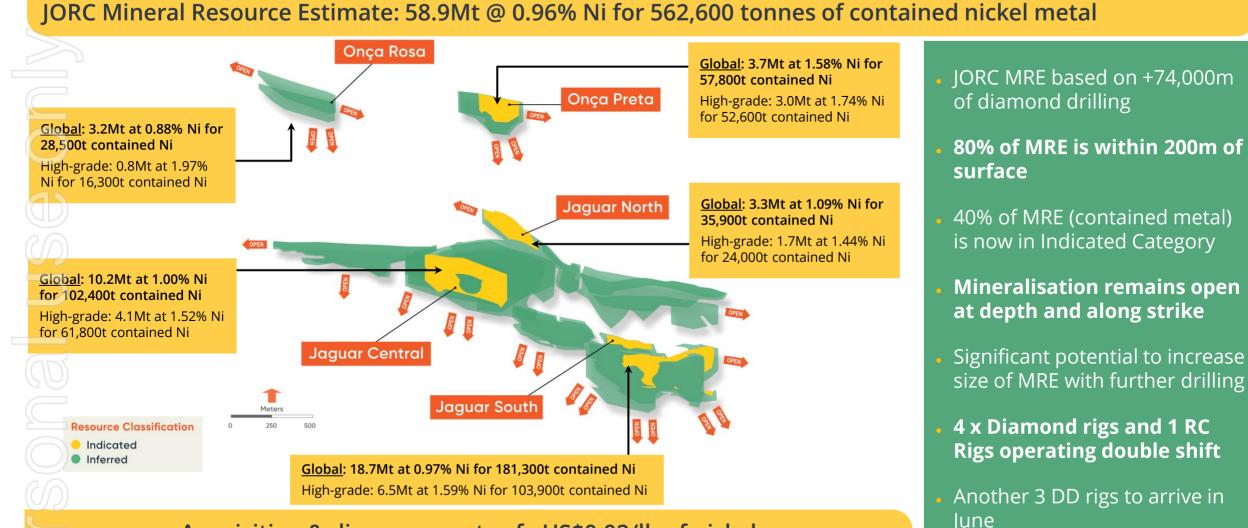
 Project located 40km north of Tucumã and Ourilândia do Norte (pop +70,000) – mining communities with skilled workforce
 900km by road to Vila de Conde Free Access Port or rail to Sao Luis
 Ideally positioned to feed the global battery supply chain







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

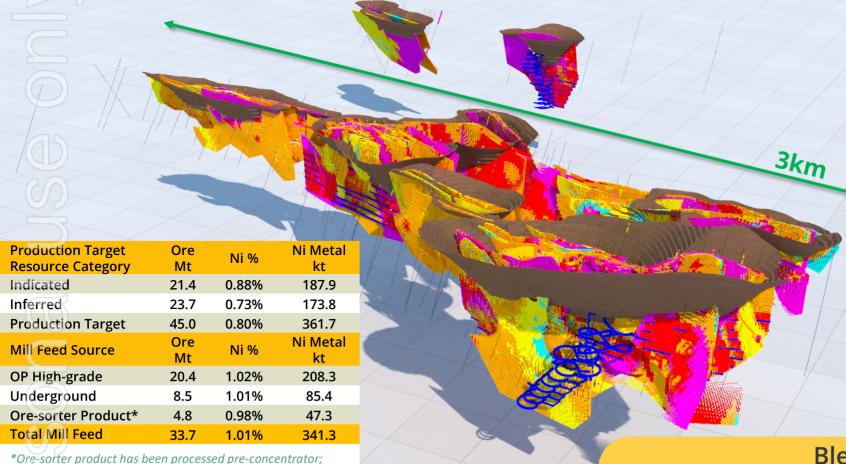


#### Acquisition & discovery costs of ~US\$0.02/lb of nickel

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

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Production Target: 45.0Mt @ 0.80% Ni for 361,700t of contained Ni over initial ~13-year LOM



Totals are rounded to reflect acceptable precision, subtotals may not reflect global totals.

