



2 July 2024

**Jaguar Nickel Sulphide Project – Feasibility Study**

**POSITIVE FEASIBILITY STUDY DEMONSTRATES STRONG ECONOMICS AND CLEAR PATHWAY TO DEVELOP A SUSTAINABLE, LONG-LIFE AND LOW-COST NICKEL SULPHIDE PROJECT IN NORTHERN BRAZIL**

**Forecast production averaging 18,700tpa of nickel over an initial 18-year open pit mine life for Post Tax operating cash flow of US\$2.11 billion**

**Maiden Jaguar JORC Ore Reserve of 63Mt @ 0.73% Ni for 459,200 tonnes of contained nickel**

**First quartile life-of-mine C1 cash cost and AISC of US\$2.30/lb and US\$3.57/lb Ni respectively**

**Low capital intensity with pre-production capex of US\$371 million (incl. pre-strip and contingency)**

**Post Tax NPV<sub>8</sub> of A\$997 million and IRR of 31% pa**

Centaurus Metals (ASX Code: CTM) is pleased to announce the completion of a positive Feasibility Study (FS) for the development of its 100%-owned Jaguar Nickel Sulphide Project in the Carajás Mineral Province of northern Brazil, which highlights strong economics from an initial concentrate-only project delivering a long-life production profile at first quartile operating costs.

The Jaguar Project represents a cornerstone asset for Centaurus that will underpin the Company's ambition to build a diversified Brazilian critical minerals business with best-in-class ESG credentials.

The outcomes of the Jaguar Feasibility Study demonstrate the potential for Jaguar to become a **sustainable, long-term and low-cost producer of low-emission nickel for global markets**, generating strong financial returns while also delivering significant social and economic benefits for the local communities where the Project is located. Jaguar is currently one of the largest undeveloped nickel sulphide projects globally and a **highly strategic potential source of unencumbered nickel concentrate product**, particularly for the EV battery supply chain.

The Feasibility Study only considers open pit nickel sulphide ore over an **initial 18-year mine life**, delivering nickel sulphide feed to a **3.5Mtpa conventional nickel flotation plant** to produce approximately **18,700 tonnes of recovered nickel metal per year** at a **low life-of-mine (LOM) C1 operating cost of US\$2.30/lb and AISC of US\$3.57/lb, on a contained nickel basis.**

**KEY FEASIBILITY STUDY OUTCOMES & PROJECT HIGHLIGHTS**

**Production Base, Nickel Price & FID Timing**

- Production of a high-quality nickel concentrate via a conventional 3.5Mtpa nickel flotation circuit.
- Forecast nickel production averaging 18,700 tonnes per annum (tpa) of contained nickel metal over the current initial 18-year open pit evaluation period.
- Life-of-Mine (LOM) nickel price assumption of US\$19,800/tonne (US\$8.98/lb) and 76% nickel payability.
- FID targeted for Q2 2025 based on the current environmental approvals and development timeline.

**Physical Parameters**

- JORC Mineral Resource Estimate (MRE) of 109.2Mt @ 0.87% Ni for 948,900 tonnes of contained nickel.
- Maiden JORC Proved and Probable open pit Ore Reserves of 63.0Mt @ 0.73% Ni for 459,200t of contained nickel.
- First production targeted for H2 2027 with LOM recovered nickel of 335,300 tonnes.
- Ideally positioned to meet forecast growth in demand for Class-1 nickel from the EV battery market.

Australian Office  
Centaurus Metals Limited  
Level 2, 23 Ventnor Avenue  
West Perth WA 6005  
AUSTRALIA

Brazilian Office  
Centaurus Niquel Ltda  
Edifício Century Tower  
Rua Maria Luiza Santiago, 200  
Santa Lúcia, 17º Andar - Sala 1703  
Belo Horizonte - MG - CEP: 30360-740  
BRAZIL

ASX: CTM  
ACN 009 468 099  
office@centaurus.com.au  
T: +61 8 6424 8420

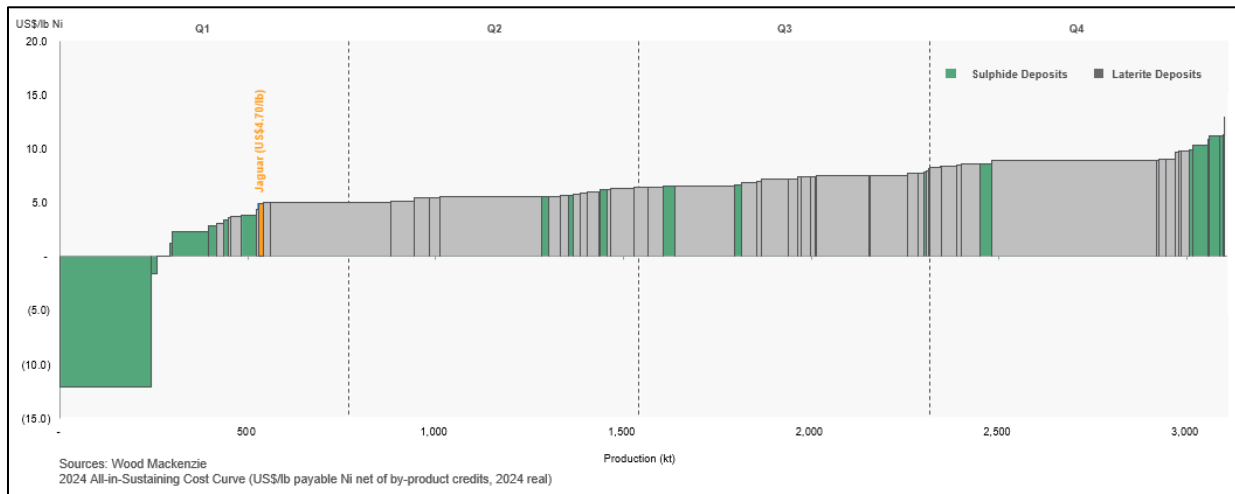


# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Operating Costs & Capital Costs (on a contained nickel basis)

- First Quartile LOM C1 cash costs of operations of US\$2.30/lb (US\$3.03/lb on payable basis).
- First Quartile LOM AISC of US\$3.57/lb (US\$4.70/lb on payable basis).



- Pre-production Capex (including growth & contingency) of US\$371 million.
- Pre-production Capex includes US\$68 million for mine pre-strip with pre-production waste material being used in the construction of the Integrated Waste Landform (IWL).

## Strong Post Tax Financial Returns

- Operating cash flow of US\$2.11 billion (A\$3.17 billion).
- Undiscounted free cash flow of US\$1.74 billion (A\$2.61 billion).
- NPV<sub>8</sub> of US\$663 million (A\$997 million).
- IRR of 31% pa.
- Capital payback of 2.7 years from first nickel concentrate production.
- Average annual free operating cash flow during steady-state operations of US\$118 million (A\$178 million).

## Other Key Financial Metrics

- Revenue (net of payabilities) totalling US\$5.05 billion (A\$7.65 billion).
- EBITDA totalling US\$2.63 billion (A\$3.96 billion).
- Robust economics at spot nickel price (US\$17k/t) and 5.45 USD/BRL exchange rate, delivering NPV<sub>8</sub> of US\$407 million (A\$611 million) and IRR of 23% pa.

Variable	Base Case	Sensitivity	NPV8 after Tax US\$663M	
Ni price	US\$19,800/t	+/- 10%	474.9	877.6
Ni Recovery	73%	+/- 10%	474.9	850.4
USD/BRL	5.30	+/- 10%	538.4	764.4
Discount Rate	8%	+/- 1%	580.8	735.4
Operating Costs	LOM US\$	+/- 10%	597.7	727.8
Capital Cost (Development)	US\$371M	+/- 10%	631.9	693.5

## Key Approval Processes

- Key environmental approval for the Project – the Preliminary Licence (LP) – granted in January 2024 by the Pará State Environmental Agency, SEMAS.
- Installation Licence (LI) application lodged with approval anticipated in Q4 2024.
- Technical approval of the Mining Lease application received from the ANM (Brazilian National Mining Agency), with formal issue of the Mining Lease now only awaiting receipt of the LI from SEMAS.
- LP/LI granted by SEMAS for the powerline route from the existing 230kV grid to the Project.
- Mining Easement for Project, powerline route and road corridors lodged and awaiting approval by ANM.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Strong Cash Position, Funding & Next Steps

- Strong cash position of ~A\$25 million at 30 June 2024 to support value engineering and pre-development activities at Jaguar through to FID.
- Preliminary engagement with potential strategic partners has been ongoing over the past 12 months and has confirmed the significant strategic interest in the Project from a range of parties including EV battery supply chain participants seeking to diversify their supply base and limit reliance on nickel supply from Indonesia, and in the context of limited supply of unencumbered nickel sulphide concentrates.
- With the completion of the FS, the Company will formally commence a strategic partnering process in conjunction with the Company's financial adviser, Standard Chartered Bank, with finalisation of this process to support FID.
- The Company will consider a range of potential transaction structures with a preference for minority equity investment at the project level, in order to minimize dilution and maximise value for Centaurus shareholders.
- Project financing and other debt funding discussions will also continue in parallel to the partnering discussions, supported by the Company's debt adviser, Orimco.
- Value engineering of the overall project design in advance of the FID decision will commence shortly, with the priorities for this work being to enhance the detailed mine plan and final process flowsheet design.
- Work with the Environmental Agency is continuing to secure the grant of the LI and the ANM for the formal issue of the Mining Lease.

## ESG and Carbon Footprint

- Power for the Project to be delivered from 100% renewable sources via the 230kV Brazilian national grid.
- Estimated E1 (Scope 1 + Scope 2 + freight + downstream) Green House Gas (GHG) emissions for Jaguar are forecast to be low at 7.27 tonnes of CO<sub>2</sub>/tonne of nickel equivalent for the proposed production and external downstream processing of a nickel concentrate product with this life-of-mine CO<sub>2</sub> footprint assessed to be lower than 94% of global nickel production, once in production<sup>1</sup>.
- Jaguar on-site Scope 1 & 2 emissions assessed at 1.55t CO<sub>2</sub>/tonne of nickel equivalent<sup>1</sup>.
- Significantly lower carbon footprint from processing of sulphide ore compared to laterites. The Jaguar GHG E1 emission levels are 85% lower than the nickel industry average of 48.6 tonnes of CO<sub>2</sub>/tonne of nickel equivalent<sup>1</sup>.
- Strong social programs implemented within the local municipalities where the Company operates, currently focused on health, waste management and workforce training for construction employment opportunities.
- Three land possession agreements executed to significantly de-risk future project development activities.
- Widespread engagement with local municipalities including the public hearings held in 2023 which supported the grant of the Preliminary Licence, as noted below.

## Upside to FS Outcomes and Value Engineering Catalysts

- Updating the current Jaguar Mineral Resource Estimate in Q3 2024 to incorporate over 50,000 metres of deeper diamond drilling completed in 2023.
- Extensional drilling has highlighted the potential for underground production concurrent with, or after, open pit production at Jaguar. The 2023 "Deeps" diamond drilling at the Jaguar South and Onça Preta deposits has confirmed the presence of nickel sulphide mineralisation beyond 700 metres and 1,000 metres<sup>2</sup>, respectively.
- Approximately 15.1Mt at 1.49% Ni<sup>3</sup> for 224kt of contained nickel metal in the MRE sits below the FS pit designs. Underground studies will be undertaken in the future to determine the timing and extent of future underground mining activities at Jaguar.
- Value engineering opportunities to further optimise the mine plan, production profile and financial returns early in the life of the operation, above the FS estimates, are being actively pursued.
- Ore sorting has not been considered in the FS but early-stage work has shown promising results. Further testwork is required and will be undertaken as part of the implementation of the Project.

<sup>1</sup> Refer ASX Announcement dated 26 March 2024 which outlines the work undertaken in conjunction with Skarn Associates to assess carbon footprint of Jaguar Concentrate Project.

<sup>2</sup> Refer ASX Announcement dated 20 November 2023.

<sup>3</sup> Refer ASX Announcement dated 10 November 2022. Considers a 1.0% Ni cut-off grade.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Centaurus' Managing Director, Mr Darren Gordon commenting on the Feasibility Study Outcomes

"The completion of this high-quality Feasibility Study marks the culmination of two years of effort and represents a pivotal milestone for our shareholders and our key stakeholders in Brazil.

"The compelling economics and forecast financial returns outlined in the Study confirm Jaguar's outstanding fundamentals and our long-standing belief that we have one of the world's best new nickel sulphide projects, both from an economic and sustainability perspective.

"The Study shows that Jaguar has a clear pathway to development, forming the cornerstone of our strategy to build a Brazilian strategic minerals business to benefit our shareholders, our people and the communities where we operate.

"The delivery of the Jaguar Feasibility Study puts us firmly on a path to achieve this vision, with compelling economics and ESG credentials that will be highly sought after as the world continues to transition to electrification.

"The Feasibility Study shows a project which yields outstanding financial and economic returns while at the same time delivering significant social benefits to our local communities over a long period of time.

"The development of Jaguar will provide many new job opportunities in and around the local municipalities. With a peak construction workforce of over 1,200 people, 490 full-time operational personnel and approximately 630 mining contractor employees, Jaguar will not only provide direct employment opportunities but will also stimulate the local economy through the creation of both direct and indirect employment and business opportunities.

"A key attribute of the Jaguar Project's robust economics lies in the first quartile C1 operating costs of approximately US\$2.30/lb Ni (US\$3.03/lb on a payable basis) and the associated free cash-flows that are generated over the initial 18-year open pit mine life.

"As a result, we have a high degree of confidence that Jaguar will be financially viable in any future nickel price environment and, importantly, will always be able to compete on cost with the growing supply of nickel from laterite sources out of Indonesia. Importantly, it will do so with a significantly lower carbon footprint due to its use of 100% renewably sourced power for the Project in Brazil.

"The low C1 cash costs are largely driven by very low power cost (approximately US\$0.035/kWh as a result of the renewable power that will supply the Project via the 230kV Brazilian national grid), the size and quality of the Project's nickel sulphide deposits supporting the scale of the proposed operation, State-based indirect tax incentives associated with operating in the Carajás Mineral Province and the favourable Brazilian Real exchange rate.

"At a life-of-mine nickel price of US\$19,800/tonne Ni, the Jaguar open pit project delivers a Post Tax NPV of A\$997 million and a Post Tax IRR of 31% pa. These strong economics give us the confidence to progress all of the key workstreams required to make a Final Investment Decision in Q2 2025.

"Central to these activities will be the advancement of the strategic partnering discussions, where the Company has been actively engaging with a range of potential partners who have indicated strong strategic interest in the project. A number of these groups have also assessed the suitability of the Jaguar concentrate product to their respective downstream processing routes, underlining the strategic nature of Jaguar's unencumbered nickel sulphide concentrate product, particularly for supply to the rapidly growing EV battery value chain globally.

"Work will also continue to optimise the overall project based on an initial concentrate-only project, in line with our strategic decision in March this year to stage the Project implementation in two phases, consistent with current market conditions. This work has the potential to yield further significant upside – and will be undertaken in parallel with the ongoing strategic partnering discussions."

## SUMMARY OF JAGUAR PROJECT FEASIBILITY STUDY RESULTS

The results of the 2024 Jaguar Feasibility Study have allowed the Board of Centaurus to commit to completing the targeted value engineering activities, actively advancing partnering discussions to support the required funding of the Project and undertaking any necessary pre-development activities required to continue to meet the overall project development timeline.

The key assumptions underpinning the economics of the Jaguar Nickel Sulphide Project (Table 1) and the key financial results (Table 2) are summarised below:

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Table 1 – Base Case Financial Model Assumptions and Production Target

Assumptions	Units	Feasibility Study
Average LOM Exchange Rate	USD/BRL	5.30
Nickel Price (2024 real terms)	US\$/tonne	19,800
Nickel Price (2024 real terms)	US\$/lb	8.98
Nickel payability at Nickel Price	%	76
Corporate tax rate (under SUDAM Program)	%	15.25
Discount Rate (real terms)	%	8
<b>Physicals</b>		
Ore Reserves	63.0Mt @ 0.73% Ni for 459,200t Contained Ni	
Life of Mine Recovered Nickel	t	335,300
Average Life-of-mine Recovery to Concentrate	%	73
Concentrate Grade	%	12.3

Table 2 – Key Project Results Including Capital and Operating Cost Assumptions

Key Project Financial Metrics		
Key Financial Results	Units	Feasibility Study
Total Revenue (Net of Payabilities)	US\$M	5,046
EBITDA	US\$M	2,631
Tax Paid	US\$M	282
<b>Project Cashflow</b>		
Pre-Tax	US\$M	2,020
Post Tax	US\$M	1,738
Post Tax	A\$M	2,614
<b>Net Present Value (NPV<sub>8</sub>)</b>		
Pre-Tax	US\$M	795
Post Tax	US\$M	663
Post Tax	A\$M	997
<b>Internal Rate of Return (IRR)</b>		
Pre-Tax	% pa	34%
Post Tax	% pa	31%
<b>Capital Payback Period</b>		
Pre-tax	Years	2.5
Post Tax	Years	2.7

**AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT  
& MEDIA RELEASE**



Key Cost Information	Units	Feasibility Study
<b>Capital Costs</b>		
Pre-Production Development Capital	US\$M	371
Sustaining and Deferred Capital	US\$M	237
<b>Operating Costs (contained nickel basis)</b>		
<b>C1 Cash Costs</b>	<b>US\$/lb</b>	<b>2.30</b>
Product Logistics	US\$/lb	0.59
Royalties	US\$/lb	0.36
Sustaining and Deferred Capital	US\$/lb	0.32
<b>All-in Sustaining Costs (AISC)</b>	<b>US\$/lb</b>	<b>3.57</b>

The Company is pleased to present the **Executive Summary of the Jaguar Nickel Sulphide Project Feasibility Study** which forms part of this release and is set out from **Page 24**.

A summary of the Jaguar JORC Mineral Resources and Ore Reserves are set out in Table 3 and 4 below.

**Table 3 – Jaguar Nickel Project Mineral Resource – November 2022<sup>4</sup>**

Classification*	Grade				Contained Metal		
	Mt	Ni %	Cu %	Co ppm	Ni (kt)	Cu (kt)	Co (kt)
Measured	14.0	1.06	0.07	388	149.4	9.7	5.5
Indicated	72.6	0.81	0.06	237	588.5	42.6	17.2
<b>Measured &amp; Indicated</b>	<b>86.6</b>	<b>0.85</b>	<b>0.06</b>	<b>262</b>	<b>737.8</b>	<b>52.5</b>	<b>22.7</b>
Inferred	22.6	0.93	0.09	289	211.0	19.8	6.5
<b>Total</b>	<b>109.2</b>	<b>0.87</b>	<b>0.07</b>	<b>268</b>	<b>948.9</b>	<b>72.3</b>	<b>29.2</b>

\* Within pit limits cut-off grade 0.3% Ni; below pit limits cut-off grade 0.7% Ni; Totals are rounded to reflect acceptable precision; subtotals may not reflect global totals. All oxide material is considered as waste and therefore not reported as Resources.

**Table 4 – Jaguar Nickel Project Ore Reserves – July 2024**

Deposit	Classification	Ore Tonnes	Ore Grades			Contained Metal		
		Mt	Ni %	Cu %	Co ppm	Ni (kt)	Cu (kt)	Co (kt)
Jaguar	Proved	8.8	0.80	0.05	231	70.3	4.4	2.0
	Probable	51.5	0.70	0.05	195	358.4	25.6	10.0
	<b>Total</b>	<b>60.3</b>	<b>0.71</b>	<b>0.05</b>	<b>201</b>	<b>428.7</b>	<b>30.0</b>	<b>12.0</b>
Onça Preta	Proved	2.6	1.15	0.09	635	29.6	2.2	1.7
	Probable	0.1	0.66	0.06	316	0.9	0.1	0.1
	<b>Total</b>	<b>2.7</b>	<b>1.12</b>	<b>0.08</b>	<b>619</b>	<b>30.5</b>	<b>2.3</b>	<b>1.7</b>
Jaguar Nickel Project	<b>Proved</b>	<b>11.4</b>	<b>0.88</b>	<b>0.06</b>	<b>323</b>	<b>99.9</b>	<b>6.6</b>	<b>3.7</b>
	<b>Probable</b>	<b>51.6</b>	<b>0.70</b>	<b>0.05</b>	<b>196</b>	<b>359.3</b>	<b>25.7</b>	<b>10.1</b>
	<b>Total</b>	<b>63.0</b>	<b>0.73</b>	<b>0.05</b>	<b>219</b>	<b>459.2</b>	<b>32.3</b>	<b>13.8</b>

The rounding in the above tables is an attempt to represent levels of precision implied in the estimation process and apparent errors in summation may result from the rounding. Ore Reserve has been reported using a 'Net Smelter Return' (NSR) cut-off of US\$12.02/tonne which includes provision for feed grade, recovery, treatment costs, freight and nickel payables.

<sup>4</sup> Refer to ASX Announcement of 10 November 2022.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Introduction

Centaurus Metals Limited (ASX: CTM) (Centaurus or the Company) is pleased to present the outcomes of the Feasibility Study (FS) completed on its 100%-owned Jaguar Nickel Project, located in the world-class Carajás Mineral Province in Brazil.

While the FS presents a detailed, high-quality evaluation of the Project, the Company has also identified significant opportunities for improvement to the FS estimates which will be examined further over the next 6-9 months as part of a round of value engineering work to be undertaken in conjunction with ongoing strategic partnering discussions prior to a Final Investment Decision (FID), targeted for Q2 2025.

The FS outcomes are based on the November 2022 Mineral Resource Estimate (MRE) (JORC 2012) released on 10 November 2022. The Global Project MRE presently sits at 109.2Mt @ 0.87% Ni for 948,900 tonnes of contained nickel. The Measured and Indicated component of the Resource of 86.6Mt @ 0.85% Ni for 737,800 tonnes of contained nickel, representing 77.7% of the total Resource base, provided a strong platform for the FS and formed the basis of the pit optimisations and the definition of Ore Reserves.

The **FS considers open pitable mineralisation only. The opportunity exists to extend mining underground** after the open pits have been mined out **but the underground does not presently form part of the FS economics.**

The July 2024 JORC Ore Reserve, delivered in conjunction with this FS, has been estimated at 63.0Mt @ 0.73% Ni for 459,200t contained nickel.

The FS does not include extensions to the mineralisation at Jaguar disclosed since the November 2022 MRE announcement. Since then, significant extensions to mineralisation outside of the MRE have been reported at both the Jaguar South and Onça Preta Deposits. All drilling completed during 2023, which totals approximately 50,000 metres of diamond drilling, will be incorporated into the next MRE for the Jaguar Project – which is expected to be released in Q3 2024.

Opportunities to improve the FS production profile and financial returns early in the life of the operation are also being actively pursued. The Company has already identified several opportunities to improve the FS outcomes. These include:

- Re-optimisation, design and scheduling of the open pits to remove the constraints previously imposed by the refinery processing case which the Company decided not to pursue in the short term (refer ASX announcement, 1 March 2024)
- Revising the process flowsheet for the flotation circuit to potentially produce a higher specification concentrate than was optimal for the refinery case, in conjunction with further engagement with potential off-takers during the next phase of the strategic partnering process
- Modifying the process and non-process infrastructure layout to reduce capital and operating costs during the implementation of the Project
- Directly engaging with equipment suppliers and contractors to improve pricing of equipment and supplies during the implementation of the Project; and
- The application of ore sorting with further testwork to be undertaken during the implementation of the Project.

Mining production will come from two main areas, the Jaguar Pit and the Onça Preta Pit.

The Jaguar Pit – which comprises the Jaguar Central, Central North, North, South, North-east and West deposits and extends over 2,900m of strike - is up to 1,000m wide and up to 240m below the lowest point on natural surface. In the location of the Jaguar South deposit, the pit extends to a depth of 480m when measured from the highest point of the southern pit wall to the pit base.

The Onça Preta Pit is 500m long, 400m wide and up to 230m deep.

Drilling of the Jaguar Project in 2023 has demonstrated the scale of deeper mineralisation below the open pits, with potential for future underground operations highlighted by results from drilling at both Jaguar South and Onça Preta.

The results, which were not included in the November 2022 MRE, include:

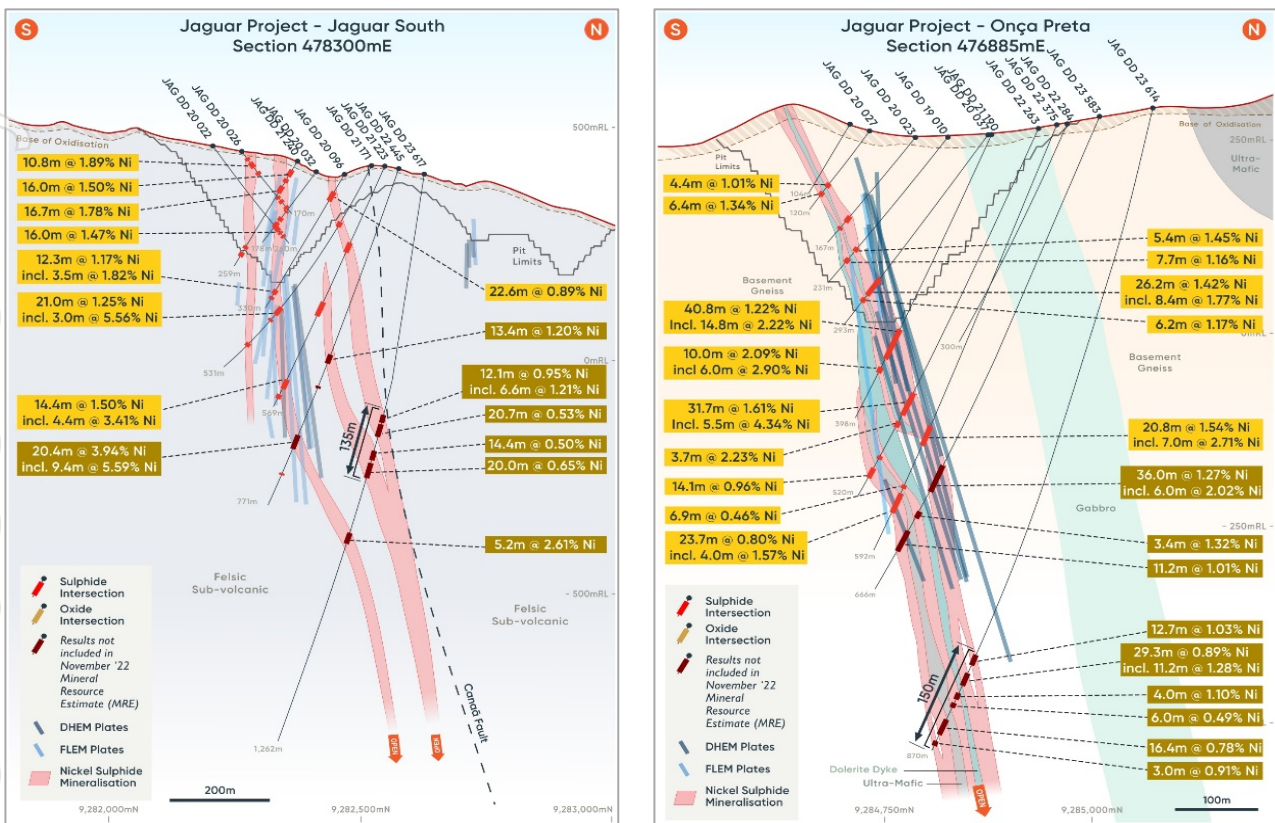
- 20.4m at 3.94% Ni from 612.7m, including 9.5m at 5.59% Ni from 612.7m in JAG-DD-22-445 (Jaguar South)
- 21.0m at 2.26% Ni from 501.0m, including 6.0m at 4.48% Ni from 516.0m in JAG-DD-23-607 (Jaguar South)
- 36.0m at 1.27% Ni from 483.6m, including 6.0m at 2.02% Ni from 500.1m in JAG-DD-23-583 (Onça Preta)
- 22.0m at 1.92% Ni from 325.0m, including 9.0m at 3.43% Ni from 325.0m in JAG-DD-23-593 (Jaguar South)
- 42.7m at 0.98% Ni from 511.7m, including 4.1m at 2.42% Ni from 542.9m in JAG-DD-22-462 (Onça Preta)
- 27.0m at 1.25% Ni from 387.0m, including 12.0m at 2.27% Ni from 402.0m in JAG-DD-23-556 (Jaguar South)
- 29.3m at 0.89% Ni from 744.0m, including 11.2m at 1.28% Ni from 746.5m in JAG-DD-23-614 (Onça Preta)
- 29.2m at 0.83% Ni from 731.9m, including 19.1m at 1.02% Ni from 739.6m in JAG-DD-23-613 (Onça Preta)
- 5.2m at 2.61% Ni from 780.6m in JAG-DD-23-617 (Jaguar South)

Some of these intersections are shown on the cross-sections in Figure 1.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Figure 1 – Jaguar South and Onça Preta cross-sections showing drill results outside the optimised open pit shell<sup>5</sup>

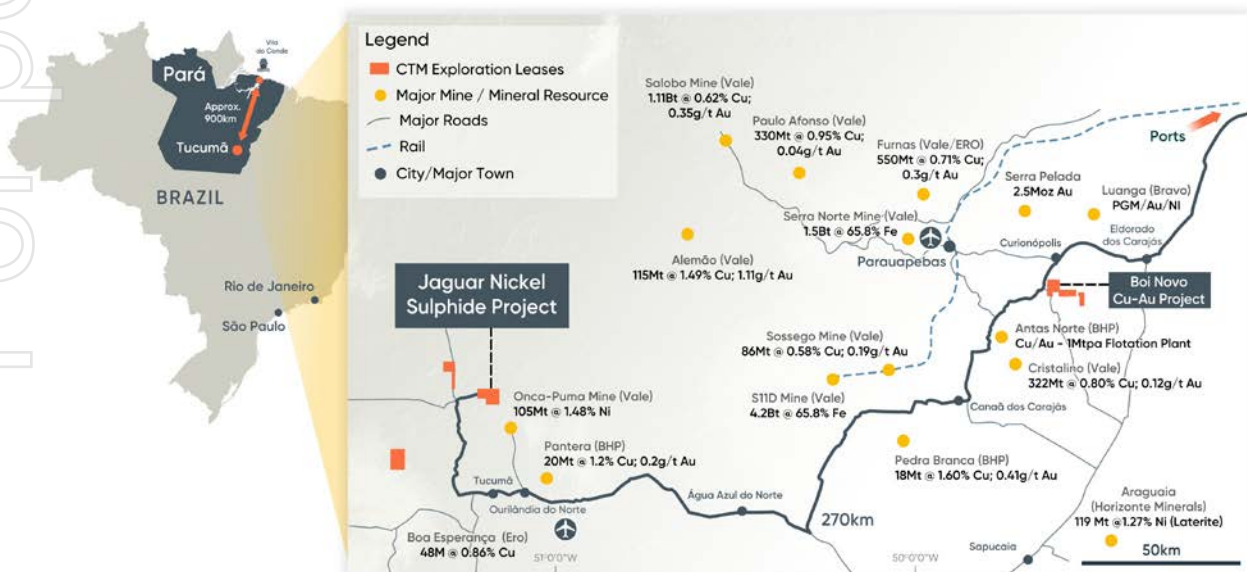


## Project Location

The Jaguar Project is located approximately 250km from the regional city of Parauapebas (population ~267,000) in the northern Brazilian State of Pará and sits within a 30km<sup>2</sup> tenement package in the São Félix do Xingu municipality in the western portion of the world-class Carajás Mineral Province. The Carajás Mineral Province is Brazil's premier mining hub, containing one of the world's largest known concentrations of bulk tonnage Iron Oxide Copper Gold (IOCG) and iron ore deposits.

Figure 2 shows the location of the Project, which can be accessed by roads from the towns of Tucumã or Ourilândia do Norte.

Figure 2 – Jaguar Project Location Map



<sup>5</sup> Refer to ASX Announcement dated 29 March 2023



# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Study Contributors

Centaurus personnel and external consultants contributed to a combination of reports, assessments, field studies and surveys, test-work programs and subsequent analysis to complete the various components of this Study. This Study has been prepared in conjunction with the following specialist Australian and Brazilian minerals industry service providers as set out in Table 5.

Table 5 – Study Contributors

Area	Activity	Consultant
Lead Engineer	Project engineering process	Ausenco Services Pty Ltd
	Infrastructure and cost estimation	Ausenco do Brasil Engenharia Ltda
Geology	Geology report	Geosborne Pty Ltd
	Mineral Resource Estimate	Trepanier Pty Ltd
	Review of Mineral Resource Estimate	Cube Consulting Pty Ltd
Mining	Mining planning, design and costs, waste management and mining report	Re Metallica Associates
	Mine capital and operating cost estimate	Re Metallica Associates
	Mine geotechnical engineering	Re Metallica Associates
	Mine Production Schedule	Deswik Mining Consultants (Australia)
	Hydrogeological assessment	MDGEO
	Competent Person JORC 2012 Ore Reserves	Mining Plus Pty Ltd
Environment	Environmental EIA/RIMA	Consultoria Empreendimentos e Recursos Naturais
Process	Optical mineralogy investigations	McArthur Ore Deposit Assessments Pty Ltd
	Metallurgy Test work program	ALS Metallurgy / Strategic Metallurgy Pty Ltd
	Flowsheet Review	Independent Metallurgical Operations Pty Ltd
	Bulk Material Testing	Tunra Bulk Solids Handling Research Associates
	Integrated Waste Landform	TEC 3 Geotecnia e Recursos Hídricos Ltda
	Acid Drainage	TEC 3 Geotecnia e Recursos Hídricos Ltda
NPI	Water Balance	AQ2 Pty Ltd
	Water modelling and flood study	TEC 3 Geotecnia e Recursos Hídricos Ltda
	Water Dams	Walm BH Engenharia Ltda
	Power supply	SECTA Conexão
	Access road	ALKES Engenharia / Estrutural Projetos
	Logistics and Transport costs	C. Steinweg Group



**Production**

The FS mine plan comprises open pit mining production only for the initial evaluation period, which extends over 18 years, with ore to be sourced from mining the Jaguar Pit and the Onça Preta pit (Figure 3). The Jaguar Pit is located within 1km of the processing facility while the Onça Preta Pit is approximately 2.7km from the plant.

The production profile in the FS demonstrates that annual production will average 18,700 tonnes of nickel-in-concentrate per annum over a planned initial 18-year open pit mine life (Figure 4). The FS financial outcomes have been modelled only on open pit production from the Ore Reserves in the Jaguar and Onça Preta pits.

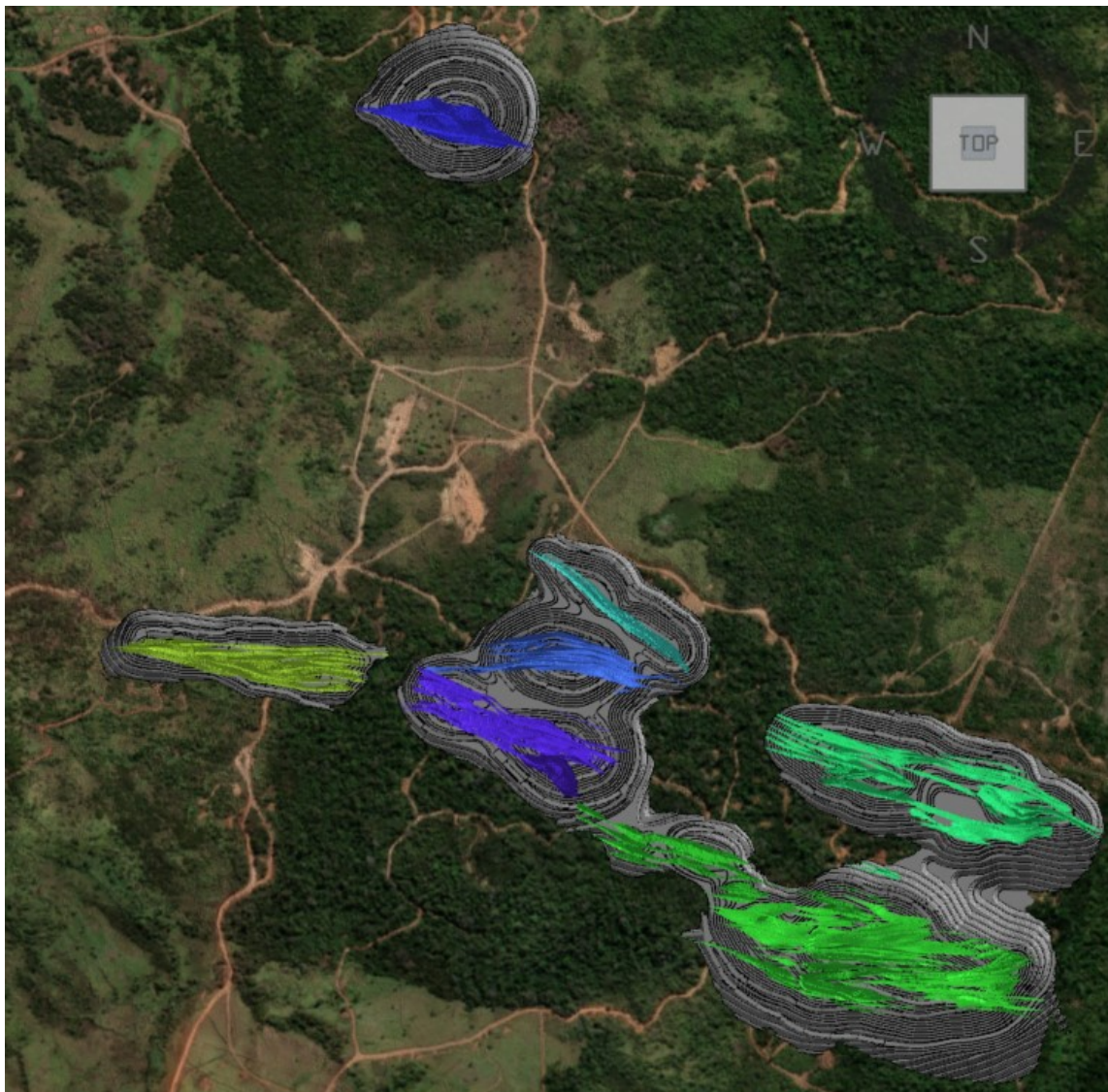
While the forecast open pit production profile in the FS currently tails off from the end of year 16 as mining areas become constrained in the bottom of the pits, the Project continues to generate strong cashflows through to the end of the current open pit mine life.

There is also strong potential to maintain nickel production at or above 18,500tpa well beyond year 16 from future underground operations targeting the extensive depth extensions to existing Resources that have already been identified.

In addition, this potential is likely to be supported by the inclusion of potential new open pit ore sources as well as any new discoveries made on the broader Jaguar land package.

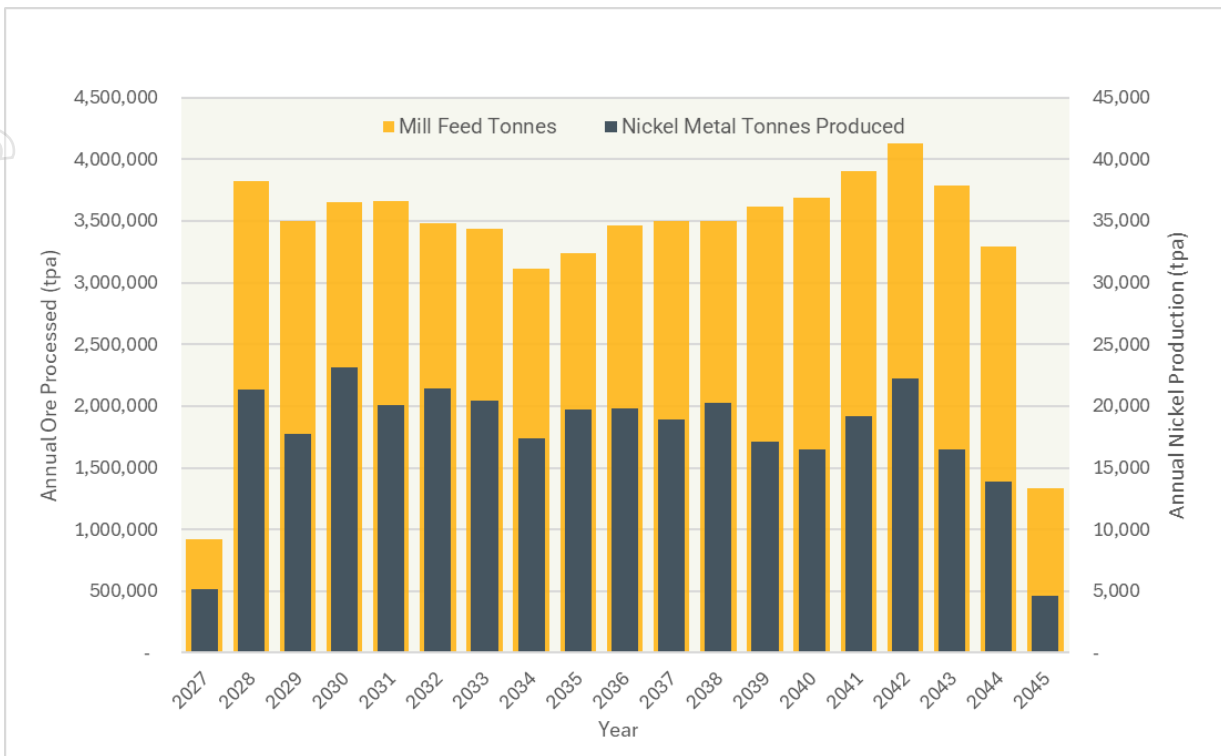
Design allowance and scalability of the comminution and float circuit has been built into the FS, providing scope to exceed nameplate throughput following commissioning through further mine schedule optimisation. This would increase production rates by bringing forward production from the later years of the FS production profile or make space for additional production from potential new discoveries.

**Figure 3 – Jaguar Pit Shell Outlines**





**Figure 4 – Jaguar Annual Process Tonnes and Nickel-in-Concentrate Production**

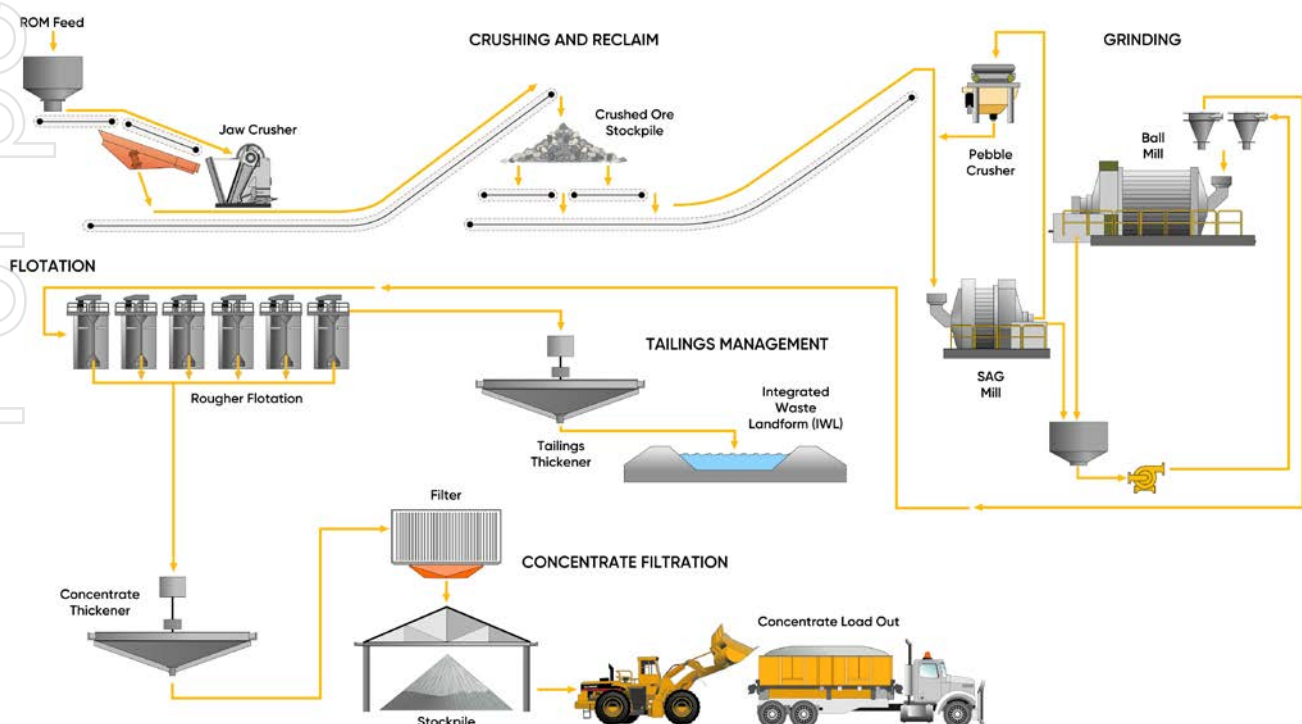


**Process Configuration**

The comminution and flotation circuits for the process plant were selected based on a detailed assessment of the metallurgical testwork completed on the various geological domains of the Mineral Resource. The preferred flowsheet that has been selected is common for nickel sulphide deposits globally, with the comminution circuit comprising primary crushing, a SAG mill and Ball mill followed by flotation and filtration to produce a nickel concentrate product (Figure 5).

Underpinned by the results of the FS metallurgical testwork and the geometallurgical modelling, the Project’s ore is expected to recover 73% of the nickel to concentrate at a nickel grade of 12.3% as outlined in the FS.