- Independent Mining & Geotech studies were completed by Entech (Australia) & ReMetallica (Brazil)
- +75% of mill feed from open pit
- LOM strip-ratio of 6.5:1
- +60% of Mill Feed in Indicated Resource Category
- +60% Resources converted to Production Target
- Outstanding opportunity to grow mine life from multiple sources

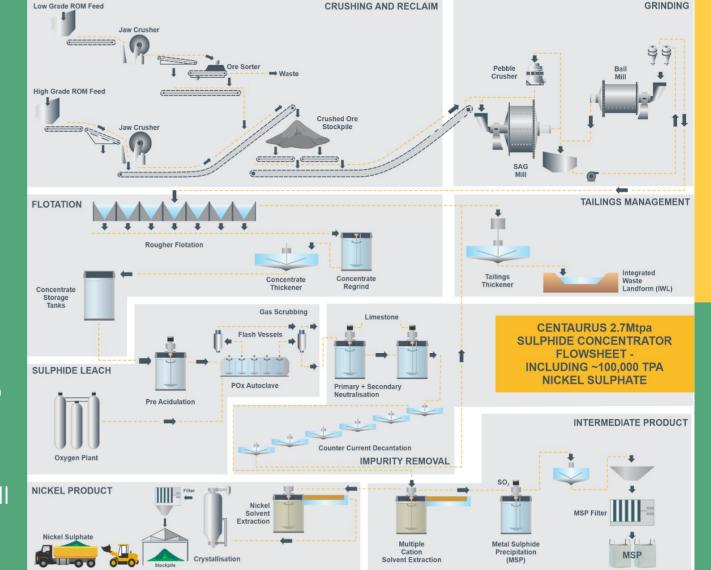
Blended Mill Feed:

33.7Mt @ 1.01% Ni for 341,300t of contained Ni

# Jaguar Project – Processing Plant Value-Add – nickel sulphate plant to treat 2.7Mtpa

#### Study Partners

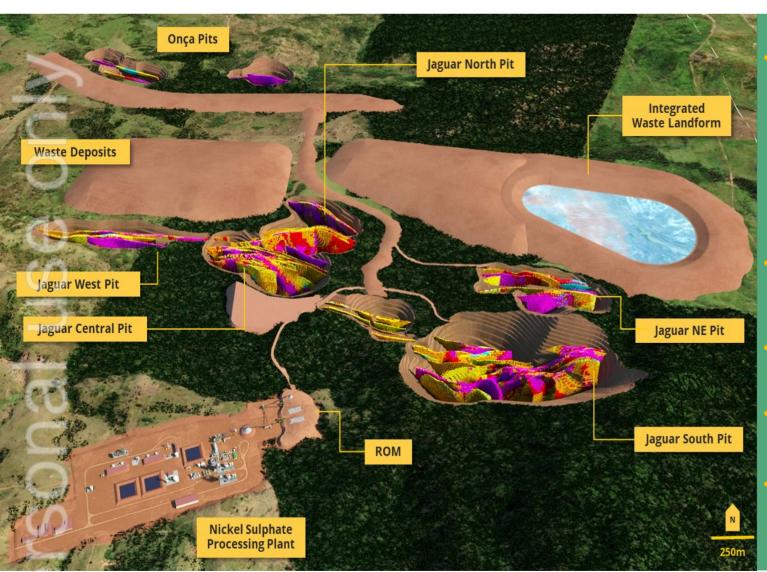
- DRA Global Independent plant engineering
- ALS Metallurgical testwork
- Steinert ore sorting pilot tests
- Ore Sorting Testwork
- 0.47% Ni feed upgraded to 1.09% Ni with a 25% mass-recovery
- **Flotation Testwork**
- Optimisation of nickel/sulphur flotation
   LOM Recovery increased from 78% ⇒ 82%
   High Fe:MgO ratio (+9) and low impurities
   Hydrometallurgical Testwork
  - Nickel, cobalt, copper and zinc extraction all **exceeding 99%**



Concentration

Purification

# Jaguar Project – Environmental Credentials Targeting world's best-practice tailings & emissions management



Tailings storage conceptual study completed by industry expert Chris Lane. **Integrated Waste Landform** (IWL) chosen as tailings solution

- Optimises use of mine waste; and
- Highest safety factor against embankment failure

Sulphate tailings and residue is near inert and further **reduces the potential environmental impact** of the surface storage of the tailings

Opportunity to recover ammonia sulphate (fertiliser) as by-product from waste

Nickel Sulphate has **significantly lower carbon footprint** v laterite projects using HPAL or NPI

Powered by a 138kV line from the national grid: **Brazil @ +80% renewable power**, mainly hydro power – reduced carbon emissions

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

**Environmental Approvals On-Track** 

Significant amount of environmental data historically collected by Vale available 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)
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 advancing in respect to two further properties





## Jaguar Project – Responsible Exploration & Mining Building relationships now and for the future







**Social Programs Implemented** 

- Social programs underway with local municipalities where the Company operates, currently focused on health and water quality
- Partnership in place with municipalities to upgrade roads
- Jaguar is forecast to engage up to 1,000 personnel during construction and 300-500 during operations
- 80% of exploration and early development work awarded to local suppliers
- Set to contribute over <u>R\$2.0 billion</u> (+US\$400 million) in taxes and government royalties - 65% of government (CFEM) royalty goes back to the local municipality

#### Health & Safety and our Covid-19 Response

- 100 person site exploration camp operational in order to mitigate risk of Covid-19 transmission during working week
- Test kits and PPE donated to the local health services
- Full time nurse employed to manage Covid-19 related activities and support OHS team

# Jaguar Project Targeted Development Timeline





Q3/2023 – Formal Decision to Mine

Q4/2022 – Definitive Feasibility Study

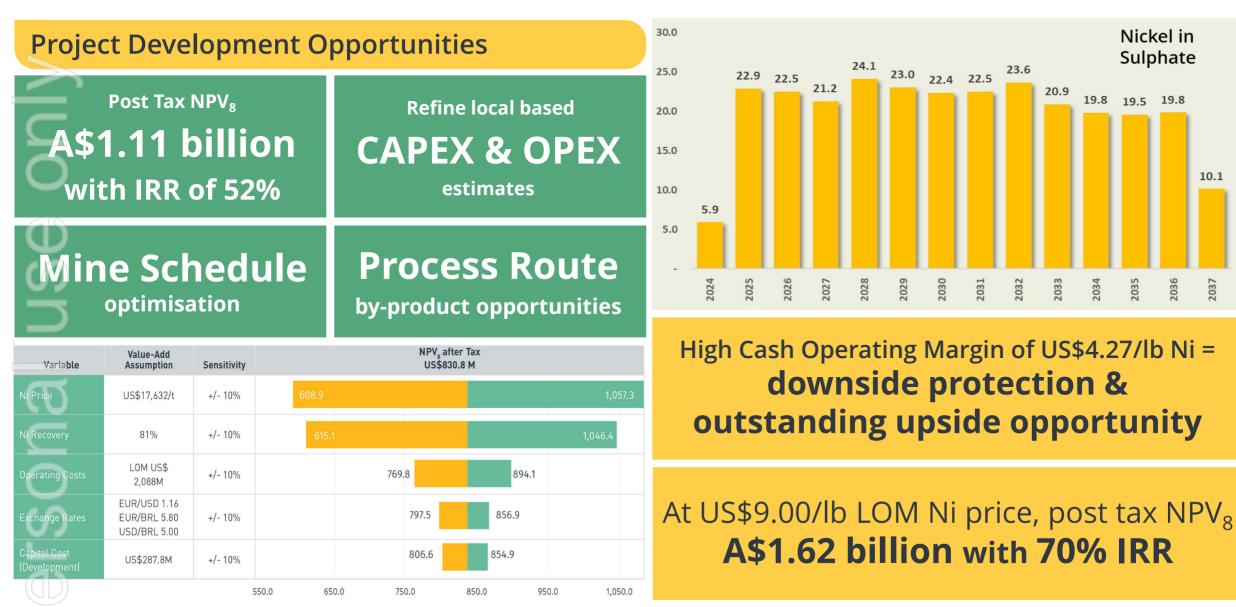
Q4/2021 and Q2/2022 – MRE Resource Upgrade