**Figure 5 – Process Flowsheet**



For personal use only

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Operating Cost Estimate

The FS operating costs have been developed based on a projected 3.5Mtpa processing plant treating 63Mt of ore at a nickel grade of 0.73% over an 18-year open pit evaluation period, recovering approximately 335,300 tonnes of nickel-in-concentrate. The operating costs have been compiled and developed from a variety of sources including:

- Mining costs estimated based on a contractor mining strategy, with pricing received from five contractors through a request for pricing (RFP) process based on a detailed mine plan
- Metallurgical testwork to estimate consumption rates for reagent and wear materials
- First principal estimates based on an assessment of key physical drivers (including power), volumes and consumption rates
- Supplier requests for pricing and budget quotations
- Rosters, personnel numbers and salaries and other salary oncosts determined by Centaurus and external consultants; and
- General and administration costs determined by Centaurus.

C1 cash costs comprise all on-site costs directly associated with mining, processing and general administration (G&A). All-in Sustaining Costs (AISC) costs cover the C1 cash costs plus product logistics, royalties and all other costs related to sustaining production.

Table 6 – Jaguar C1 Cash Cost Estimate

Cost Area	C1 Cash Cost Estimate		
	US\$/t mined (Ore + Waste)	US\$/t of ore milled	US\$/lb of Nickel in Concentrate Produced
Mining	\$2.90	\$18.13	\$1.55
Processing		\$6.90	\$0.59
General & Administration (G&A)		\$1.91	\$0.16
<b>TOTAL C1 CASH COST</b>		<b>\$26.94</b>	<b>\$2.30</b>

The first quartile operating cost environment for the production of nickel at Jaguar is principally a result of the **low processing cost environment**, which in turn is derived from the very low power costs available to the Project.

The Project can access 100% renewable power from the 230kV national grid that currently delivers power to Vale's Onça Puma ferronickel operations, located 15km to the south-east of Jaguar. The Company has costed a 40km spur line from the national grid to the Jaguar site as part of the FS capital cost. The benefit of incurring this upfront capital cost is that the Project will be able to source **power at a very low unit rate of approximately US\$0.035/kWh delivered to site**. Other key consumable and reagent costs include grinding media, mill liners and flotation and thickening reagents

Centaurus plans to employ approximately 490 people on the Project during steady-state operations and the cost of this workforce over the life of the initial open pit project is included in the operating costs. Labour only represents approximately 9% of the overall cost of the Project.

G&A includes costs associated with site administration, supply and logistics, communications, occupational health and medical care, site security, community, insurance and environmental monitoring and protection initiatives.

Table 7 – Jaguar All-in Sustaining Costs (AISC)

Cost Area	LOM AISC Estimate	
	US\$/t of ore milled	US\$/lb of nickel in concentrate produced
<b>C1 Cash Costs</b>	<b>\$26.94</b>	<b>\$2.30</b>
Product Logistics	\$6.92	\$0.59
Royalties	\$4.24	\$0.36
Sustaining Capital	\$3.75	\$0.32
<b>TOTAL AISC</b>	<b>\$41.85</b>	<b>\$3.57</b>

AISC reported includes all mine gate costs associated with mining, processing and administration (C1 Cash Cost) as well as product logistics, royalties and sustaining and deferred capital. Closure costs are not included in the AISC but have also been included as a cost to determine the overall project economics.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Product Logistics costs represent the cost of trucking concentrate from site to the proposed export loading port of Vila do Conde – close to the Pará State capital of Belém – and the cost of sea freight from Vila do Conde to the point of discharge. Trucking has been costed at US\$52/wmt of concentrate while sea freight has been costed at US\$48/wmt of concentrate.

The product logistics costs also include all of the costs of storage, handling and loading at the port. Overall product logistics costs are estimated at US\$141/wmt concentrate.

The relevant royalties for the Jaguar Project are set out in Section 1.17 of the Executive Summary and include a Government Royalty (CFEM) of 2% and a Royalty to Vale and the Brazilian National Development Bank (BNDES) related to the acquisition by Centaurus of the Project in 2019 of 2% and 1.8%, respectively.

Sustaining capital mainly relates to the mining of material for IWL (Integrated Waste Landform or tailings dam) lifts as well as the cost of constructing the IWL lifts during the life of the Project. It also includes sustaining costs for the process plant and infrastructure and the replacement of light vehicles and mobile equipment.

## Capital Cost Estimate

Centaurus finalised the Project capital estimate for the Study following receipt of costs estimated for the concentrator and infrastructure based on engineering and estimation work completed by Ausenco. The capital estimate was prepared with a ±15% level of accuracy and using Q3 2023 base pricing. The estimate is based on an Engineering, Procurement, Construction and Management (EPCM) implementation approach for the processing plant, process plant infrastructure and other site-based infrastructure. It covers all the costs associated with the construction and associated expenditure to develop the Project to a production capacity of 3.5Mtpa to produce approximately 18,700tpa of nickel-in-concentrate annually over the initial 18-year open pit mine life.

The estimate includes all costs associated with engineering, drafting, procurement, construction, construction management, freight, commissioning, first fills of plant reagents, consumables and spares, owner's costs (project build and operational readiness) and project management, design growth allowance and a risk weighted contingency.

The estimate is based on an FS level of engineering, material take-offs for earthworks, concrete, steelwork, piping and platework and budget price quotations for equipment and bulk commodities.

**Table 8 – Jaguar Project Pre-Production Capital Cost Estimate**

Capital Costs	Pre-Production Capital Cost - US\$M
Pre-Strip Mining (incl waste for IWL Construction)	67.8
Process Plant	101.0
Tailings and Water Management	18.5
Non-Process Infrastructure	77.3
<b>Total Direct Pre-Production Capital Costs</b>	<b>264.6</b>
Indirect Construction Costs	22.3
Engineering (EPCM/Spares/First Fills)	23.1
Owner's Costs	26.8
<b>Total Direct &amp; Indirect Pre-Production Capital Costs</b>	<b>336.8</b>
Contingency (incl growth)	34.6
<b>TOTAL PRE-PRODUCTION CAPITAL COST</b>	<b>371.4</b>

## Economic Assumptions and Sensitivity Analysis

Key economic and financial model assumptions used for the FS are outlined in Table 9

**Table 9 – Key FS Financial Assumptions**

Metric	Assumption
Nickel Price (2024 real terms)	US\$19,800/tonne (US\$8.98/lb)
Nickel Payability at Nickel Price	76%
Discount Rate (real terms)	8%
USD:BRL Exchange Rate	5.30

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE

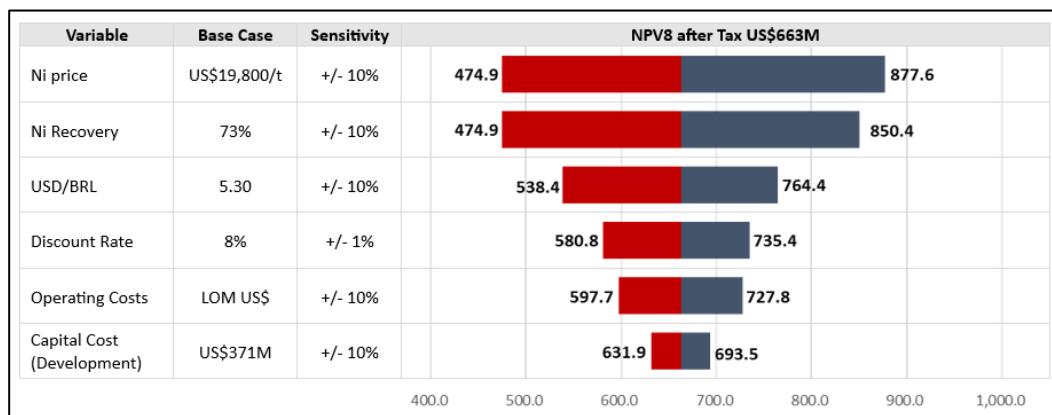


Sensitivity analysis (Figure 6) shows the Project to be least sensitive to changes in capital and operating costs. This is due to the relatively high annual nickel production rate over the evaluation period and the low operating costs, principally a result of the low power costs available from renewably source power over the 230kV national grid. The analysis demonstrates significant leverage to improved nickel price, nickel recovery and the USD/BRL exchange rate.

For example, an approximate 10% increase in the FS assumed nickel price of \$19,800/tonne would increase post-tax NPV<sub>8</sub> by ~US\$215M, whereas a 10% increase in the estimated capital cost would only reduce post-tax NPV<sub>8</sub> by ~\$35M.

Importantly, **the project retains robust economics even in the current lower nickel price environment** – an environment that the Company does not believe is sustainable in the longer term based on the estimated change from surplus supply to supply deficit that is forecast to occur from 2028. **At current spot market conditions** (US\$17,000/tonne nickel price and USD:BRL FX of 5.45), and holding all other key cost inputs the same, **the Project would still generate a margin of over US\$2.36/lb and have a post-tax NPV of US\$407M (A\$611M) and a post-tax IRR of 23% pa.**

Figure 6 – Project NPV<sub>8</sub> Sensitivity Analysis (US\$M) – Post-tax



With the Jaguar Project’s very favourable first quartile operating cost structure, Centaurus believes the Project will be able to operate profitably through all market conditions once in production. This is a key consideration for all potential strategic partners, particularly from EV supply chain participants who require long term, stable nickel supply to support significant investments in battery production capacity.

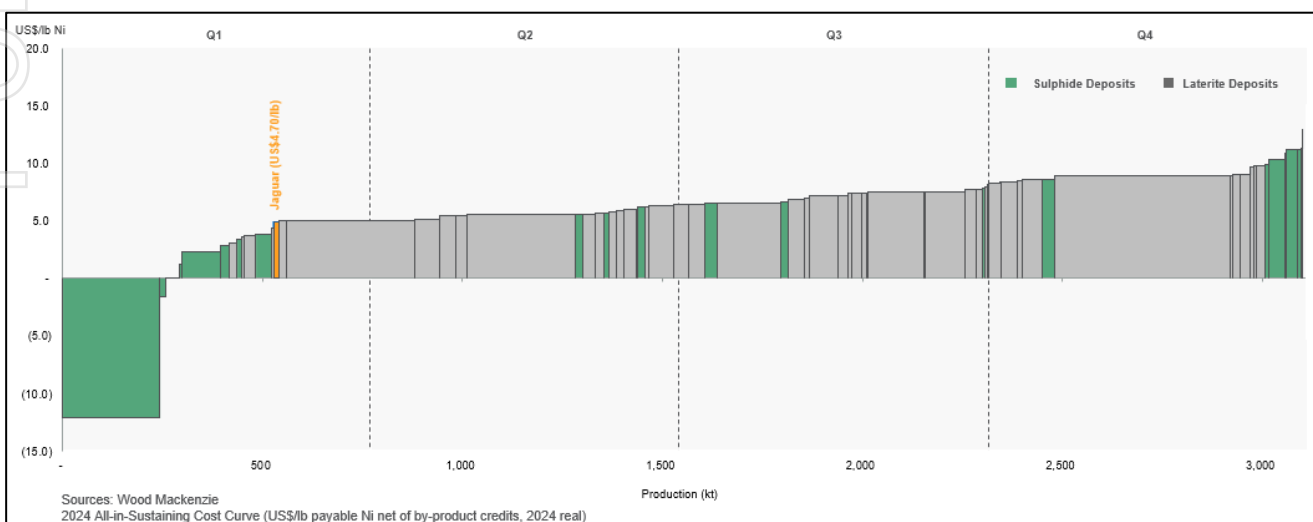
## Project Positioning

The Feasibility Study demonstrates that Jaguar is a globally unique nickel development opportunity, highlighted by:

- I. First quartile AISC for global nickel projects and not reliant on by-product credits to achieve cost profile, which is cost competitive against Indonesian nickel producers.
- II. Ranks in the first quartile for capital intensity of any large scale undeveloped global nickel project.
- III. One of the largest nickel sulphide resources globally with unencumbered off-take rights.
- IV. Life-of-mine CO<sub>2</sub> footprint forecast to be lower than 94% of global nickel production.

A comparison of the Project’s FS metrics based on these four categories is provided in Figure 7 to Figure 10.

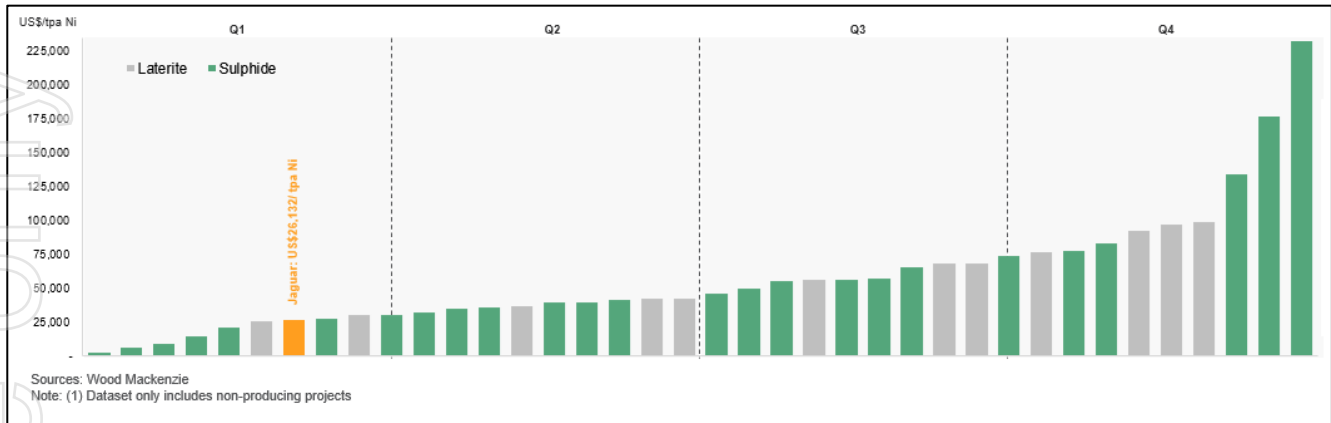
Figure 7 – 2024 All-in-Sustaining Cost Curve (US\$/lb payable Ni net of by-product credits, 2024 real) – source: Wood Mackenzie



# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE

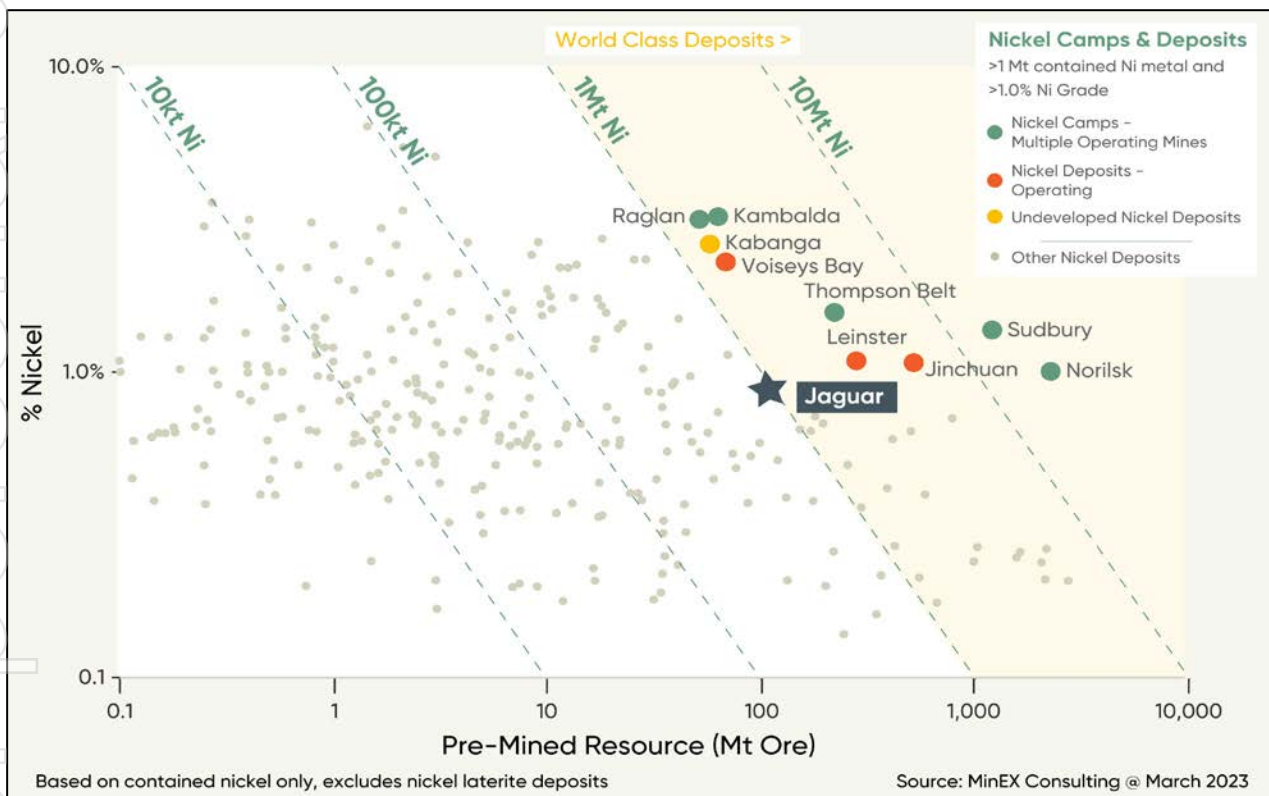


**Figure 8 – Nickel Capital Intensity Curve (US\$ Initial Pre - Production Capital/tpa Ni payable, 2024 real), dataset only includes non-producing projects – source: Wood Mackenzie**



The above Capital Intensity Chart in Figure 8 above compares the Jaguar FS estimates and current major non-producing nickel development assets globally as assessed by Wood Mackenzie.

**Figure 9 – Global Nickel Sulphide Camps and Deposit – Pre-mined Resources**



Refer Table 10 below for underlying data and references.

**Table 10 - Data and references for comparison of pre-mined resources of global nickel sulphide deposits and camps**

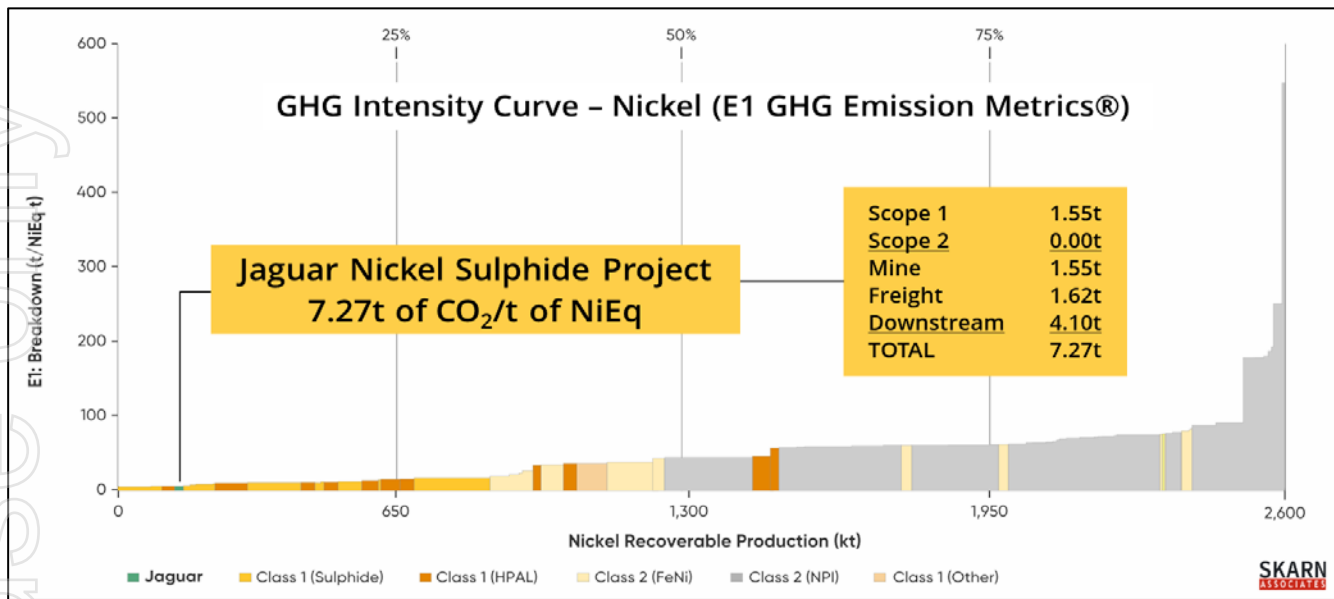
Camp / Deposit	Country	Deposit Type	Resource Date	Pre-Mined Resource MI&I		Ni Metal
				Mt Ore	% Ni	Mt
Norilsk (Talnakh Camp)	Russian Federation	Low-MgO NiS	31-Dec-19	2,433	1.02	24.7
Sudbury Camp	Canada	Low-MgO NiS	31-Dec-09	1,215	1.38	16.8
Jinchuan Deposit	China	Low-MgO NiS	31-Dec-09	520	1.06	5.5
Thompson Belt Camp	Canada	High-MgO NiS	31-Dec-09	232	1.58	3.7
Leinster Camp	Australia	High-MgO NiS	30-Jun-20	295	1.07	3.2
Raglan Camp	Canada	High-MgO NiS	31-Dec-14	53	3.10	1.7
Voiseys Deposit	Canada	Low-MgO NiS	31-Dec-21	70	2.31	1.6
Kambalda Camp	Australia	High-MgO NiS	30-Jun-11	60	3.08	1.9
Kabanga Deposit	Tanzania	Low-MgO NiS	31-Dec-15	58	2.62	1.5
Jaguar Deposit	Brazil	Low-MgO NiS	10-Nov-23	109	0.87	0.9

Source: MinEx Consulting © June 2023

Note that quoted resources are “Pre-Mined Resources” and have not been altered with reduction/addition in resources due to production or resource development; Of the listed camps/deposits Kabanga and Jaguar are the only projects that have resources that are yet to be mined. Camps are a collection of deposits sharing a common proximal location and geology - and they usually share a common processing facility. When a set of mines is owned by a single company, the reported endowment often refers to the entire camp.



Figure 10 – GHG Intensity Curve – Nickel (E1 GHG Emission Metrics®) for Global Nickel Projects (CO<sub>2</sub>/tonne)<sup>1</sup> – source Skarn Associates



**Nickel Market Outlook & Nickel Pricing**

*Market Outlook*

Nickel demand continues to grow and is expected to have exceeded 3Mt in 2023. Consumption remains dominated by the stainless-steel sector which last year accounted for approximately two thirds of total demand. Despite the steady ongoing expansion of this sector the main growth driver for future nickel demand is the production of battery materials, particularly for electric vehicles, which is forecast to grow from 11.5% of consumption in 2023 to 30% by the early 2030s. Non-ferrous alloys, electroplating, and other applications account for the rest of demand.

*Long Term Nickel Price Assessment*

In determining the appropriate long-term nickel price to be used in the Study, the Company engaged AME Mineral Economics Pty Ltd (AME) to produce an industry report on the nickel market. AME has assessed the supply/demand balance over the long term with their price forecast model being based on the relationship of global market balance of demand and supply and estimated the cost of production incorporating future energy cost assumptions.

According to AME, global stimulus spending has resulted in strong demand for stainless-steel, while forecasts of stronger and quicker uptake of electric vehicles in the future continues to provide support for the view of a positive outlook for nickel concentrate demand.

The AME nickel price forecast for 2030 is US\$19,700/tonne and continues with an upward trend such that their 2040 price forecast is over US\$21,000/tonne.

In addition to the input provided by AME, Centaurus has also considered the consensus forecast for nickel prices prepared by major investment banks in order to assist with evaluating a suitable long term nickel price. A summary of this consensus forecast shows a long-term nickel price that averages US\$19,053/tonne (2024 real terms).

*Jaguar Nickel Concentrate*

The Jaguar Nickel Concentrate average life-of-mine specification is set out in Table 11 with month-to-month production varying depending on the location of where the ore is sourced:

**Table 11– Average LOM Jaguar Nickel Concentrate Specification for Study**

Ni (%)	Cu (%)	Co (%)	Zn (%)	Fe (%)	S (%)	MgO (%)	Fe/MgO
12.3	0.85	0.24	2.6	28.0	32.0	3.9	7.2



# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



The life-of-mine concentrate grade is 12.3% Ni with a Fe:MgO ratio of 7.2. Based on the grade of copper and cobalt in the testwork results, nickel is likely to be the only payable metal in most months of operation.

Deleterious elements such as arsenic, antimony, lead and zinc - traditionally viewed as penalty elements in nickel concentrates - have been studied in comprehensive concentrate assays and other than zinc none of these deleterious elements reach commercially relevant thresholds.

While the Jaguar concentrate product contains elevated levels of zinc compared to more traditional nickel concentrates, discussion with off-takers and potential strategic partners in the battery materials sector has indicated that no penalty would be applicable to zinc in the Jaguar concentrate.

## *Offtake terms*

Due to the limited volume of new nickel sulphide concentrate sources available to the market, offtake terms have been and remain very strong, despite a weakening in nickel price during 2023 and early 2024. This situation appears set to continue with limited new mine production - particularly nickel sulphides - incentivised at current prices and potential new processing capacity being constructed to support the growing EV battery market.

Recent discussions with potential customers for Jaguar concentrate have highlighted a clear desire to diversify their nickel supply sources away from Indonesia amid growing concerns around ESG standards and GHG emissions as well as a general overdependence on sourcing nickel supplies from a single country.

## *FS Long-Term Nickel Price Assumption*

For this Study, Centaurus has adopted a long-term nickel price of US\$19,800/tonne (US\$8.98/lb) with the pricing assumption supported by a detailed market summary prepared by AME, consensus price forecasts by global investment banks and Centaurus's assessment (developed with the support of its Financial Adviser, Standard Chartered Bank) of the nickel supply/demand balance and cost curve from the commencement of planned operations from Jaguar. Jaguar production is planned to commence in H2 2027 and will initially have a mine life of 18 years based just on open pit ore.

The Study assumes a 76% payability from the sale of its nickel concentrate. This payability is a conservative assessment of nickel payability based on the discussions referred to above with potential offtakers and strategic partners in the battery materials sector and the current nickel concentrate market supply/demand fundamentals noted above. The pricing structures used in the FS financial model are reflective of the discussions held to date with these groups.

## **Community and Environment**

### *Community*

With Centaurus's commitment to establishing an environmentally and socially responsible economic mining operation at the site, a comprehensive consultation program with all potential stakeholders commenced following the acquisition of the Project from Vale in 2019. The program has been progressively expanded as the Project progresses toward development.

The Company has consulted widely in the Tucumã, Ourilândia do Norte and São Félix do Xingu communities. Numerous community engagement meetings have been held to consult with and update local officials, the general public and other stakeholders on the Project development plans as well as to seek feedback on any concerns from the community in relation to conducting exploration activities and the development of the Project and supporting infrastructure.

During each of these meetings, a comprehensive presentation of the main outcomes of the EIA-RIMA was made and this led to the positive results at the public hearings held in São Félix do Xingu and Tucumã/Ourilândia do Norte in the second half of 2023.

The strong local support received during the public hearings helped Centaurus obtain the grant of the LP in February 2024.

### *Environment*

Detailed programs of environmental and social baseline surveys and studies have already been undertaken over several years for the Project and for the 230kV Transmission Line by teams of specialist environmental and social scientists. These programs covered the physical, biotic and socio-economic environments at the local and region scales.

Data from these surveys and studies were then integrated into the Project's engineering designs and options for Project layout, allowing Centaurus to complete an assessment of potential impacts and risks to the social and environmental resources and receptors at these local and regional levels and select the optimal site layout. The outcome of this work was summarised into the EIA-RIMA based on the terms of reference defined by SEMAS and incorporated into the RCA/PCA report.

As noted above, following the extremely positive response received to the Project at the public hearings, the Company's EIA/RIMA was approved and the key environmental approval, the LP, was issued in February 2024. In April 2024, the Company lodged its RCA/PCA, being the application document required for the LI. The Company expects the LI to be issued in Q4 2024.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



In addition to the main environmental approval for the Project, the Company has also been issued its combined LP/LI for the powerline route from the existing 230kV national grid to site.

The Jaguar Project is one of the largest undeveloped nickel projects on a global basis and will have low carbon footprint once in production. As noted above in Figure 10, the carbon intensity (Scope 1, 2, product logistics and downstream processing) for the Project has been assessed in conjunction with Skarn Associates at 7.27 tonnes of CO<sub>2</sub> per tonne of nickel equivalent production. The on-site Scope 1 and 2 emissions are very low at 1.55t CO<sub>2</sub>/t NiEq as a result of being able to access 100% renewable power via the existing 230kV national grid.

## **Mining Lease Approval**

In January 2024, the Company received the technical approval of the Mining Lease Application (PAE) for Jaguar by the ANM. The key condition to the formal grant of the Mining Lease by the ANM is the receipt of the LI from the Environmental Agency, SEMAS. The LI is expected in Q4 2024 and, on the basis of this, the Company expects the Mining Lease to be granted in Q1 2025.

The Company can commence on-site construction activities following the grant of the LI by SEMAS, but mining of the pits can only occur with the formal issue of the Mining Lease.

As it currently stands, a Final Investment Decision (FID) is planned in Q2 2025 after both the LI and the Mining Lease have been issued given that one of the first activities to commence will be the construction of the IWL, which will require mining activities to be undertaken.

## **Funding**

The Company has developed a detailed funding plan in conjunction with its advisers to secure the development capital required to bring Jaguar into production with an aim to secure an appropriate funding solution on terms which maximises value and minimize dilution for existing Centaurus shareholders. It is anticipated that the Project will be funded through a combination of equity at the project level and project debt, which may be supported by some equity funding at the corporate level. The Feasibility Study demonstrates Jaguar's long life production profile, cost competitiveness through the market cycle and attractive financial outcomes, providing a strong platform for Centaurus to secure funding on attractive terms.

The Company has been engaged in ongoing partnering discussions in conjunction with its financial adviser, Standard Chartered Bank, over the past 12 months. Ongoing engagement has confirmed the strong strategic interest in the project from a range of potential partners, with the completion of the Feasibility Study expected to facilitate the next phase of the strategic partnering process, whereby interested parties will be invited to provide formal investment proposals to fund project development.

The Company will consider a range of potential transaction structures, with a preference for minority equity investment at the project level with partner/s who can contribute funding, marketing and other technical support to maximize value for Centaurus shareholders.

The debt funding process is being managed by the Company's debt advisor, Orimco. Strong interest has been received from potential financiers including banks, credit funds and development finance institutions in supporting the funding of the project. With the Feasibility Study complete, the next phase of work with debt financiers can commence. Debt funding may also be sourced via the strategic partnering process, either directly from the parties who are active in the partnering process, or financiers who directly support the potential partners who are active in the partnering process.

The Board considers that the robust project cash flows outlined in the Feasibility Study are supportive of debt funding of the Project on standard commercial terms.

Equity funding at the corporate level may also be required and the Company expects that its highly supportive shareholder base would support ongoing project development given the Project's compelling economics. Further, strong indications of equity support have been provided to the Company by stockbroking houses who have research coverage on the Company.

Centaurus has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required. The grounds on which this reasonable basis has been established includes:

- The outstanding financial metrics of the FS including first quartile operating costs, significant free cash flow generation over an initial open pit mine life of 18 years and one of the lowest capital intensities of a nickel project of this scale on a global basis.
- The Company's strong track record in successfully raising equity funds as and when required to advance the exploration and development of the Project.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



- Centaurus has already received strong inbound interest from potential strategic partners who have demonstrated their desire to participate in the project and secure offtake from the Jaguar Nickel Project, particularly given its position as a highly strategic source of non-Indonesian nickel for the EV battery supply chain. Multiple interested parties have also provided indicative pricing terms for Jaguar’s nickel concentrate, confirming the marketability of the product.
- The Company has an uncomplicated, clean corporate and capital structure with a current market capitalisation of approximately \$210 million and no debt. Centaurus owns 100% of the Jaguar Nickel Project, located in the Carajás Mineral Province of northern Brazil (one of the best mining provinces globally due to its extensive access to key infrastructure), which has a world-class Mineral Resource and Ore Reserve base with one of the lowest carbon emission footprints in the global nickel sector. These factors are all expected to be highly attractive to potential partners, debt financiers and equity investors.
- Centaurus is being supported by its financial adviser, Standard Chartered Bank who will assist the Company to undertake a formal strategic partnering process to secure equity funding for the Project.
- The Company is also being supported by its debt adviser, Orimco, in arranging debt funding for Project development. The Company has received strong interest from potential financiers including banks, credit funds and development finance institutions in providing debt funding for Project development.
- The Centaurus Board and management team has extensive experience in mine development, financing and operations in the resources industry.

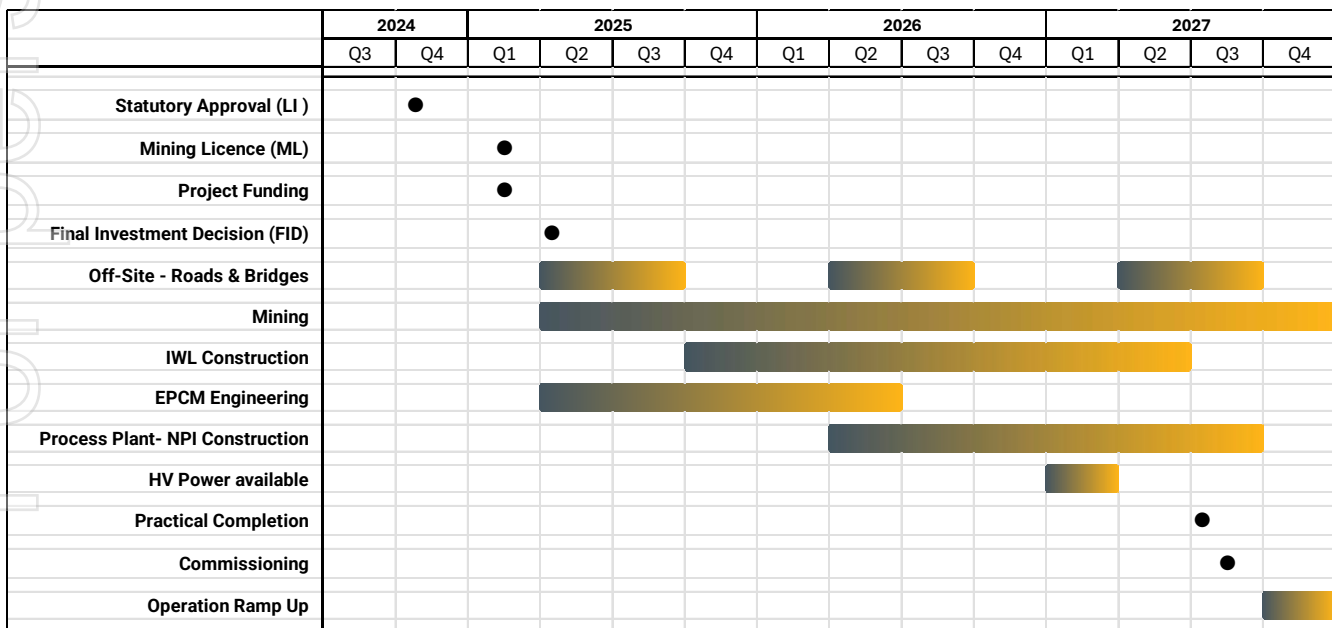
It is anticipated that funding for project will be advanced significantly over the next six months, enabling the Centaurus Board to consider a Final Investment Decision (FID) leading to the start of construction in line with its proposed development timeline of Q2 2025.

## Project Timeline

Completion of the statutory approvals processes (Mining Lease and LI) and the Company’s strategic partnering process are expected to be the key determining factors in the timing of FID. The timing of the receipt of final statutory approvals is subject to several factors and is therefore uncertain, however, the Company believes it should receive the LI in Q4 2024 while the Mining Lease Grant should be delivered in Q1 2025.

Based on this timeline, a Final Investment Decision (FID) is targeted for Q2 2025. With an estimated two-year construction period, the first nickel production at Jaguar is targeted for the second half of 2027. In parallel with the permitting and strategic partnering processes over the next 6-9 months, the Company will also undertake a number of value engineering activities designed to further improve the already strong economics of the Project ahead of the FID.

Figure 11 - Indicative Project Timeline



## Project Delivery Capability

The Company maintains its firm commitment to build its organisational capability to take the Project from the exploration/studies phase, through project construction, commissioning and into operations.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Mr Wayne Foote was appointed General Manager of Operations in July 2021 and has played a central role in the completion and delivery of the Jaguar FS. Mr Foote is a highly experienced mining engineer with extensive operational experience. He has previously held a number of senior executive roles both in Australia and overseas, including more than two years living in Brazil, and brings a strong skill set in building and leading effective, disciplined teams. Mr Foote was ably supported on the delivery of the FS by Project Director, Mr Mick Ryan.

In Brazil, local activities are managed by Brazil Country Manager, Mr Bruno Scarpelli, who has been with the Company since 2011 and has a deep understanding in the operating regime for mining projects in Brazil. Mr Scarpelli excels in the areas of stakeholder relations and regulatory approvals, particularly in the field of environmental matters, health and safety and human resources. Mr Scarpelli was the previously Environmental Coordinator of the S11D Iron Ore Project, part of the world-class Carajás Iron Ore Operations in the State of Para, Brazil.

Senior appointments have been made in the Project team working under Mr Foote in roles across mining, metallurgy, procurement and contracts management and operational readiness. Ongoing recruitment is required and will be advanced concurrently with the value engineering work planned to be undertaken while the strategic partnering process is running its course over the next 6-9 months in advance of FID. The location of the Jaguar Project in the mining project and infrastructure-rich Carajás Mineral Province is expected to assist with accessing a skilled workforce compared to other more remote regions of Brazil.

The team has been supported by experienced technical consultants who are leaders in their fields of geology, resource definition, hydrogeology, mine design, process design and tailings management. Most of these consultants will continue to support the Project going forward.

The Project team is being supported more broadly by the development and implementation of governance and environmental management systems designed to ensure compliance with regulatory requirements and sustainability commitments.

## **Board Approval of Pathway to Production**

The Centaurus Board has endorsed the FS outcomes and approved the following next steps and Project implementation activities:

- Mining, metallurgical and engineering value adding activities to further enhance project economics focussed on the mine plan and final process flowsheet design.
- Undertake strategic pre-development Project activities to support FID in Q2 2025.
- Commence a formal strategic partnering process in conjunction with its financial adviser, Standard Chartered Bank, with partnering outcomes targeted for delivery in advance of FID.
- Advance debt funding discussions in parallel with the partnering discussions, supported by the Company's debt advisor, Orimco.
- Continue to refine the project implementation plan and contracting strategy.
- Work with the Environmental Agency, SEMAS, on the grant of the LI and the ANM for the formal issue of the Mining Lease prior to FID.

These approvals will enable the Project to maintain its strong momentum since its acquisition of the Jaguar Project in late 2019 and facilitate a pathway for first production from this world-class nickel project in the second half of 2027.

The Board will be ready to consider a formal Final Investment Decision on the Project at the conclusion of the project financing and project approval processes, expected in Q2 2025.

## **Project Opportunities**

### *Mining*

There is opportunity to re-optimize and redesign the open pits and associated waste containment facilities for the concentrate-only product scenario not constrained by the back-end refinery circuit. From this work, a reschedule of the mine plan can be undertaken to further enhance project economics for concentrate production.

Separately early-stage testing of Jaguar and Onça Preta composite samples has shown they are amenable to Ore Sorting to improve grade with low nickel losses through rejection of both dilution waste and waste within the ore intersections. Further work is required to quantify the amenability throughout the various deposits.

### *Processing*

During the implementation phase of work, the Company will improve the concentrator layout to further reduce earthworks, conveyor, piping and cable runs, revise concrete and structural steel designs, and review the concentrate filtration and storage requirements for lower volume, higher-grade concentrate production.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Additional metallurgical testing is intended to be undertaken to assess if the nickel grade/recovery relationship can be further improved prior to implementation and, should this be successful, the Company anticipates that there may be process flowsheet design and equipment selection benefits.

## Resource Growth

The hydrothermal nature of the mineralisation at the Jaguar Project points to a deep plumbing system which remains open beyond the current drill depths. The 2023 “Deeps” drilling at Jaguar South has confirmed the presence of nickel mineralisation beyond 700 metres while the mineralisation at Onça Preta extends to depths of 1,000 metres. Additionally, regional exploration successfully identified mineralisation outside of the current MRE with a discovery made at the Twister Prospect.

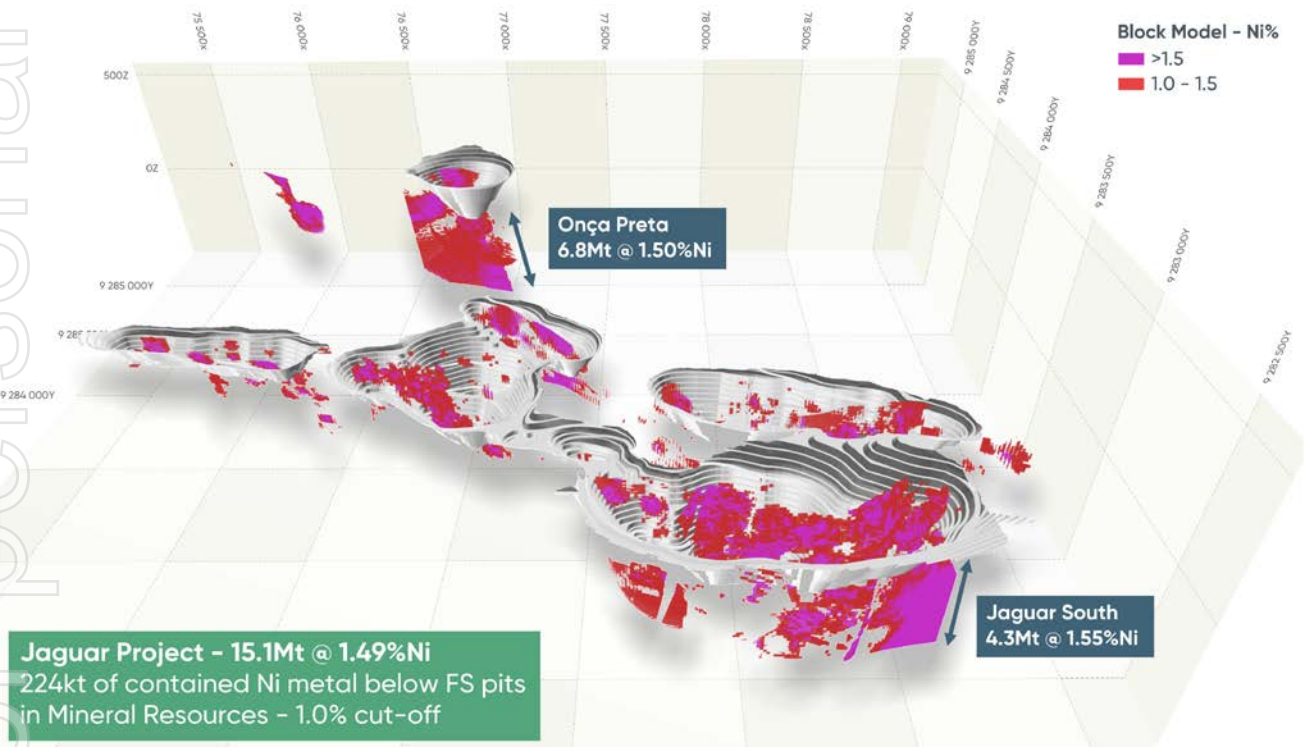
More than 50,000 metres of the exploration and deeper diamond drilling completed in 2023 will be included in the next MRE update, planned for Q3 2024.

## Underground Operations

The FS considers open pit Measured and Indicated Resources only based on the November 2022 MRE. An additional **15.1Mt at 1.49% Ni for 224kt of contained nickel metal<sup>6</sup>** of Mineral Resources, considering a 1.0% Ni cut-off grade, sits below the FS final pit designs (Figure 12). More than 75% of these resources are hosted in the Jaguar South and Onça Preta Deposits.

A focused economic study will be completed on underground operations at the Jaguar South and Onça Preta Deposits to determine the potential upside of bringing high-grade nickel feed to the plant. The study will be underpinned by the updated MRE planned for release in Q3 2024.

Figure 12– Jaguar MRE Block Model showing blocks greater than 1.0% Ni<sup>7</sup>



A number of other opportunities also exist in respect to Non-Process Infrastructure which are set out in the FS Executive Summary from Page 24.

## Key Risks

As part of the FS, a risk assessment process was undertaken involving Centaurus and Ausenco personnel to ensure that, at a Study level, technical risks were identified and mitigated within the constraints of the Study engineering. Centaurus has also undertaken corporate risk assessments. Consideration has been given to opportunities which may enhance the performance of the Project during further value engineering exercises.

<sup>6</sup> Includes 8.8Mt at 1.50%Ni Measured and Indicated Resources and 6.3Mt at 1.48%Ni Inferred Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources.

<sup>7</sup> Refer to ASX Announcement dated 10 November 2022.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



The risk strategy adopted has been to minimise, wherever possible, risks that have the potential to adversely impact the financial viability of the Project or the ability to obtain project financing.

It is recognised that there are uncertainties in implementing and operating any project, including a new nickel sulphide concentrate project in Brazil. There is a risk that forecasts will not be achieved in some areas and there are opportunities and avenues for improving the performance of the Project in others.