Q2/2021 – Lodge Key Environmental Licence

Q1/2021 – MRE Upgrade & Scoping Study Results



#### Jaguar Project – Proceeding Straight to DFS Robust project with plenty of project development & Ni price upside



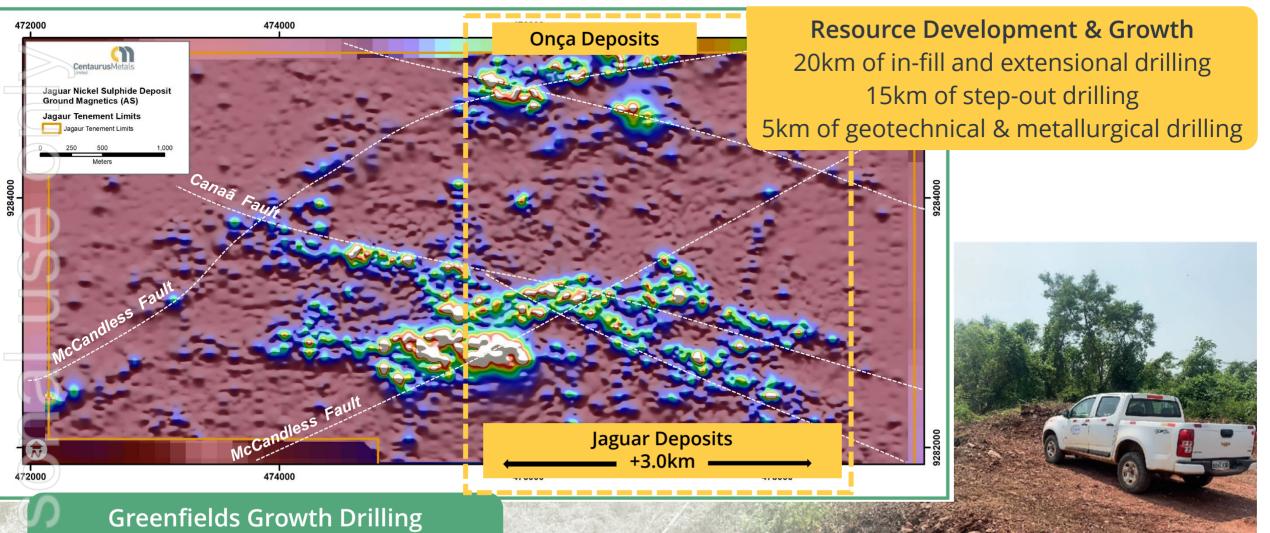
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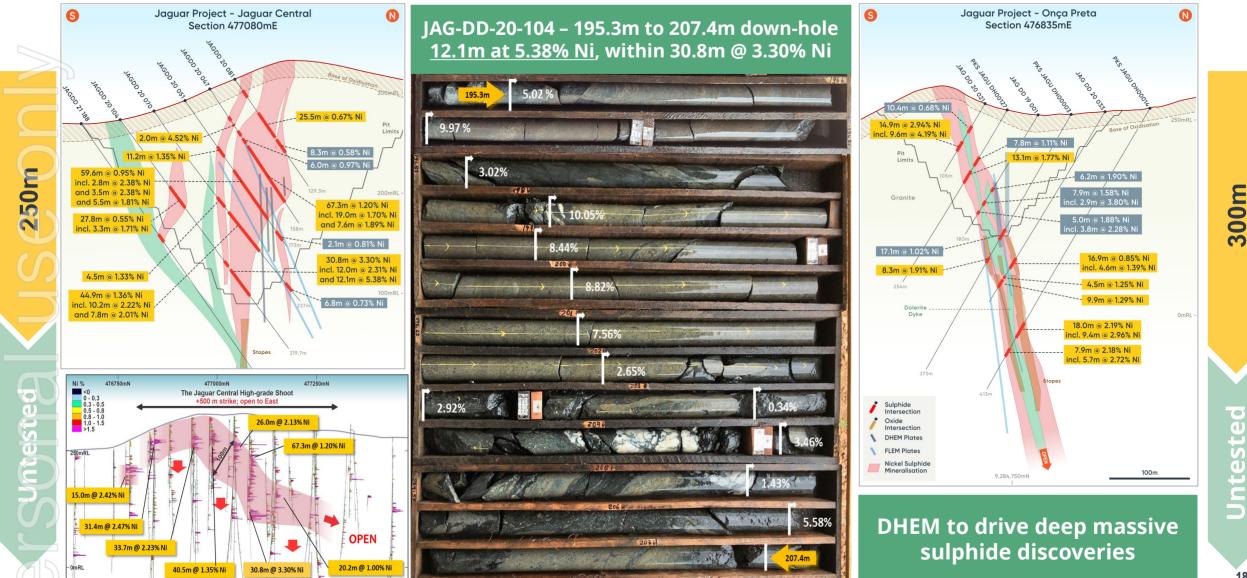
### Jaguar Project – Resource Growth and Upside 65km of development & growth drilling underway