A list of assessed key risks is provided below with details of these risks set out in the FS Executive Summary document that forms part of this ASX Release from Page 24. This should not be considered an exhaustive list, but the key risks include:

- Technical Risks
  - Water Supply
  - Mining
  - Processing
  - Tailings Storage
  - People
  - Supply chain
- Political/Country Risk
- Environment and Approval Risk
  - Approvals and Land
  - Environment and Climate
- Implementation Risk
- Funding and Offtake Risk.

-ENDS-

For further enquiries please contact:  
Nicholas Read  
Read Corporate  
M: +61 419 929 046  
T: +61 8 9388 1474

Authorised for Release by the Centaurus Board  
Darren Gordon  
Managing Director  
Centaurus Metals Ltd  
T: +61 8 6424 8420

## COMPETENT PERSONS' STATEMENTS

### Ore Reserves – Jaguar Nickel Project

The information in this report that relates to Ore Reserves is based on information compiled by Adriano Carmensi Carneiro and Peter Rowland Lock, both of whom are Competent Persons and Members of the Australasian Institute of Mining and Metallurgy. Both Adriano Carmensi Carneiro and Peter Rowland Lock are currently employed by Mining Plus. Adriano Carmensi Carneiro and Peter Rowland Lock both have sufficient experience relevant to the style of mineralisation 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 the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Specifically, Mr Carneiro is the Competent Person for the overall study, excluding Capital and Operating estimates, nickel price and financial analysis. Mr Lock is the Competent Person for the capital and operating estimates, nickel price and financial analysis. Adriano Carmensi Carneiro and Peter Rowland Lock consent to the disclosure of information in this report in the form and context in which it appears.

### Mineral Resources - Jaguar Nickel Project

The information in this report that relates to the November 2022 Jaguar Mineral Resource 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.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## Exploration Results

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.

## Initial Market Announcements

This report contains information extracted from the following ASX market announcements made by the Company;

- ASX announcement dated 10 November 2022 in relation to the Jaguar Project MRE;
- ASX announcements dated 29 March 2023 and 20 November 2023 in relation to Jaguar exploration results;

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 referred to above 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 were presented have not been materially modified from the original announcements.

## FORWARD LOOKING STATEMENTS

These materials prepared by Centaurus Mining Limited (or the "Company") include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events, or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements, or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant securities exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

## DISCLAIMER - WOOD MACKENZIE

The data and information provided by Wood Mackenzie should not be interpreted as advice and you should not rely on it for any purpose. You may not copy or use this data and information except as expressly permitted by Wood Mackenzie in writing. To the fullest extent permitted by law, Wood Mackenzie accepts no responsibility for your use of this data and information except as specified in a written agreement you have entered into with Wood Mackenzie for the provision of such data and information.



**CentaurusMetals**  
Limited

For personal use only

# Jaguar Nickel Project

Feasibility Study  
July 2024

[www.centaurus.com.au](http://www.centaurus.com.au)



---

## Table of Contents

<b>1</b>	<b>EXECUTIVE SUMMARY</b>	<b>1-7</b>
1.1	INTRODUCTION	1-7
1.2	BACKGROUND	1-7
1.3	PROJECT LOCATION	1-8
1.4	STUDY CONTRIBUTORS	1-9
1.5	GEOLOGY & RESOURCE	1-10
1.6	MINING	1-14
1.7	METALLURGY	1-18
1.8	PROCESSING	1-22
1.9	INFRASTRUCTURE & SERVICES	1-24
1.10	OWNERSHIP AND PERMITTING	1-26
1.11	ENVIRONMENTAL, SOCIAL AND COMMUNITY	1-29
1.12	IMPLEMENTATION	1-31
1.13	OPERATIONAL ACTIVITIES	1-32
1.14	CAPITAL COST ESTIMATE	1-34
1.15	OPERATING COST ESTIMATE	1-35
1.16	NICKEL MARKET OUTLOOK & NICKEL PRICING	1-37
1.17	FINANCIAL ANALYSIS	1-38
1.18	RISKS	1-45
1.19	INSURANCE PLAN	1-49
1.20	PROJECT OPPORTUNITIES	1-49
1.21	RECOMMENDATION AND CONCLUSION	1-51

## List of Figures

Figure 1:1 – Location of the Jaguar Nickel Project	1-8
Figure 1:2 – The Jaguar Nickel Project Geology	1-10
Figure 1:3 – Core photos from drill hole JAG-DD-20-034 <sup>Note</sup>	1-11
Figure 1:4 – Cross-Sections Jaguar South Deposit (left) and Onça Preta Deposit (right)	1-11
Figure 1:5 – 3D view of the Jaguar and Onça Deposits showing Resource Categories	1-13
Figure 1:6 – Jaguar Project – Nickel grade and tonnage curve.	1-14
Figure 1:7 – General layout of the Project.	1-16
Figure 1:8 – Ultimate Pit Locations	1-16
Figure 1:9 – Jaguar mining phases with Onça inset	1-17
Figure 1:10 – Total Material Movement by year	1-18
Figure 1:11 – Mineralogy Composite Locations	1-20
Figure 1:12 – Annual Processing Summary	1-22
Figure 1:13 – Block Flow Diagram of the Jaguar Project	1-23
Figure 1:14 – Process Plant layout	1-24
Figure 1:15 – Site layout showing key Infrastructure Locations	1-25
Figure 1:16 – Project Tenement Area	1-26
Figure 1:17 – Operations Organisation Chart	1-33
Figure 1:18 – AME Historical and Forecast Nickel Prices	1-37
Figure 1:19 – Jaguar Project Cashflow Summary	1-45
Figure 1:20 – Jaguar Project Sensitivities	1-45
Figure 1:21 – Jaguar MRE Block Model showing blocks greater than 1.0% Ni	1-50

---

## List of Tables

---

Table 1:1 – Key Study Contributors	1-9
Table 1:2 – JORC Mineral Resource Estimate	1-12
Table 1:3 – Ore Reserve Estimate – July 2024	1-15
Table 1:4 – Annual Mine Production	1-18
Table 1:5 – Domain Recovery Factors	1-19
Table 1:6 – Project Throughput and Recovery Summary	1-19
Table 1:7 – Nickel Residence by Mineral	1-20
Table 1:8 – Orebody Comparison of Nickel Sulphide Proportions	1-21
Table 1:9 – Summary Process Plant Design Criteria	1-23
Table 1:10 – Status of Project Approvals	1-29
Table 1:11 – Project Key Activities	1-32
Table 1:12 – Capital Cost Breakdown	1-34
Table 1:13 – Sustaining and Closure Cost Estimate	1-35
Table 1:14 – Forecast Operating Cost (Average) Summary	1-36
Table 1:15 – Average LOM Jaguar Nickel Concentrate Specification for Study	1-38
Table 1:16 – Project Assumptions	1-39
Table 1:17 – Jaguar Project Key Economic Metrics	1-45

## Nomenclature and Abbreviations

Acronym/Abbreviation	Description
ANM	National Mining Agency (Agência Nacional de Mineração)
ASX	Australian Stock Exchange
Carajás	Carajás Mineral Province
Centaurus	Centaurus Metals Ltd or Centaurus Niquel Ltda
CERN	Consultoria Empreendimentos e Recursos Naturais
CFEM	Financial contribution over mineral exploitation
CLT	Consolidated Labour Code (Consolidação das Leis do Trabalho [CLT] 1964)
COEMA	State Council for the Environment, State of Pará (Conselho Estadual do Meio Ambiente)
CONAMA	National Council of Environment, Brazil (Conselho Nacional do Meio Ambiente)
Deposits	Includes the Jaguar and Onça Preta deposits.
EIA/RIMA	EIA is the Environmental Impact Study, or study of environmental impact; and RIMA is the Environmental Impact Report.
EPCM	Engineering, Procurement and Construction Management
ESG	Environmental, Social & Governance Framework
FS	Feasibility Study
GHG	Greenhouse Gas
HDPE	High-Density Polyethylene
HV	High Voltage
IBRAM	Brazilian Mining Institute (Instituto Brasileiro de Mineração)
IFC	International Finance Corporation
Infrastructure	Includes off-site access road and bridge upgrades, 230kV power line and integrated waste landform facility
IOCG	Iron Oxide Copper Gold
IPHAN	National Historic and Artistic Heritage Institute
IWL	Integrated Waste Landform
LI	Installation Licence (Licença de Instalação) issued by SEMAS
LO	Operating Licence (Licença de Operação) issued by SEMAS
LP	Preliminary Licence (Licença Prévia) issued by SEMAS
m	metres
MME	Brazilian Ministry of Mines and Energy (Ministério de Minas e Energia)

Acronym/Abbreviation	Description
MRE	Mineral Resource Estimate
NPI	Non Process Infrastructure
PAE	Plan for economic use of mineral deposit (Plano de Aproveitamento Econômico)
Process Plant	Includes crushing, grinding and flotation concentrator and support processing facilities
Project	Jaguar Nickel Project
R\$ or BRL	Brazilian Reais
RC	Reverse Circulation
RCA/PCA	Environmental Control Plan (Planos de Controle Ambientais)
ROM	Run of Mine
SAG	Semi Autogenous Grinding
SEMAS	Environment and Sustainability Secretariat of the State of Pará (Secretaria de Estado de Meio Ambiente e Sustentabilidade)
Study	The Feasibility Study
TUNRA	Tunra Bulk Solids Handling Research Associates
UCBA	Union Collective Bargain Agreements
Vale	Vale Metais Básicos S.A.

---

# 1 EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

Centaurus Metals Ltd (**Centaurus**) is a publicly listed company on the Australian Stock Exchange (**ASX**) dedicated to exploration, development and mining in Brazil. The purpose of the company is to **build a Brazilian strategic minerals business to benefit our shareholders, our people and the communities where we operate**.

Centaurus has completed a Feasibility Study (**Study**) for the development of the Jaguar Nickel Project (**Project**), that was acquired from Vale Metais Básicos S.A. (**Vale**) in September 2019. This Study has assessed the construction of a conventional flotation concentrator and support processing facilities (**Process Plant**) to produce a nickel sulphide concentrate from open pit mining operations over an initial 18 year mine life. The Study follows the Value-Add Scoping Study<sup>1</sup> and earlier Base Case Scoping Study<sup>2</sup>.

The Project is being developed by Centaurus Niquel Ltda, a wholly owned subsidiary of Centaurus Metals Ltd and which holds 100% ownership of the Project assets. For the purpose of the Study, a reference to Centaurus means Centaurus Metals Ltd or Centaurus Niquel Ltda.

The focus of the Study was for the development of the Project located in the municipality of São Félix do Xingu, in the south-eastern region of the State of Pará, near the municipalities of Ourilândia do Norte and Tucumã, which have their municipal headquarters closest to the Project.

## 1.2 BACKGROUND

The Project was originally discovered by Vale. In the period between 2006 and 2010 Vale drilled 56,592m to initially define the extent of mineralisation at the Project. During this period, substantial environmental data was also collected with the resulting surveys providing the Project baseline conditions. Based on the information generated, Vale lodged a Plan for economic use of mineral deposit (**PAE**) application for the Project with the DNPM (now the Brazilian Mining Agency called ANM) on 26 April 2013.

In 2019 Centaurus signed an agreement to acquire the Project for low upfront cash consideration, some modest deferred payments, an asset swap for the Company's grassroots Salobo West Copper Gold Project and a royalty. Following the successful completion of the transaction, Centaurus immediately started additional exploratory works at the Project. Centaurus applied for, and was granted, all necessary environmental approvals to resume drilling at the Project.

From October 2019 to October 2022, Centaurus drilled a total of 106,338m, comprising 459 diamond drill holes for 96,318m and 71 Reverse Circulation holes (**RC**) for 10,020m. This drilling was the basis for the November 2022 Mineral Resource Estimate (**MRE**) and the Maiden Ore Reserve estimation delivered as part of this Study. Further drilling has been undertaken from November 2022 through to the end of 2023 and will be the subject of a later MRE update.

On 29 March 2021, Centaurus announced the positive results of a Base Case Scoping Study for the production of a nickel concentrate based on the February 2021 MRE for a 2.7Mt/y processing plant producing nickel as a nickel sulphide concentrate.

On 31 May 2021, Centaurus released a Value-Added Scoping Study updating the flowsheet to include a hydrometallurgical circuit that could produce nickel sulphate hexahydrate and a mixed sulphide precipitate product from open pit and underground mining operations.

---

<sup>1</sup> ASX announcement 31 May 2021

<sup>2</sup> ASX announcement 29 March 2021

Centaurus committed to a feasibility study based on a nickel sulphate product and this work continued until early in 2024. On 1 March 2024, Centaurus announced the decision to develop the Project in two phases, with the first phase focusing on the production of a nickel sulphide concentrate from open pit mining operations, maintaining the contained nickel output, with a second downstream nickel sulphate refinery phase to follow when and if market conditions allow.

### 1.3 PROJECT LOCATION

The Project is approximately 250km from the regional city of Parauapebas (population ~267,000) in the northern Brazilian State of Pará and is located within a 30km<sup>2</sup> tenement in the São Félix do Xingu municipality in the western portion of the world-class Carajás Mineral Province (**Carajás**). The Carajás is Brazil's premier mining hub, containing one of the world's largest known concentrations of bulk tonnage Iron Oxide, Copper and Gold (**IOCG**) deposits. Figure 1:1 shows the location of the Project.

The State of Pará, and in particular the Carajás Mineral Province, is considered a mature location for mining projects hosting some of the largest operating facilities in Brazil with several small mining projects already under development or in operation.

The Project can be accessed by regional roads from the towns of Tucumã or Ourilândia do Norte, 40 km to the south of the Project. São Félix do Xingu is the fifth largest municipality in Brazil and the town is located where the Fresco River meets the Xingu River; approximately 120km west from the Project by road. Existing infrastructure in the immediate vicinity of the Project includes:

**Aerodromes** – located at Ourilândia do Norte and São Félix de Xingu, both serviced with regular commercial flights.

**Power** – a 230kV transmission line which provides electricity to Vale's nearby Onça Puma nickel laterite mine can be extended to provide power to the Project. Centaurus has costed in the Study to extend this transmission line the 38km to connect the Project and has received the necessary approvals.

**Communications** – fibre communication connections are provided to the site via existing services, and

**Roads** – the sealed state highway PA 279 passes through Tucumã 40km south of the Project from which unsealed arterial roads provide access to the Project with permitting approved to upgrade these roads to accommodate increased vehicle traffic for the Project development.

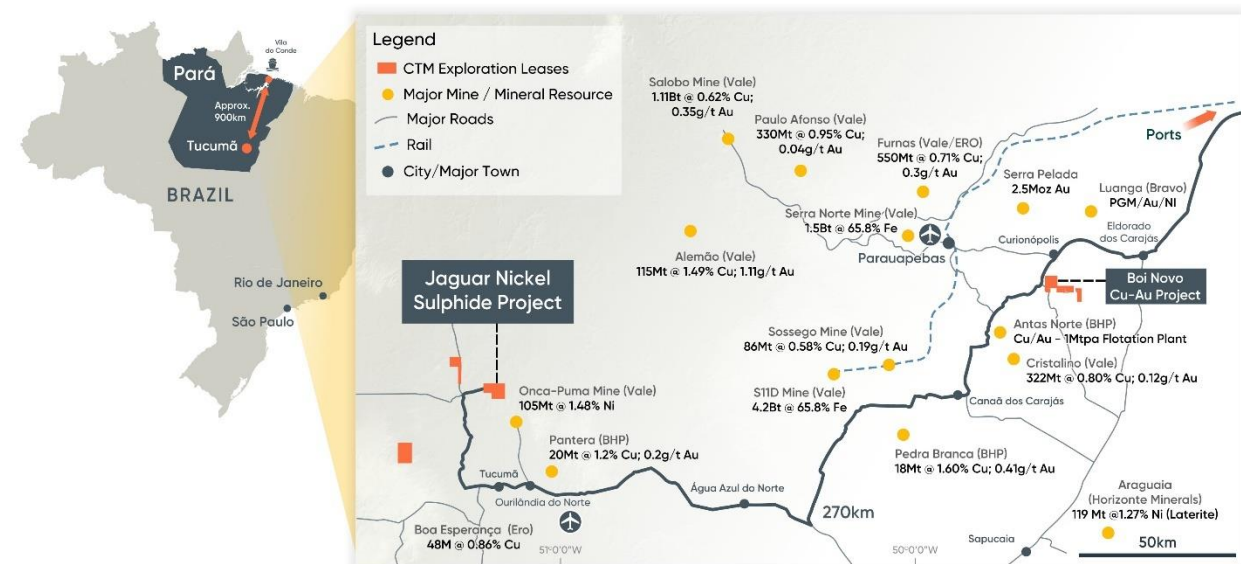


Figure 1:1 – Location of the Jaguar Nickel Project

## 1.4 STUDY CONTRIBUTORS

Centaurus personnel and external consultants contributed to a combination of reports, assessments field studies and surveys, test-work programs and subsequent analysis to complete the various components of this Study. This Study has been prepared in conjunction with the following specialist Brazilian and Australian minerals industry service providers, Table 1:1

	Activity	Consultant
<b>Lead Engineer</b>	<b>Project engineering process Infrastructure and cost estimation</b>	<b>Ausenco Services Pty Ltd Ausenco do Brasil Engenharia Ltda</b>
Geology	Geology report	Geosborne Pty Ltd
	Mineral Resource Estimate	Trepanier Pty Ltd
	Review of Mineral Resource Estimate	Cube Consulting Pty Ltd
Mining	Mining planning, design and costs, waste management and mining report	Re Metallica Associates
	Mine capital and operating cost estimate	Re Metallica Associates
	Mine geotechnical engineering	Re Metallica Associates
	Mine Production Schedule	Deswik Mining Consultants (Australia)
	Hydrogeological assessment	MDGEO
	Competent Person JORC 2012 Ore Reserves	Mining Plus Pty Ltd
Environment	Environmental EIA/RIMA	Consultoria Empreendimentos e Recursos Naturais
Process	Optical mineralogy investigations	McArthur Ore Deposit Assessments Pty Ltd
	Metallurgy Test work program	ALS Metallurgy / Strategic Metallurgy Pty Ltd
	Flowsheet Review	Independent Metallurgical Operations Pty Ltd
	Bulk Material Testing	Tunra Bulk Solids Handling Research Associates
	Integrated Waste Landform	TEC 3 Geotecnica e Recursos Hídricos Ltda
	Acid Drainage	TEC 3 Geotecnica e Recursos Hídricos Ltda
NPI	Water Balance	AQ2 Pty Ltd
	Water modelling and flood study	TEC 3 Geotecnica e Recursos Hídricos Ltda
	Water Dams	Walm BH Engenharia Ltda
	Power supply	SECTA Conexão
	Access road	ALKES Engenharia / Estrutural Projetos
	Logistics and Transport costs	C. Steinweg Group

Table 1:1 – Key Study Contributors



## 1.5 GEOLOGY & RESOURCE

### 1.5.1 Geology

The Project is located in the world-class Carajás Mineral Province, which contains one of the world's largest known concentrations of large tonnage IOCG deposits. The Carajás also hosts the world's largest source of high-grade iron ore, as well as being a significant source of gold, manganese and lateritic nickel, testament to its mineral endowment.

The Project is located at the intersection of the WSW-trending Canaã Fault and the ENE-trending McCandless Fault, immediately south of the NeoArchean Puma Layered Mafic-Ultramafic Complex, which is the host to the Puma Lateritic Nickel deposit, as shown in Figure 1:2 .

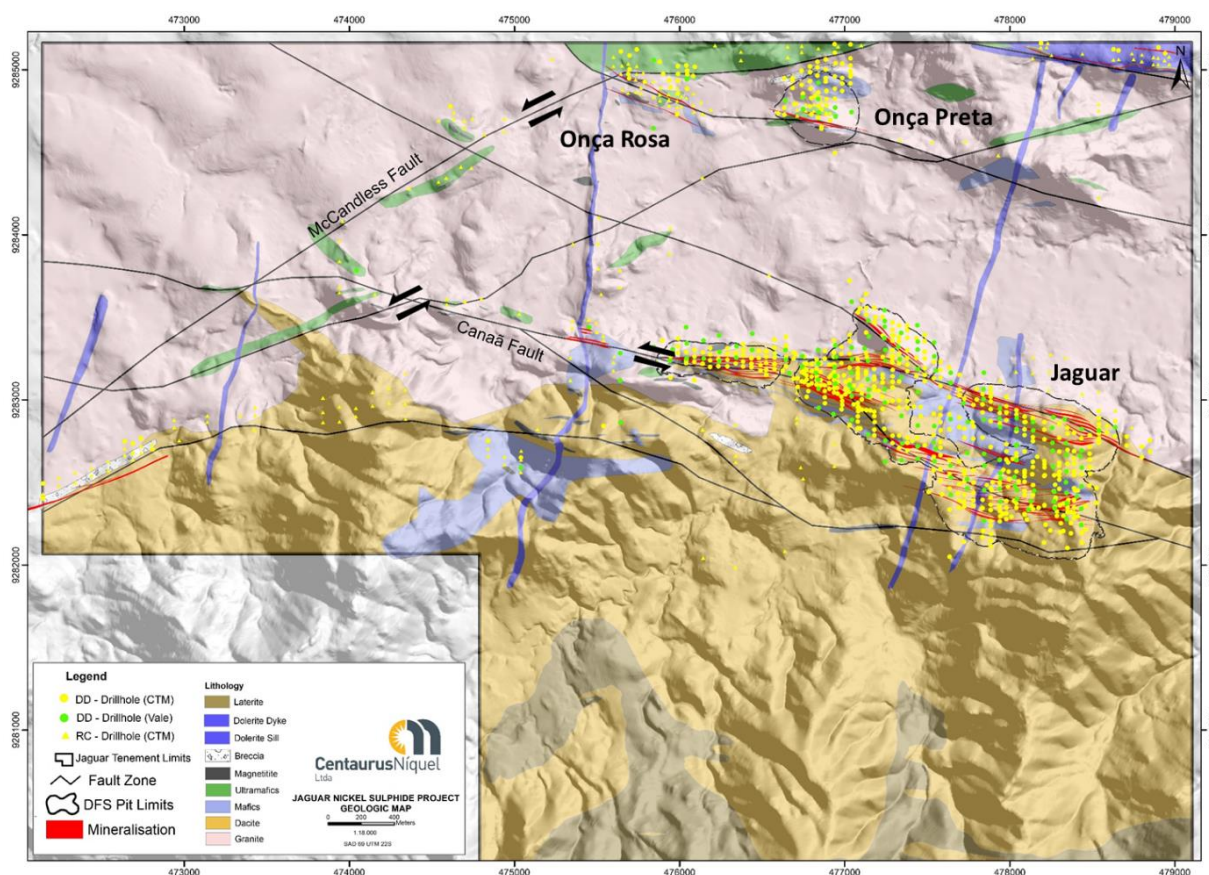


Figure 1:2 – The Jaguar Nickel Project Geology

The Jaguar mineralisation depicted in Figure 1:2 is hosted within sheared Sub-Volcanic Dacitic Porphyries of the Serra Arqueada Greenstone belt, adjacent to the boundary of a tonalite intrusive into the Xingu basement gneiss, while Onça Preta and Onça Rosa are tabular mineralised bodies hosted within the tonalite. The hydrothermal alteration and mineralisation form sub-vertical to vertical bodies which are structurally controlled by the regional ductile-brittle mylonitic shear zone. The hydrothermal alteration appears to be synchronous with, or post-date, deformation.