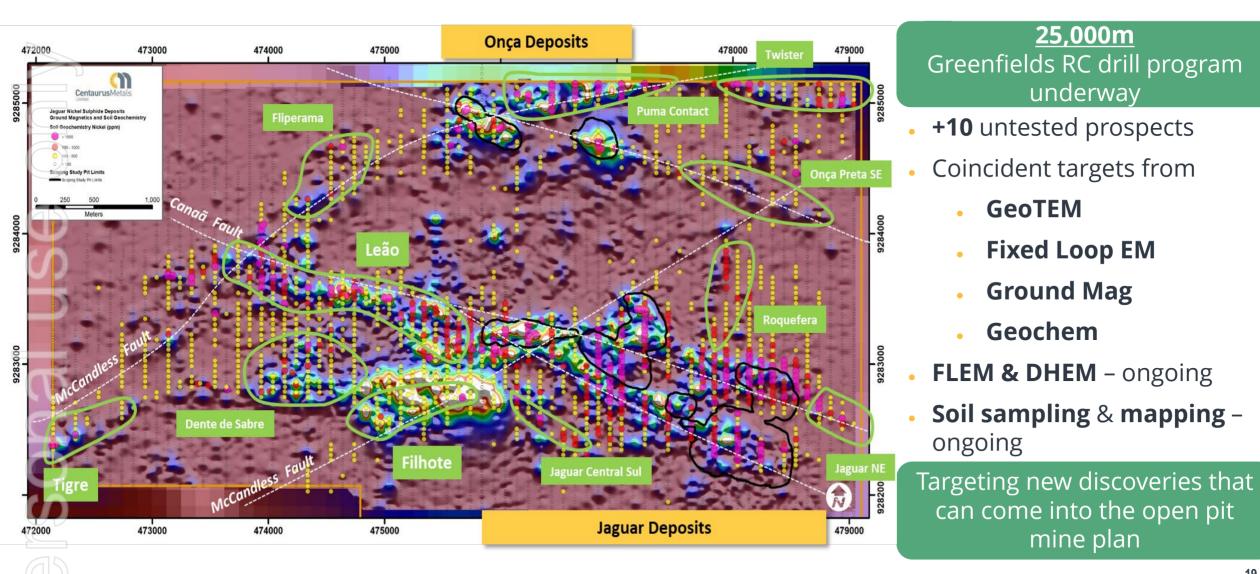


25km drill program now underway

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



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



# **Corporate Summary**

Capital Structure	May 2021				
Proforma Shares on Issue - Post Exercise of 31/5/21 Options	357.2m				
Unlisted Options	12.0m				
Top 20 Holders	64%				
Market Capitalisation (\$0.73)	A\$260.7m				
Proforma Cash – 31 May 2021	~A\$21m				
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%							
Dundee Corporation		5.1%							
Terrativa Minerais		4.8%							
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 Key investment takeaways

- **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
- Value-Add Scoping Study considers a nickel sulphate plant to treat 2.7Mtpa with Mill Feed of 33.7Mt @ 1.01% Ni for 341,300t of nickel to produce +20ktpa of nickel in sulphate and a MSP over initial mine life of 13 years
- Low capital intensity (US\$288 million), low operating costs (US\$3.29/lb) and strong annual cash flow generation;
- Strong returns: Post-tax NPV<sub>8</sub> of ~A\$1.11 billion (US\$831 million) with a post-tax IRR of ~52%
- 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 ~\$21 million as at end of May 2021

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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Investor Update | 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 & May 2021 Production Target

Deposit	Resource Category	Tonnes Mt		Grade		Contained Metal kt			Mining Method	Material	Resource	Ore	Ni %	Ni Metal
			Ni %	<b>Cu %</b>	Co ppm	Ni	Cu	Со		Туре	Category	Mt		kt
	IND	7.4	1.19	0.06	239	87.4	4.2	1.8	Open Pit	High-grade	IND	12.8	1.09%	140.2
Jaguar South	INF	11.3	0.83	0.04	184	93.9	4.3	2.1		>0.6% Ni	INF	7.6	0.90%	68.1
	Total	18.7	0.97	0.05	206	181.3	8.6	3.9			Mill Feed	20.4	1.02%	208.3
	IND	8.4	0.99	0.06	267	83.1	5.2	2.2		Low-grade	IND	7.2	0.42%	30.2
Jaguar Central	INF	1.8	1.06	0.06	269	19.3	1.1	0.5	0.3-0.6% N	0.3-0.6% Ni	INF	9.0	0.42%	37.8
	Total	10.2	1.00	0.06	268	102.4	6.3	2.7			Total	16.2	0.42%	68.0
	IND	2.3	1.08	0.14	349	24.5	3.2	0.8			IND	20.0	0.85%	170.4
Jaguar North	INF	1.0	1.12	0.28	353	11.4	2.8	0.4			INF	16.6	0.64%	105.9
	Total	3.3	1.09	0.18	350	35.9	6.0	1.2	Open Pit Production Target		Total	36.6	0.76%	276.3
Jaguar Central North	INF / Total	5.8	0.80	0.05	210	46.7	3.0	1.2	Underground		IND	1.4	1.30%	17.6
Jaguar Northeast	INF / Total	8.3	0.78	0.09	253	64.9	7.3	2.1			INF	7.1	0.96%	67.9
Jaguar West	INF / Total	5.7	0.80	0.04	150	45.2	2.1	0.9	Underground Production Target		Mill Feed	8.5	1.01%	85.4
	INF	18.0	1.08	0.07	266	195.0	12.6	4.8			IND	21.4	0.88%	187.9
Jaguar Deposits	IND	34.0	0.83	0.06	209	281.3	20.8	7.1			INF	23.7	0.73%	173.8
	Total	52.0	0.92	0.06	229	476.3	33.4	11.9	Total Production Target		Total	45.0	0.80%	361.7
	INF	2.1	1.47	0.11	762	30.9	2.3	1.6						
Onça Preta	IND	1.6	1.71	0.05	236	27.0	0.8	0.4	Ore-sorter Product*		Mill Feed	4.8	0.98%	47.3
	Total	3.7	1.58	0.08	536	57.8	3.1	2.0	LOM Mill Feed		<u>Total</u>	33.7	1.01%	341.3
Onça Rosa	INF / Total	3.2	0.88	0.06	251	28.5	1.8	0.8	*Ore-sorter product has been processe	ed pre-concentrato	r			
	IND	20.1	1.12	0.07	318	225.8	14.9	6.4	ore sorter product has been processe					
Jaguar MRE Total	INF	38.8	0.87	0.06	214	336.8	23.4	8.3						
( )	Grand Total	58.9	0.96	0.07	249	562.6	38.3	14.7						
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\* 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.