Two types of nickel sulphide mineralisation occur in the Jaguar deposit. Sulphide assemblages are similar in both mineralisation types, differing only in modal sulphide composition and structure. The mean sulphide assemblage, in order of abundance, is pyrite, pentlandite, millerite, violarite, pyrrhotite and sphalerite with trace vaesite, nickeliferous pyrite and chalcopyrite.

The most abundant type of mineralisation constitutes low-grade nickel mineralisation, occurring within veins concordant with the foliation, that is associated with the biotite-chlorite alteration.

The target high-grade nickel mineralisation is associated with the magnetite-apatite-quartz alteration. It occurs as veins and breccia bodies consisting of irregular fragments of extensively altered host rocks within a sulphide-magnetite-apatite rich matrix.

Mineralised breccias form semi-massive sulphide bodies up to 30m thick parallel to, or crosscutting biotite-chlorite rich zones as depicted in Figure 1:3.

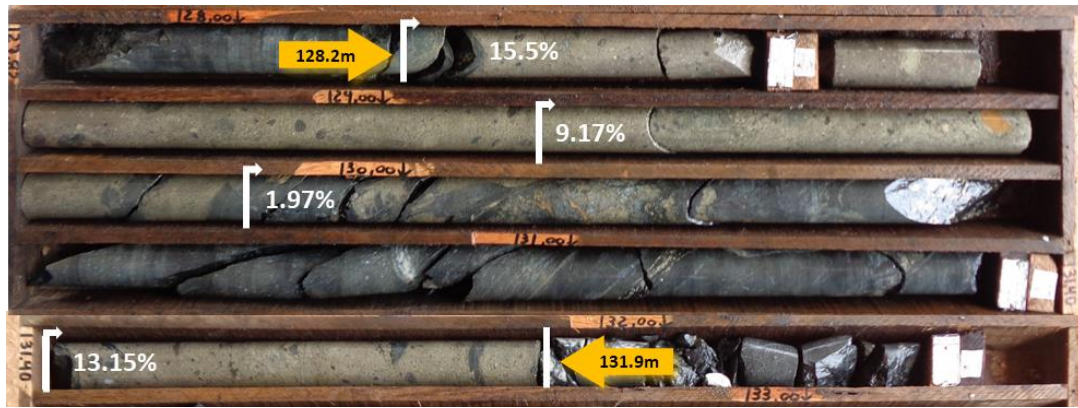


Figure 1:3 – Core photos from drill hole JAG-DD-20-034 <sup>Note 3</sup>

Mineralisation at the Jaguar deposits is a combination of both mineralisation types while Onça Preta and Onça Rosa are predominantly of the second type, forming tabular semi-continuous to continuous bodies both along strike and down dip. Cross sections of the Jaguar South deposit (left) and Onça Preta deposit (right) showing a number of significant drill intersections within the current resource (in yellow) and outside the current resource (in gold) are shown in Figure 1.4.

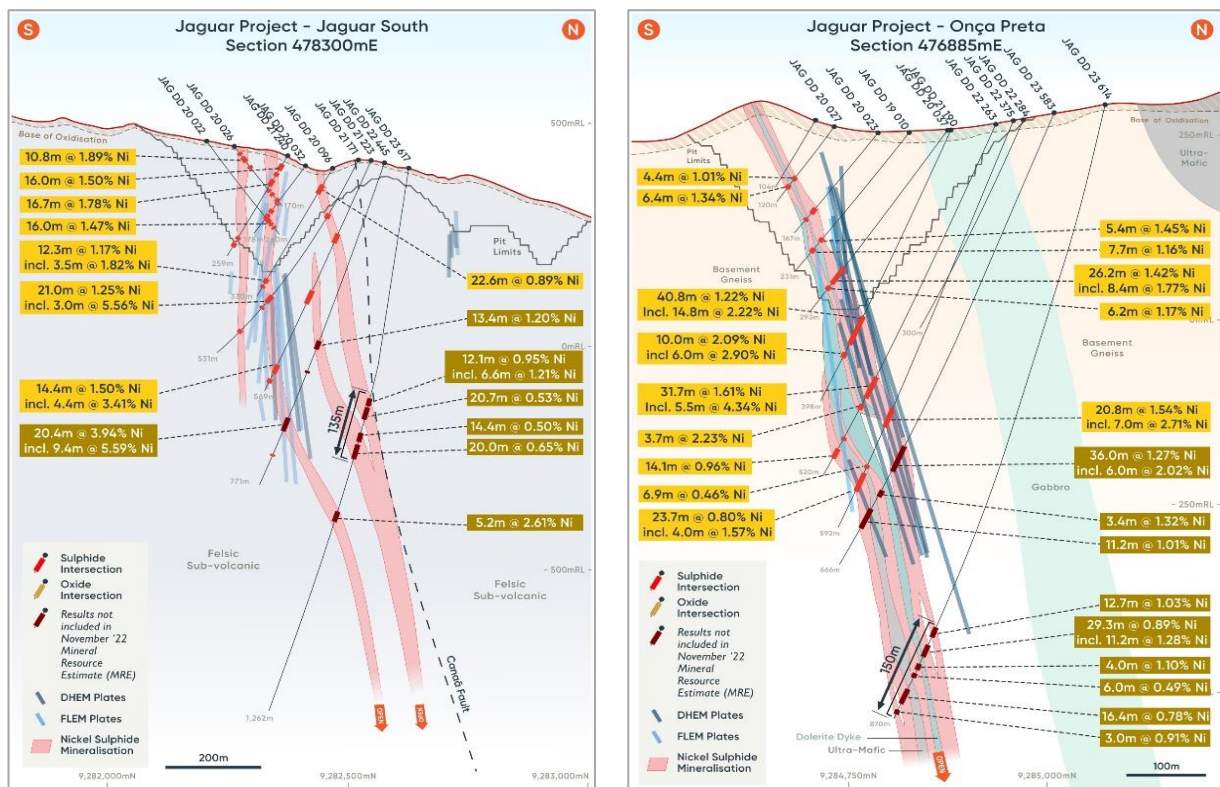


Figure 1:4 – Cross-Sections Jaguar South Deposit (left) and Onça Preta Deposit (right)

Note 3 128.2m to 131.9m: Semi-massive and massive sulphides (metallic bronze/yellow) with magnetite (black) mineralisation hosted in altered dacite. Sulphides comprising pyrite, pentlandite, millerite, chalcopyrite and minor sphalerite. Interval returned 3.7m at 8.55% Ni, 0.43% Cu and 0.12% Co from 128.2m

Regolith at the deposit is in-situ and comprises a thin soil layer overlying a decomposed saprolite transitional zone. The thickness to the base of the transitional zone generally varies from 5m to 25m (max. 42m). All oxide material is considered as waste and therefore not reported in MRE. The transitional zone has been modelled and makes up 3.9% of the MRE.

### 1.5.2 Mineral Resource Estimate

The Mineral Resource Estimate was completed by independent resource specialists Trepanier Pty Ltd in November 2022. The Measured, Indicated and Inferred MRE (JORC 2012) is 109.2Mt at 0.87% Ni for 948,900 tonnes of contained nickel which forms the basis of the Study as shown in Table 1:2.

The Study including mine optimisation and scheduling is underpinned by the November 2022 MRE block model.

Deposit	Classification	Grade				Contained Metal		
		Mt	Ni%	Cu %	Co ppm	Ni	Cu	Co
Jaguar South	Indicated	28.5	0.87	0.05	199	247,900	13,400	5,700
	Inferred	7.3	1.08	0.06	258	79,100	4,800	1,900
	<b>Total</b>	<b>35.8</b>	<b>0.91</b>	<b>0.05</b>	<b>211</b>	<b>327,000</b>	<b>18,000</b>	<b>7,600</b>
Jaguar Central	Measured	8.9	0.88	0.05	252	78,600	4,900	2,300
	Indicated	2.9	0.61	0.04	207	17,300	1,000	600
	Inferred	0.7	0.68	0.05	210	4,500	300	100
<b>Total</b>	<b>12.5</b>	<b>0.81</b>	<b>0.05</b>	<b>239</b>	<b>100,400</b>	<b>6,200</b>	<b>3,000</b>	
Jaguar North	Indicated	2.7	1.14	0.17	383	30,900	4,500	1,000
	Inferred	0.5	1.19	0.23	387	5,700	1,100	200
	<b>Total</b>	<b>3.2</b>	<b>1.15</b>	<b>0.18</b>	<b>383</b>	<b>36,600</b>	<b>5,600</b>	<b>1,200</b>
Jaguar Central North	Indicated	10.2	0.61	0.04	189	62,000	3,600	1,900
	Inferred	4.0	0.66	0.04	197	26,100	1,700	800
	<b>Total</b>	<b>14.2</b>	<b>0.62</b>	<b>0.04</b>	<b>191</b>	<b>88,100</b>	<b>5,300</b>	<b>2,700</b>
Jaguar Northeast	Indicated	13.3	0.71	0.09	269	95,100	11,700	3,600
	Inferred	3.5	0.89	0.21	317	31,200	7,200	1,100
	<b>Total</b>	<b>16.8</b>	<b>0.75</b>	<b>0.11</b>	<b>279</b>	<b>126,200</b>	<b>18,900</b>	<b>4,700</b>
Jaguar West	Indicated	7.8	0.72	0.03	168	56,200	2,300	1,300
	Inferred	0.9	0.75	0.04	157	6,900	300	100
	<b>Total</b>	<b>8.7</b>	<b>0.72</b>	<b>0.03</b>	<b>167</b>	<b>63,100</b>	<b>2,600</b>	<b>1,500</b>
Jaguar Deposits	Measured	8.9	0.88	0.05	252	78,600	4,900	2,300
	Indicated	65.4	0.78	0.06	216	509,500	36,500	14,100
	Inferred	16.8	0.91	0.09	252	153,400	15,400	4,200
	<b>Total</b>	<b>91.2</b>	<b>0.81</b>	<b>0.06</b>	<b>226</b>	<b>741,400</b>	<b>56,700</b>	<b>20,600</b>
Onça Preta	Measured	5.1	1.39	0.10	636	70,800	4,900	3,200
	Indicated	4.5	1.19	0.09	517	53,800	4,100	2,300
	Inferred	4.5	1.08	0.08	436	49,200	3,700	2,000
	<b>Total</b>	<b>14.2</b>	<b>1.23</b>	<b>0.09</b>	<b>534</b>	<b>173,900</b>	<b>12,700</b>	<b>7,600</b>
Onça Rosa	Indicated	1.9	0.98	0.08	281	18,200	1,400	500
	Inferred	0.04	0.92	0.05	304	400	20	10
	<b>Total</b>	<b>1.9</b>	<b>0.98</b>	<b>0.07</b>	<b>282</b>	<b>18,600</b>	<b>1,400</b>	<b>500</b>
Tigre	Indicated	0.8	0.86	0.09	303	7,100	700	200
	Inferred	1.2	0.70	0.06	248	8,100	700	300
	<b>Total</b>	<b>2.0</b>	<b>0.77</b>	<b>0.07</b>	<b>271</b>	<b>15,100</b>	<b>1,400</b>	<b>500</b>
Jaguar MRE	Measured	14.0	1.06	0.07	388	149,400	9,800	5,500
Jaguar MRE	Indicated	72.6	0.81	0.06	237	588,500	42,600	17,200
Jaguar MRE	Inferred	22.6	0.93	0.09	289	211,000	19,900	6,500
<b>Total</b>	<b>Total</b>	<b>109.2</b>	<b>0.87</b>	<b>0.07</b>	<b>268</b>	<b>948,900</b>	<b>72,300</b>	<b>29,200</b>

\* Within pit limits cut-off grade 0.3% Ni; below pit limits cut-off grade 0.7% Ni; Totals are rounded to reflect acceptable precision, subtotals may not reflect global totals. All oxide material is considered as waste and therefore not reported as Resources.

Table 1:2 – JORC Mineral Resource Estimate

The MRE is based on 169 Vale drill holes for a total of 56,592m of drilling plus assays from 530 Centaurus drill holes (comprising 459 diamond drill holes for 96,318m and 71 reverse circulation (RC) drill holes for 10,020m) for a total of 162,930m of drilling on the Project. All drill holes were drilled at 55°-75° towards azimuth of either 180° or 360°.

Mineralized domains and oxidation surfaces were modelled. Grade estimation was by Ordinary Kriging for Ni, Cu, Co, Fe, Mg, Zn and S.

The estimate was resolved into 10m E x 2m N x 10m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Measured Mineral Resources are defined nominally on 20m E x 20m N spaced drilling. Indicated Mineral Resources are defined nominally on 50m E x 40m N spaced drilling and Inferred Mineral Resources nominally 100m E x 40m to 100m N with consideration given for the confidence of the continuity of geology and mineralisation.

Figure 1:5 provides a 3D view of the Jaguar and Onça deposits.

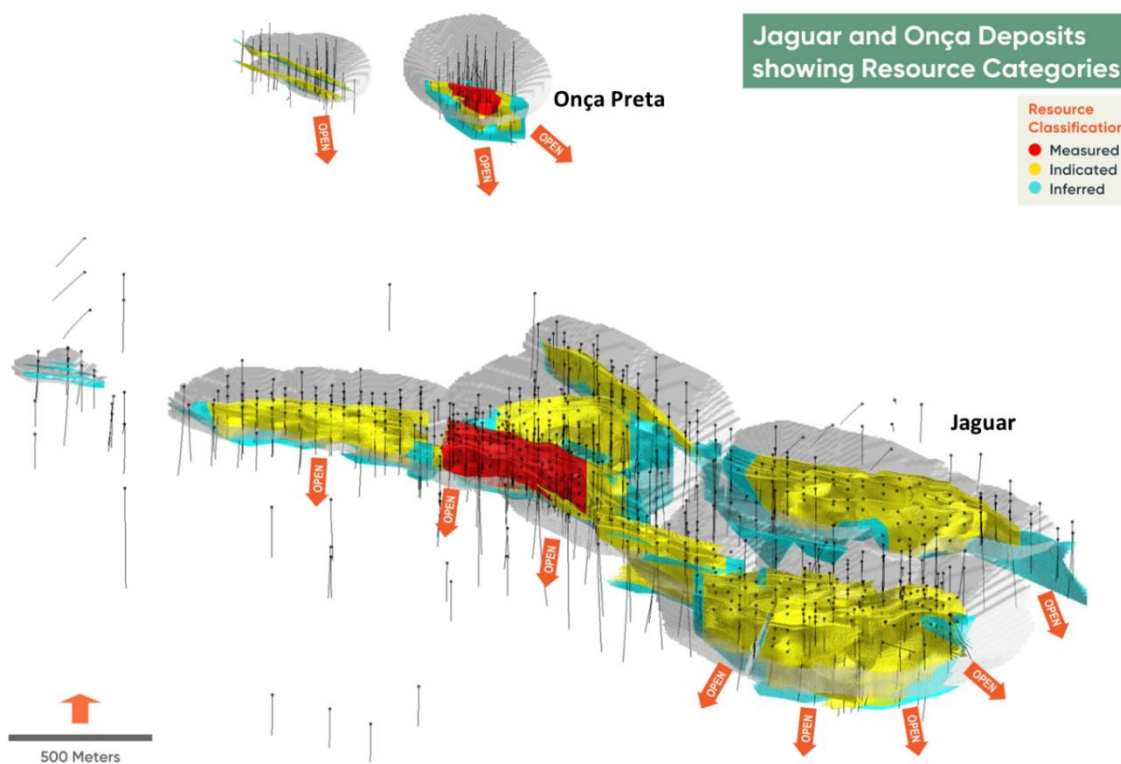
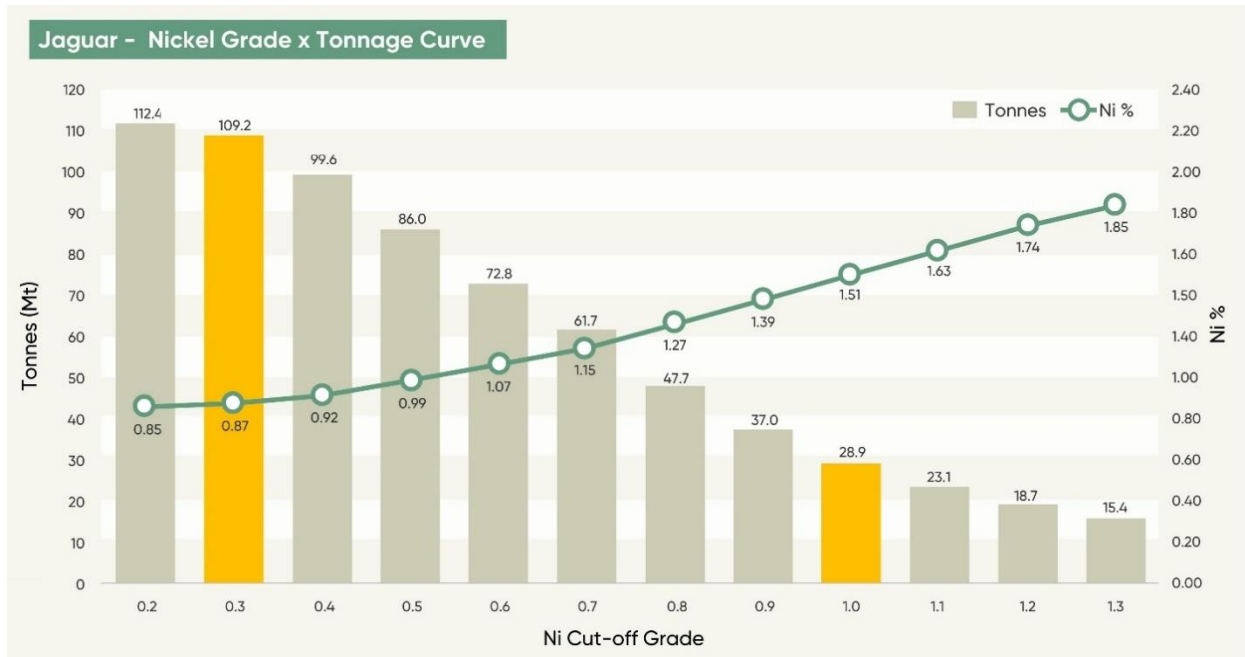


Figure 1:5 – 3D view of the Jaguar and Onça Deposits showing Resource Categories

The nickel grade-tonnage curve for the Project is shown in Figure 1:6. There is a significant, high-grade component of 28.9Mt @ 1.51% Ni for 431,800 tonnes of contained nickel metal within the Jaguar Global MRE, which has been estimated using a 1.0% nickel cut-off grade across the total MRE.

Within the high-grade component, around 30% of the contained nickel sits less than 100m from surface. This demonstrates that near-surface high-grade resources are available to allow open pit operations to potentially run at a higher nickel grade in the early years of mining.

For personal use only



(Nickel cut-off grade is variable for in-pit resources but no less than 0.7% Ni for below-pit resources)

**Figure 1:6 – Jaguar Project – Nickel grade and tonnage curve.**

Following release of the MRE in November 2022, Centaurus has undertaken an additional drilling campaign at the Jaguar Project, that was completed in December 2023 (comprising 162 diamond drill holes for 57,705m and 146 RC holes for 24,533m), totalling 82,238 metres. This campaign lifts the total drilling at Jaguar by Centaurus and Vale to 1,007 holes for 245,168m of diamond and RC drilling. Additionally, a new discovery was made at the Twister Prospect.

The additional drilling and new discovery further enhance the future of the Project.

## 1.6 MINING

The Project will mine a total of 394Mt of material over the life of the mine. This comprises 63Mt of ore and 331Mt of waste materials.

The mine plan will utilise conventional open pit mining techniques using small size mining equipment to produce ore and waste from two deposits, Jaguar and Onça, consisting of seven different open pits, sequenced using 21 different development cutbacks.

Mining Plus Pty Ltd have prepared the statement of Ore Reserves under the JORC code 2012 guidelines with the results summarised in Table 1:3.

The Ore Reserve is contained within an open pit containing 331Mt of waste material resulting in a waste to ore strip ratio of 5.26:1 and a combined total open pit movement of 394Mt. Included in the waste material is over 450,000 tonnes of Mineral Resources classified within the Inferred category which received no economic value in the work completed for the reporting of Ore Reserves.

Pre-production mining is planned to commence during Q3/2025 with development of the mine access roads and the production of fill material for use in the IWL construction.

Deposit	Classification	Ore Tonnes	Ore Grades			Contained Metal		
		Mt	Ni %	Cu %	Co ppm	Ni (kt)	Cu (kt)	Co (kt)
Jaguar	Proved	8.8	0.80	0.05	231	70.3	4.4	2.0
	Probable	51.5	0.70	0.05	195	358.4	25.6	10.0
	<b>Total</b>	<b>60.3</b>	<b>0.71</b>	<b>0.05</b>	<b>201</b>	<b>428.7</b>	<b>30.0</b>	<b>12.0</b>
Onça	Proved	2.6	1.15	0.09	635	29.6	2.2	1.7
	Probable	0.1	0.66	0.06	316	0.9	0.1	0.1
	<b>Total</b>	<b>2.7</b>	<b>1.12</b>	<b>0.08</b>	<b>619</b>	<b>30.5</b>	<b>2.3</b>	<b>1.7</b>
Jaguar Nickel Project	Proved	11.4	0.88	0.06	323	99.9	6.6	3.7
	Probable	51.6	0.70	0.05	196	359.3	25.7	10.1
	<b>Total</b>	<b>63.0</b>	<b>0.73</b>	<b>0.05</b>	<b>219</b>	<b>459.2</b>	<b>32.3</b>	<b>13.8</b>

The rounding in the above tables is an attempt to represent levels of precision implied in the estimation process and apparent errors in summation may result from the rounding. Ore Reserve has been reported using a 'Net Smelter Return' (NSR) cut-off of US\$12.02/tonne which includes provision for feed grade, recovery, treatment costs, freight and payables.

**Table 1:3 – Ore Reserve Estimate – July 2024**

Execution of the mine production plan will use specialist Brazilian mining contractors to provide grade control drilling, explosives supply and contract mining services. The mining contractor activities will include supporting functions such as road maintenance, dewatering, and equipment maintenance. The operation will include drilling, blasting, loading with 70-90 tonne class excavators and 43t on-highway rigid body trucks. Blasting will take place on 7.5m benches with mining of the blasted material to take place over 3 benches of 2.5m height. Blasting operations and explosives management will be performed by a specialist blasting contractor.

Timber clearing, stump and vegetation removal including topsoil stockpiling activities will be provided by separate local contractors specialised in this activity as is normal for mining operations in Brazil.

Centaurus will provide technical and management control over mining operations including geological, mine planning, mine production and survey functions.

The mining infrastructure to be developed to support mining activities is comprised of the following:

- Internal mine access roads as set out in Figure 1:7;
- Mine support facilities comprising purpose built mine workshop and warehouse, tyre and equipment washdown bay and mining contractors office complex;
- Explosive storage facilities and accessories magazines, and
- Shared access to Centaurus bulk refuelling facilities located adjacent to the mine infrastructure area and
- on-site restaurant for mid-shift meals.

The orientation of the Jaguar orebodies is in a west-to-east trending direction, where the primary crusher is on the south side of the open pits, and waste storage facilities located to the north. The location of these structures results in multiple origin and destinations for the mine's haulage fleet with two main road connections between Jaguar West - Jaguar Central pits and on the eastern side of Jaguar Central.

Figure 1:7 shows the ultimate pit, waste dump and IWL locations.

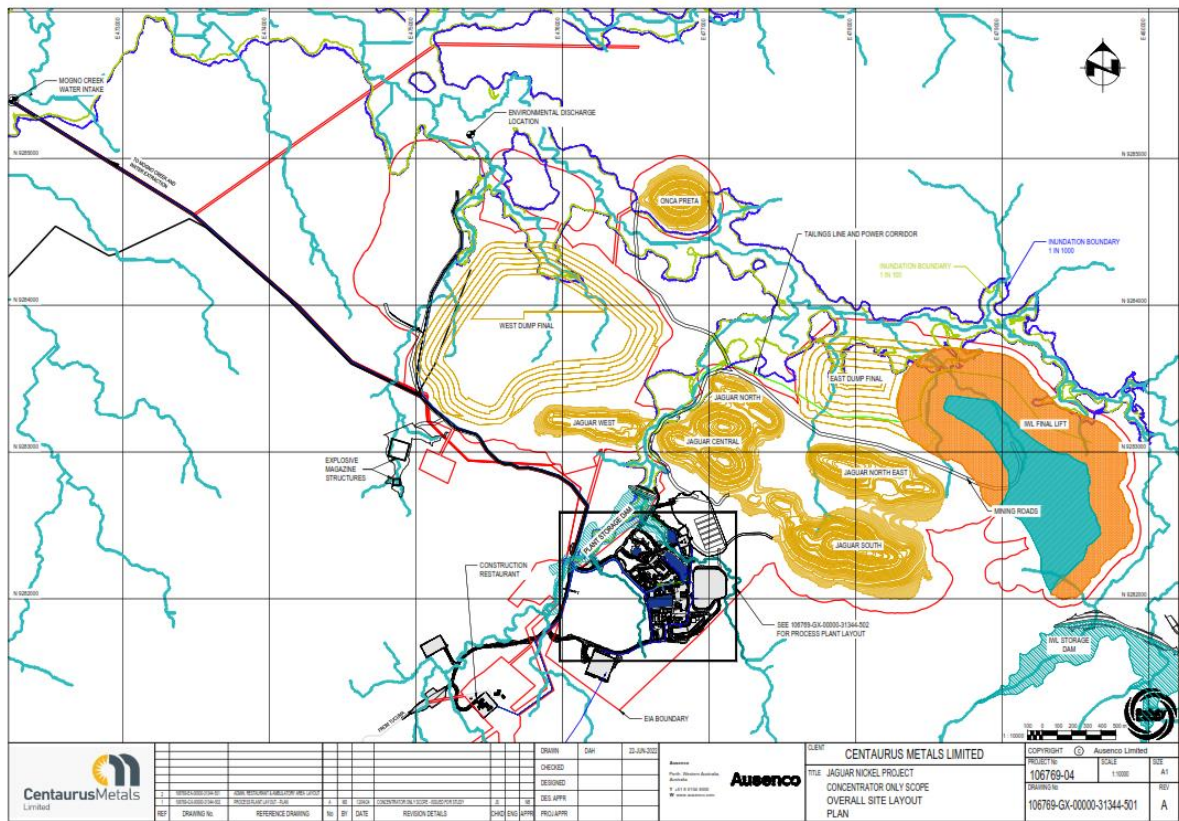


Figure 1:7 – General layout of the Project.

Figure 1:8 shows the ultimate pit, waste dump and IWL locations.

In general, double access was considered to reduce traffic congestion with exits to the south for the ore to the Process Plant and to the north for the placement of waste.

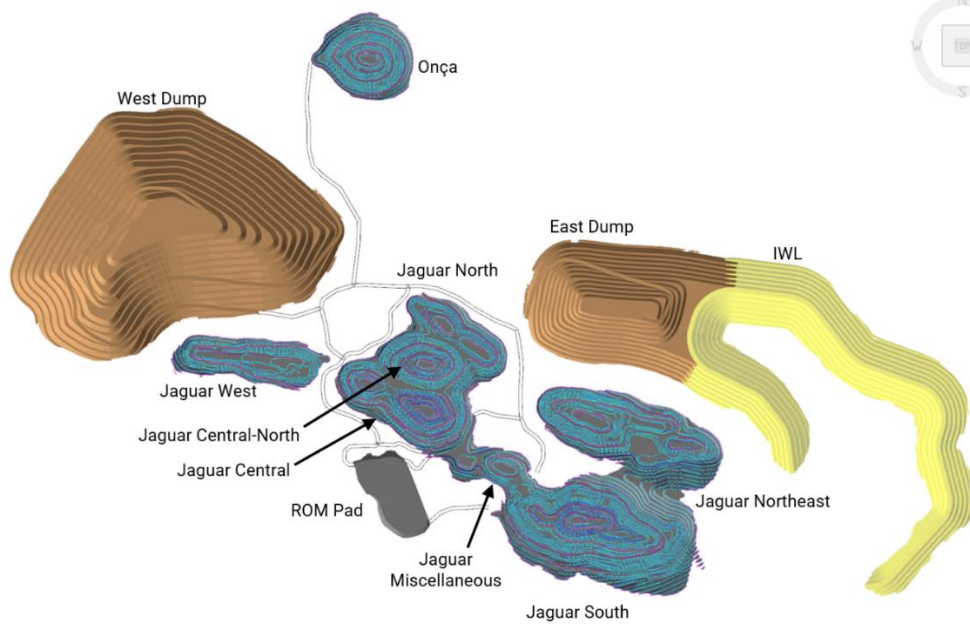


Figure 1:8 – Ultimate Pit Locations

For personal use only

The designs for the initial mining phases were developed to facilitate waste production for IWL construction, with later phases accommodating a staged development.

The following parameters were considered in the mining phase definition:

- Nested pit shells from the pit optimisation process were used to guide the first mining phases, as they provide the best value – higher ore grades with lower strip ratio;
- Direct Block Scheduling (**DBS**) results from a multi-period software (Deswik.GO);
- Process Plant production ramp-up requirement and mining capacity;
- Mining fleet and support equipment size;
- Primary crusher and waste storage facilities location and with accesses to each mining phase, and
- A minimum mining width of 30-meters between the mining phases.

To manage the life of mine strip ratio and total material movement rates required to maintain the production profile, the final pit designs will be mined using 21 phases or cutbacks. The phase numbers represent distinct mining cutback designs and do not indicate the sequence of mine development.

As a result of the mine planning and scheduling, the Jaguar deposits are divided into 18 mining phases, including three (3) pre-stripping phases (Phase 20, 22 and 23) with the Onça deposit divided into three (3) phases, which includes one (1) pre-stripping phase (Phase 21), as indicated in Figure 1:9.

Mining costs were developed from a Request for Pricing proposal sent to a number of selected mining service providers with evaluation and operating costs estimates compiled by Re Metallica Associates.

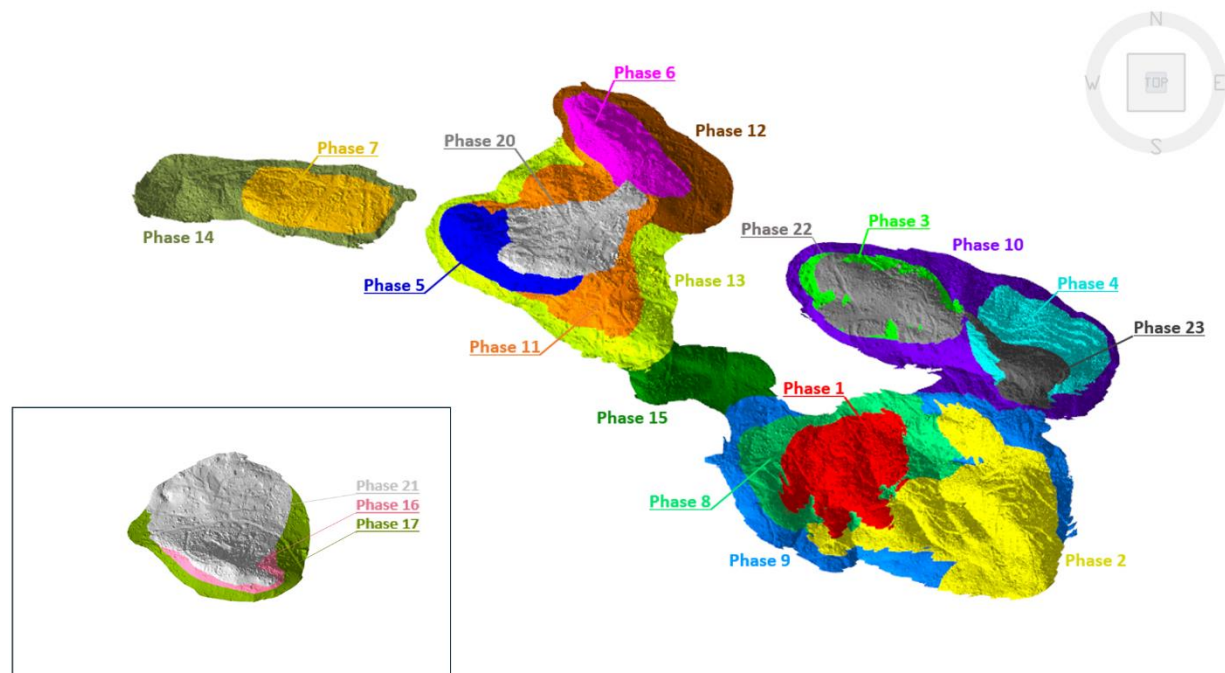


Figure 1:9 – Jaguar mining phases with Onça inset

Figure 1:10 and Table 1:4 – Annual Mine Production provides a summary of the annual mine movement, showing ore and waste tonnes, average nickel grade and strip ratio.

For personal use only



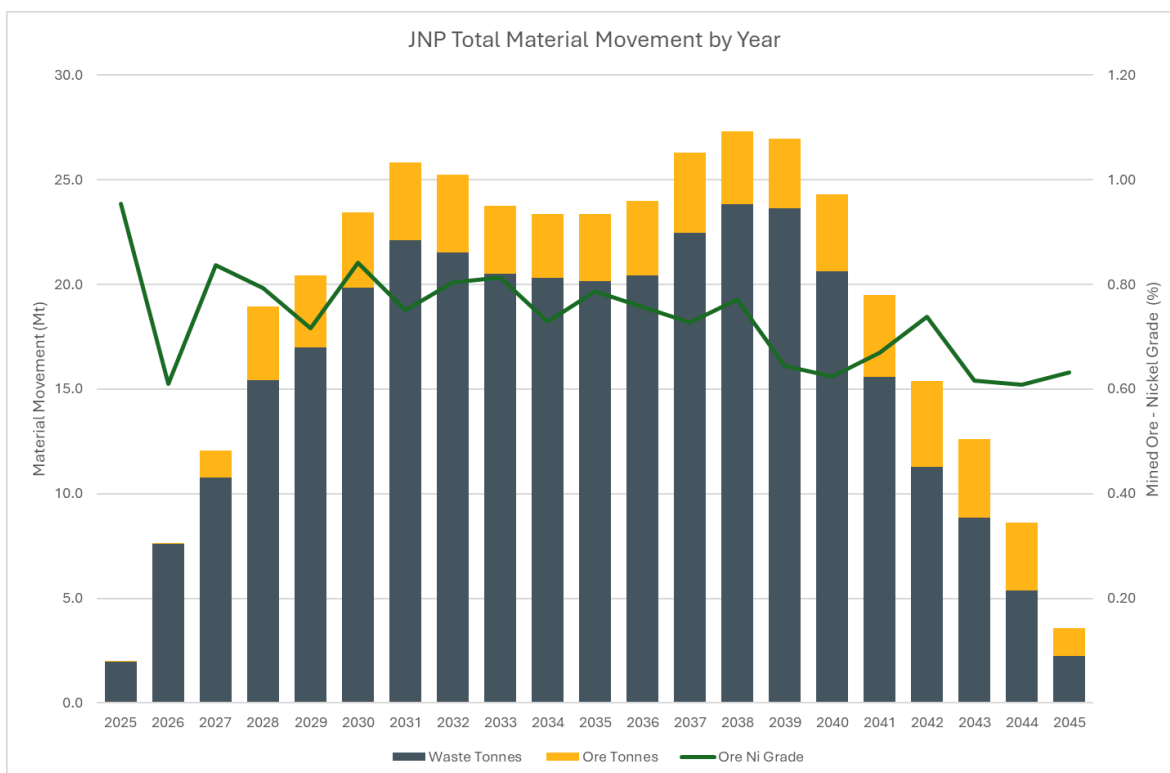


Figure 1:10 – Total Material Movement by year

	Unit	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Ore Mined	kt	63,022	13	16	1,292	3,539	3,448	3,622	3,684	3,703	3,243	3,044
Ni Grade	%	0.73	0.95	0.61	0.84	0.79	0.72	0.84	0.75	0.80	0.81	0.73
Total Waste Mined	kt	331,483	1,972	7,594	10,751	15,416	17,000	19,829	22,126	21,532	20,503	20,302
Total Mined	kt	394,504	1,986	7,609	12,043	18,955	20,448	23,451	25,811	25,235	23,746	23,346
Strip Ratio (W : O)	t : t	5.3	147.9	481.3	8.3	4.4	4.9	5.5	6.0	5.8	6.3	6.7

	Unit	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Ore Mined	kt	3,228	3,533	3,826	3,479	3,325	3,676	3,914	4,106	3,738	3,274	1,318
Ni Grade	%	0.79	0.76	0.73	0.77	0.64	0.62	0.67	0.74	0.62	0.61	0.63
Total Waste Mined	kt	20,153	20,443	22,461	23,839	23,621	20,607	15,594	11,266	8,856	5,363	2,254
Total Mined	kt	23,381	23,976	26,287	27,318	26,946	24,283	19,508	15,372	12,595	8,637	3,571
Strip Ratio (W : O)	t : t	6.2	5.8	5.9	6.9	7.1	5.6	4.0	2.7	2.4	1.6	1.7

Table 1:4 – Annual Mine Production

## 1.7 METALLURGY

Metallurgical testwork programs have been conducted on samples from the Deposits within the Jaguar MRE. This testwork has included mineralogy, comminution, flotation, thickening and filtration work and has been used to develop the process flowsheet and design criteria for the Study.

Spatially, geologically and mineralogically representative samples were tested to provide data to create geo-metallurgical parameters for throughput, recoveries and metal grades, including transitional materials. This analysis resulted in the definition of 8 metallurgical domains with characteristic comminution and metal recovery relationships. Flotation nickel and mass recovery equations are provided in Table 1:5. The geometallurgical parameters were applied to the mining schedule to provide the Project's production profile.

Domain	Fresh Rock
<b>Metallurgical Recovery - Nickel</b>	
Nickel Recovery* - All Jaguars Except North and West	$12.396 \times \ln (\%NiS_{feed}/(\%Mg_{feed}+\%S_{feed})) + 106.29$
Nickel Recovery* - Jaguar North, West and Onça Preta	$24.162 \times \ln (\%NiS_{feed}/(\%Mg_{feed}+\%S_{feed})) + 129.36$
<b>Flotation Mass Recovery</b>	
Mass Recovery* - All Jaguars except Jaguar North	$1.8976 \times \%S_{feed}$
Mass Recovery* - Jaguar North and Onça Preta	$0.9262 \times \%S_{feed}$

\* For Transitional rock a factor of 70% is applied on the above Mass and Metallurgical Recoveries

A maximum nickel concentrate grade of 16% is applied by increasing mass recovery maintaining recovered nickel metal.

**Table 1:5 – Domain Recovery Factors**

Table 1:6 outlines the minimum, maximum and life of mine averages for mill throughput, recovery of nickel/copper/cobalt and expected concentrate grades of nickel/copper/cobalt on an annualised basis.

	Minimum	Maximum	Life of Mine
<b>Mill Throughput (tph)</b>	389	515	447
<b>Recovery</b>			
Nickel (%)	55.3	77.4	73.0
Copper (%)	69.5	83.7	78.0
Cobalt (%)	35.2	50.9	46.8
<b>Concentrate Grade</b>			
Nickel (%)	9.2	14.7	12.3
Copper (%)	0.5	1.3	0.9
Cobalt (%)	0.15	0.31	0.24

**Table 1:6 – Project Throughput and Recovery Summary**

In summary:

- Non-sulphide nickel was found to be essentially fixed by domain with little influence of nickel grade. All the Jaguar deposits, with the exception of Jaguar West, have a non-sulphide nickel content of approximately 0.13%. Jaguar West with a non-sulphide nickel content of approximately 0.22% and Onça Preta with the lowest non sulphide nickel content of approximately 0.09% all aligning with host rock lithology;
- Mass recovery was found to be proportional to sulphur feed grade;
- Nickel recovery was found to be relative to the sulphide nickel to sulphur plus magnesium ratio;
- Copper recovery was a function of copper head grade;
- Sulphur recovery was a function of sulphur head grade, and
- Both zinc and cobalt recovery were functions of sulphur recovery.

Metallurgical samples were selected based on grade, location, geological domaining and concentrated around known areas of expected high nickel production as illustrated in Figure 1:11.

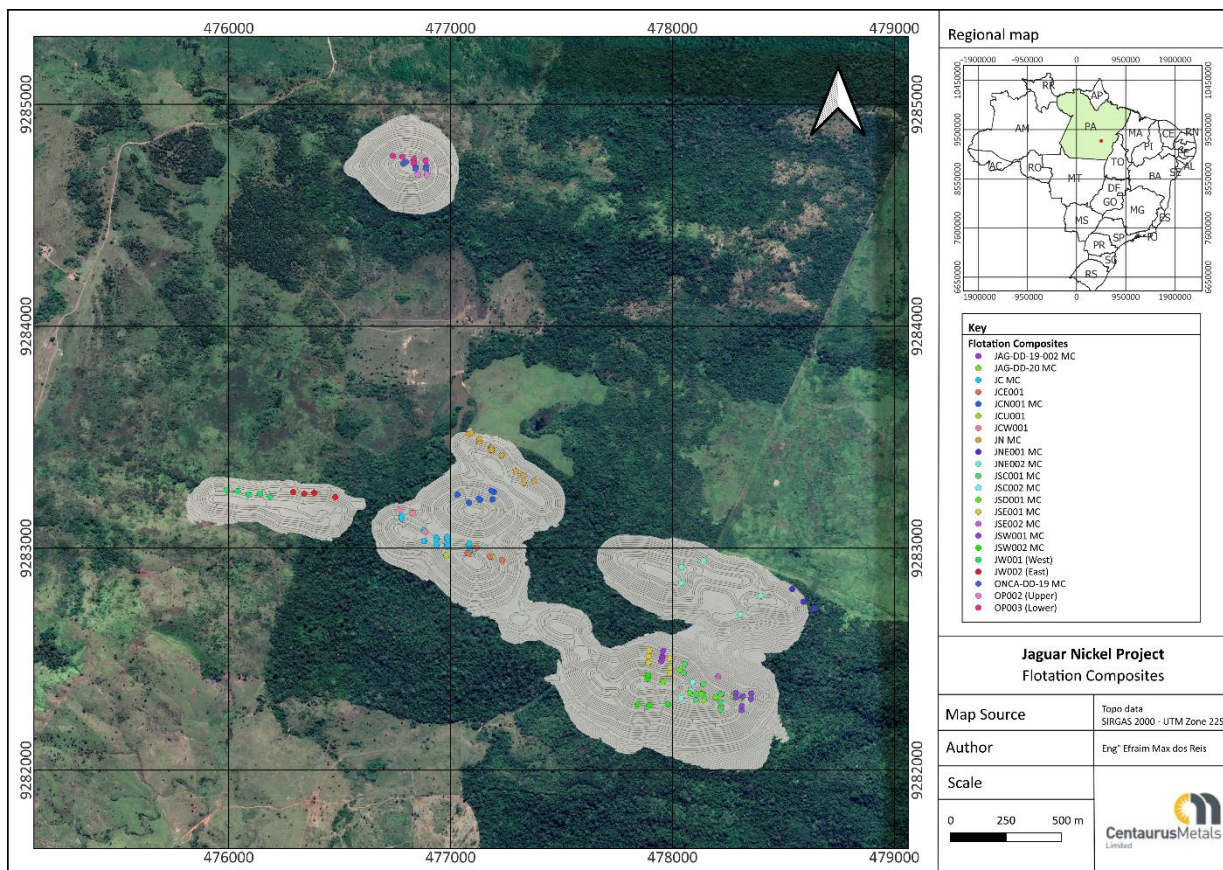


Figure 1:11 – Mineralogy Composite Locations

Table 1:7 provides the mineralogy identification of numerous sulphide species, including nickel, and indicates that high nickel concentrate grades should be possible with the principal nickel sulphide mineral being millerite, making up 67% of the nickel in nickel sulphides. Crystalline pyrite is the main sulphide present.

Mineral	Symbol	Nickel (%)	Mineral	Symbol	Nickel (%)
Millerite	Mi	63.3	Magnetite	Mt	0.16
Pentlandite	Pt	40.0	Albite	Ab	0.00
Violarite	Vi	43.4	Actinolite	Ac	0.13
Polydymite	Pd	53.9	Fluorapatite	Ap	0.03
Crystalline Pyrite	PyX	0.12	Biotite	Bt	0.29
Porous Pyrite	PyP	1.88	Chlorite	Cl	0.33
Pyrrhotite	Po	0.16	Stilpnomelane	Sn	0.26
Chalcopyrite	Cp	0.32	Talc	Tc	0.45
Sphalerite	Sp	0.16			

Table 1:7 – Nickel Residence by Mineral

The mineralogical distribution of the main nickel sulphide minerals is provided in Table 1:8

Orebody	Millerite (%)	Pentlandite (%)	Violarite (%)
Jaguar West	85	5	10
Jaguar Central	75	1	24
Jaguar South (west)	66	20	14
Jaguar South (central)	56	40	4
Jaguar South (east)	83	2	15
Jaguar Central North	83	5	12
Jaguar North	95	0	5
Jaguar North-East	48	27	25
Onça Preta	19	80	1
<b>Weighted Average</b>	<b>67</b>	<b>19</b>	<b>14</b>

Table 1:8 – Orebody Comparison of Nickel Sulphide Proportions

Spatial analysis of the mineralogy provided the following guidance and expectations:

- **Nickel:** No nickel trends are apparent; high-grade zones are distributed amongst all ore domains.
- **Cobalt:** Jaguar South has a cobalt-poor central zone while the Onça domains are cobalt-rich.
- **Copper:** The southern domains are generally copper-poor except Jaguar North-East which is copper-rich.
- **Zinc:** Jaguar West, Jaguar South, and Onça domains are zinc deficient while zinc concentrates in the domains of Jaguar North, Jaguar Central North, and Jaguar North-East.
- **Silica/Alumina:** Most of the silica is concentrated in Jaguar South, Jaguar Central, and Jaguar North-East.
- **Potassium:** The Jaguar domains, except Jaguar North, contain elevated levels of potassium inferring these areas have elevated biotite levels, the only mineral within the mineralised zones containing potassium.
- **Calcium/Phosphorus/Fluorine:** The Onça and Jaguar South domains contain the least apatite/fluorine indicating that these domains should produce concentrates with lower fluorine levels.
- **Talc:** All ore domains contain talc with Jaguar South containing the least.

Due to the host rock mineralogy and the variable magnetite and silicate contents of the ore, the breakage parameters were variable; A x b from 90 to 30, Bond Ball Work Index of 12 – 19kWh/t and bond abrasion index range of 0.04 – 0.14, with a trend of increasing hardness to the southeast of the deposits.

Flotation testing was completed by ALS Metallurgy in Perth initially to develop the flowsheet assessing primary grind, collector addition, flotation times, depression, activation, dispersion in rougher and cleaning/regrind cleaning testing.

Non-sulphide nickel assaying was completed for all tests to allow nickel sulphide recoveries to be determined and removing the variability of nickel locked in silicates has on recovery.

Nickel rougher kinetics were very fast floating, therefore, allowing a simple rougher/scavenger flotation flowsheet which separated the nickel sulphides from the majority of the non-sulphide gangue, pyrite and sphalerite to achieve high nickel concentrate grades without the requirement of cleaning.

In addition to the testing of fresh mineralisation to assess the response of fresh material transition testing, blending, ageing, site water and mild steel milling tests were completed. The results of this work demonstrated that:

- Transition material achieved a lower nickel recovery at a given grade compared with fresh ore, a 20% average reduction. A conservative 70% of the fresh rock recovery at a given grade has been applied as the basis for transition recoveries.
- Blending of ores showed that the output from a laboratory tested blend was the same as the weighted average of the individual components suggesting that blending of different domains will not had a detrimental effect on the overall flotation response.
- Aging of samples with very high sulphur levels did not affect the metal recovery of the sample indicating that stockpiling for extended periods of time will not limit the predicted recovery.

## 1.8 PROCESSING

The Process Plant has a nominal throughput capacity of 3.5Mt/y of ore. Figure 1:12 summarises the annual Process Plant throughput and contained nickel metal in concentrate.

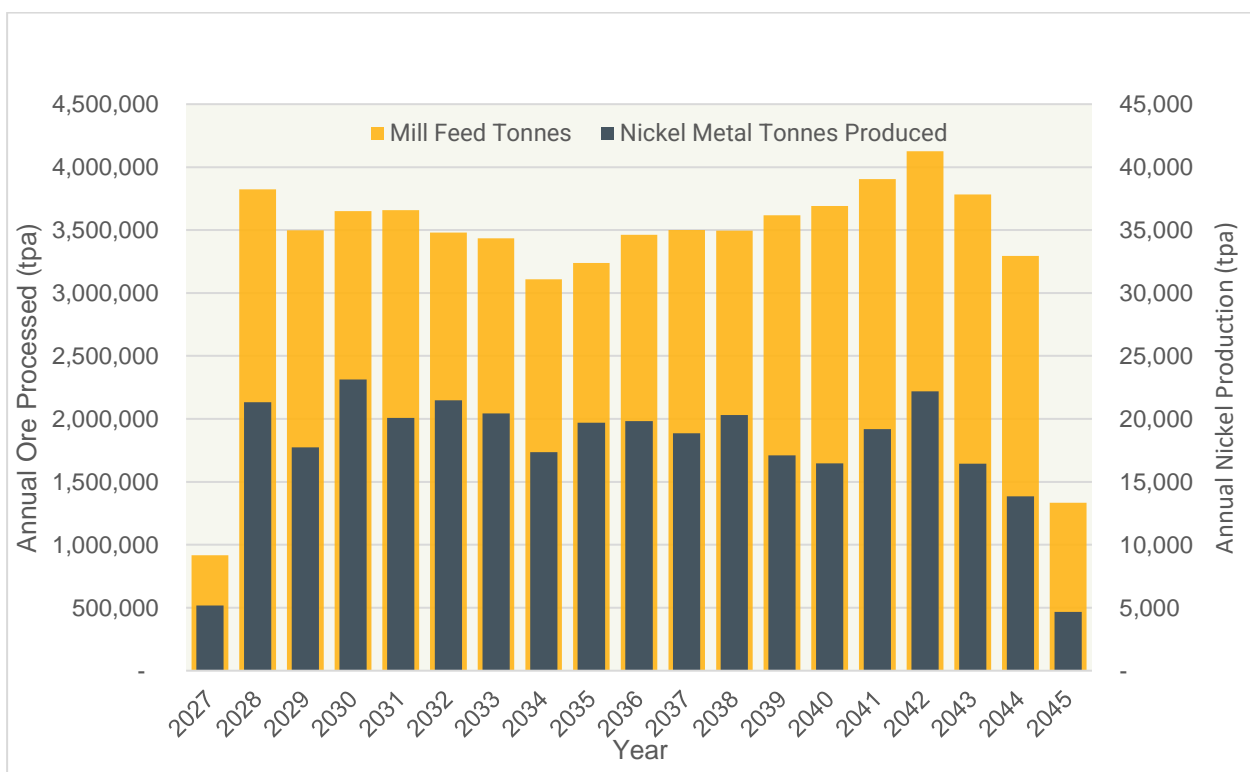


Figure 1:12 – Annual Processing Summary

The Process Plant from the run-of-mine (**ROM**) stockpile through to the tailings and the storage of concentrate, includes but is not limited to the following circuits:

- Crushing;
- Grinding;
- Flotation;
- Tailings Thickening and disposal;
- Concentrate thickening, filtration and storage;
- Reagent mixing and distribution, and
- Services.

The process flowsheet is depicted in Figure 1:13.

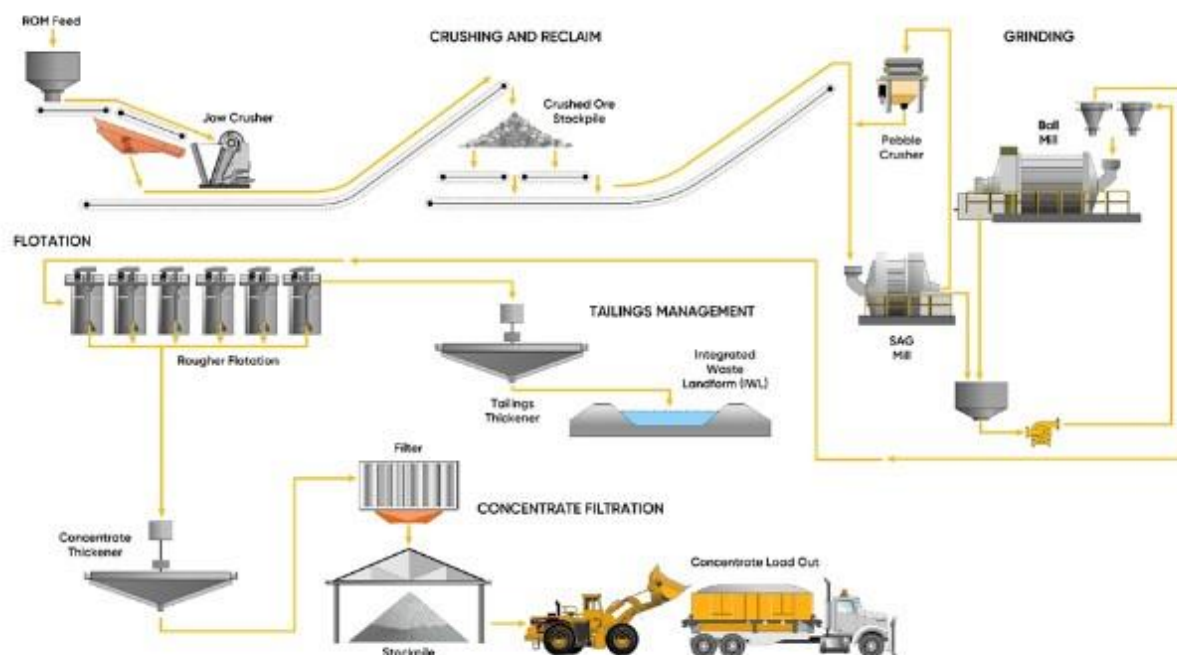


Figure 1:13 – Block Flow Diagram of the Jaguar Project

The primary crushing circuit includes a single toggle jaw crusher to prepare the ore for grinding. Crushed ore will be transferred to the crushed ore stockpile via conveyors from where it will be reclaimed and conveyed to the primary SAG Mill. The grinding circuit consists of a 5.7MW SAG mill in closed circuit with a pebble crusher, and open circuit with a 6.5MW ball mill which is in closed circuit with cyclones.

The milled slurry flows to the flotation circuit, where reagents are added and the nickel sulphides are recovered in a rougher / scavenger circuit. The flotation concentrate is thickened and filtered and stored within the concentrate storage shed for loadout to the port. The flotation tailings are thickened then pumped to the IWL for further consolidation and reclamation of water.

Due to the climatic conditions and the layout, a water treatment plant is included to manage contaminated surface water run-off from process areas and the tailing storage facilities pond volume.

Table 1:9 provides a summary of the design criteria for the Process Plant.

Description		Units	Value
Ore Throughput	Annualised (nominal)	Mt/y	3.5
	Crushing Circuit (range)	dry t/h	500-700
	Concentrator Feed (nominal)	dry t/h	438
Plant Availability	Crushing Circuit	%	80
	Concentrator	%	91.3
Concentrate Grade (average)	Nickel	%	12.3
Concentrate Recovery (design)	Nickel	%	78.5
Concentrate Production	Nominal	dry t/h	19.4
	Design	dry t/h	32.0

Table 1:9 – Summary Process Plant Design Criteria

Figure 1:14 is an extract of the 3D design produced showing the Processing Plant and facilities layout for the Project.



Figure 1:14 – Process Plant layout

## 1.9 INFRASTRUCTURE & SERVICES

The following infrastructure forms part of the Project:

- Site access roads;
- Process waste storage facility (IWL);
- Process and non-process buildings;
- Mining and Support Service contractor's infrastructure and facilities;
- Explosive Magazine;
- Fuel storage and distribution;
- Power supply and distribution;
- Surface water management;
- Water supply and treatment;
- Wastewater treatment;
- Sewage treatment;
- Communications, control system and the IT systems;
- Waste material disposal facilities, and
- Mobile plant, support equipment and vehicles.

Figure 1:15 shows key infrastructure located across the Project site.

### 1.9.1 Off-Site Access Road Upgrade

The access road between Tucumã and the Project site is to be upgraded consisting of 40km of access roads and selected bridges to facilitate year-round, all-weather access for the safe and reliable transportation of people, supplies and products.

### 1.9.2 230kV Power Supply

Power will be supplied to the Project via the construction of a new 38km 230kV HV transmission line connected to the national high voltage grid at a location between the Ourilândia do Norte and the substation located near Vale's Onça Puma nickel laterite mine and terminating in a HV substation to be constructed at the Project site.

The Brazilian Ministry of Mines and Energy (**MME**) approved the 230kV HV transmission line connecting the Project to the national high voltage grid in October 2023. On 5 February 2024, State Secretariat of Environment and Sustainability of Pará (**SEMAS**) issued the combined LP and LI approval for the construction and installation of the 230kV transmission line.

### 1.9.3 Tailings Storage Facility

An Integrated Waste Landform (IWL) was selected as it meets world's best practice, achieving the highest safety factors for process waste storage with the design incorporating the use of mine waste. Flotation tailings from the concentrator will be pumped to the IWL facility.

Figure 1:15 shows the IWL (9) in its final elevation alongside the East waste dump (10).

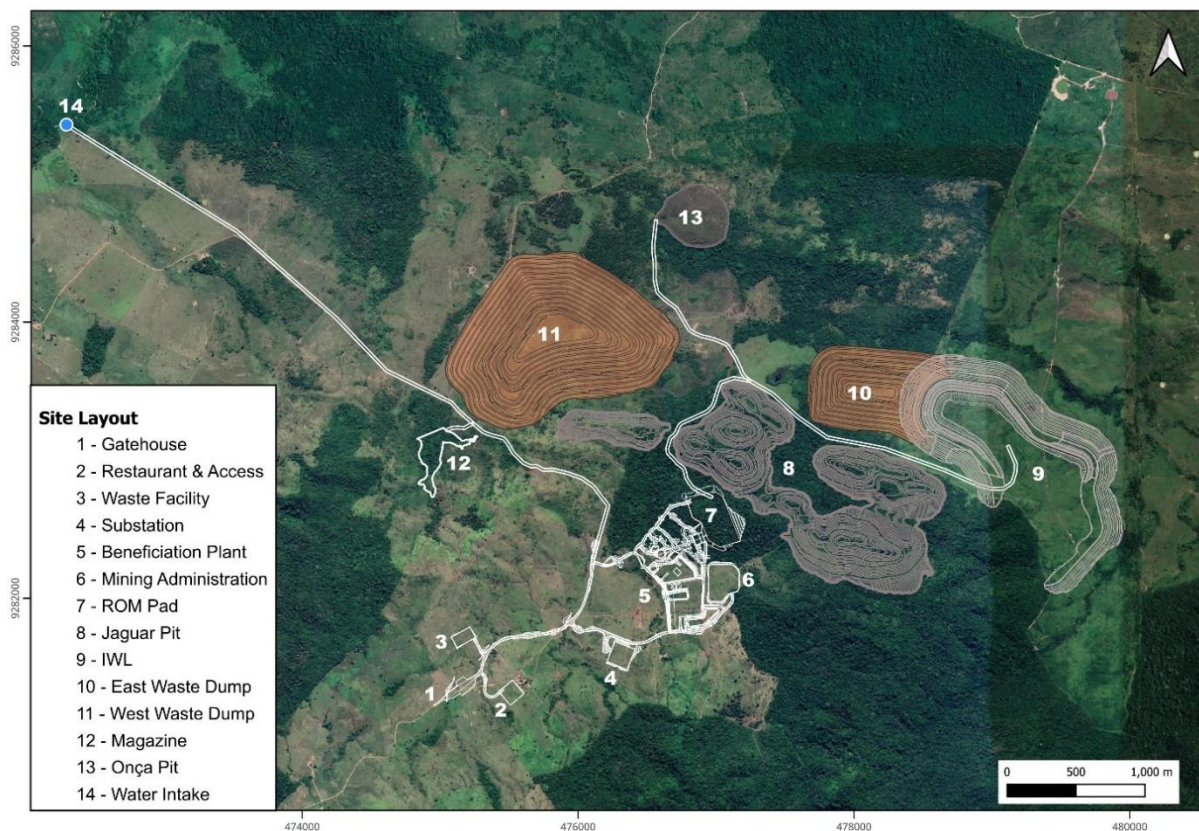


Figure 1:15 – Site layout showing key Infrastructure Locations



The IWL consists of a retaining wall constructed from selected mine waste and the upstream slope is lined with High-Density Polyethylene (HDPE) to prevent water and tailings percolation through the embankment, providing increased safety to the structure.

### 1.9.4 Water Supply and Management

Raw water is supplied from the Igarapé Mogno river (see location point 14 on Figure 1:15) and supplemented from the catchment of a Process Plant Water Dam. Raw water is used throughout the site for dust suppression, process water and, after treatment, for potable water. Process water is supplemented by return water from the IWL, including rain catchment within the IWL.

Potentially contaminated water from the Process Plant area is captured and treated prior to either being reused within the processing facilities or discharged to the environment.

## 1.10 OWNERSHIP AND PERMITTING

### 1.10.1 Tenure

A single mineral tenement, (ANM 856.392/1996), Figure 1:16, covers the Project area of 2,964Ha. The tenement application for the mining lease (Article 38 of the Mining Code) received final approval on 5 February 2024, with the PAE previously lodged and receiving technical approval on the 18 January 2024. The mining easement encompasses the entire Project area and a buffer area around the Project footprint.

The key remaining approvals for the Project are the Mining Lease Grant from ANM and the LI installation licence and subsequent LO operating licence from SEMAS.

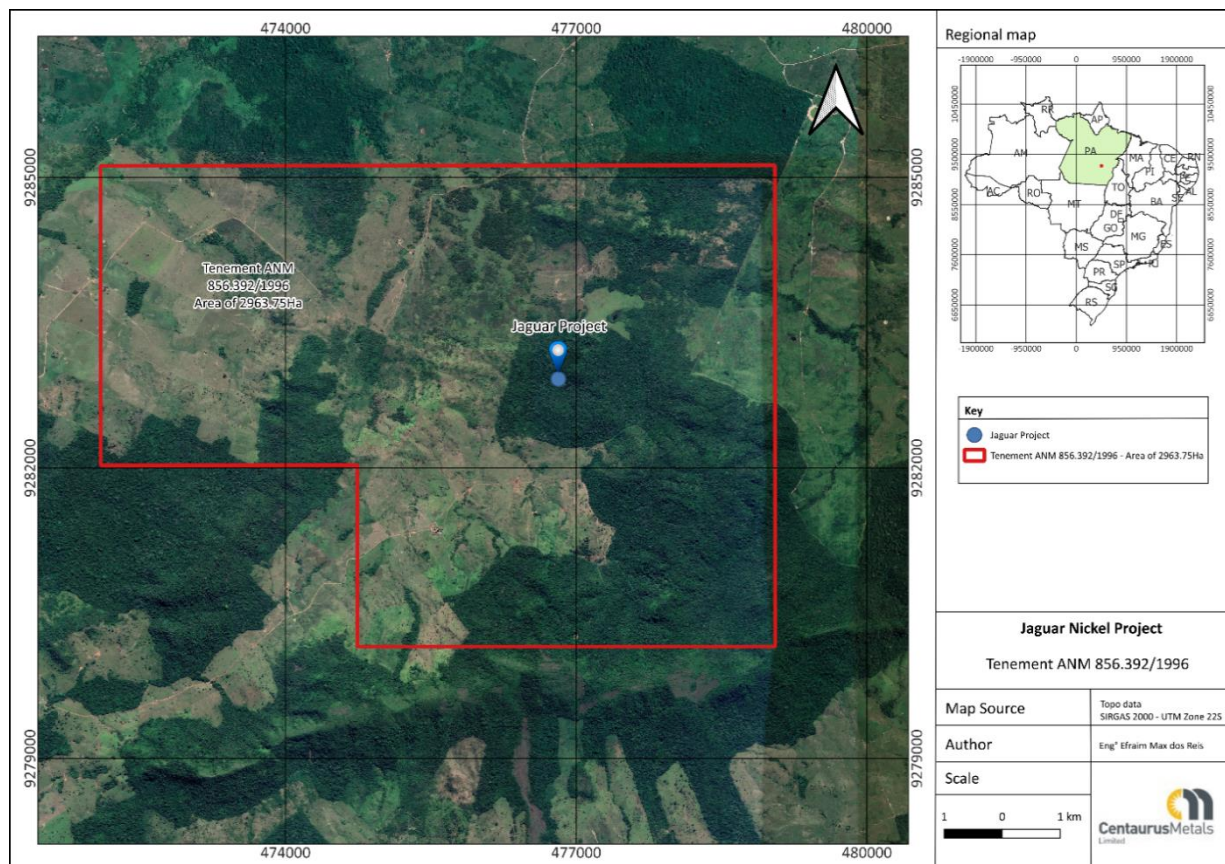


Figure 1:16 – Project Tenement Area

The total area of land currently owned by Centaurus is approximately 2,090ha, while the disturbed area of the Project is approximately 965ha. Of the 2,090ha of land currently owned by Centaurus, 1,045ha or 50% of legal reserve is required, though the legal reserve does not need to be located on the land owned by Centaurus at the Project site.

The Project footprint is covered by four properties of which Centaurus has purchased three (3) and is currently in negotiation with the landowner to purchase the fourth property of 770ha. The properties purchased by Centaurus had the possession rights assignment agreements registered with the notary office in São Félix do Xingu. The mining easement includes the fourth parcel of land currently not owned by Centaurus.

### 1.10.2 Approvals Summary

The Project has received its key Preliminary Licence (LP) approval from SEMAS in February 2024.

Approval to conduct the public access road and bridge upgrades has been provided from each of the municipalities, with only clearing permits to be obtained before work can commence. The permit allowing diversion of water during bridge upgrade activities was received 27 February 2023.

Centaurus has initiated the next stage of the approvals process which involved the preparation and lodgement of the Project Installation Licence (LI) application, which was made based on an Environmental Control Plan (RCA/PCA). The RCA/PCA for the Project included basic engineering design level information on atmospheric emissions control systems, liquid effluent control systems, settling ponds design to retain sediments, waste management systems, tailings dam stability and hydrogeochemical monitoring systems, waste dump stability monitoring system, and a refinement of all the impact elimination and mitigation programs proposed in the Environmental Impact Study and the Environmental Impact Report (EIA/RIMA).

Once issued, the LI allows the commencement and completion of all construction activities including commissioning of the Process Plant and support facilities. It also includes mine pre-stripping activities but does not allow commercial production or sale of nickel sulphide concentrate product.

The Operating Licence (LO) authorises the commencement of operations for the Project and is issued by SEMAS. This approval is granted once the management plans and programs contained in the EIA/RIMA and in the RCA/PCA have been assessed and proposed environmental management and engineering controls have been installed. This will include the SEMAS site inspection team verifying the installation before the completion of construction or during the commissioning phase.

Once the LO is issued, then commercial production can take place and the nickel sulphide concentrate produced from the Project can be sold.

At the completion of the Study the remaining primary approvals to be obtained include:

- Project LI approval: expected Q4/2024, and
- Project LO approval: expected Q4/2027 following successful construction and commissioning of the Project facilities.

Table 1:10 shows the status of approvals received and future approvals required for the Project.

Licensing / Permitting Requirement	Timing	Prerequisite	Status as at 21 June 2024
Jaguar Project LP	Prior to construction	Site inspection by SEMAS Public hearings EIA/RIMA approval COEMA approval	LP Approval received 2 February 2024 Approval (LP No.: 1971/2024) Valid until 01 Feb 2027
Project Installation Licence (LI) includes IWL initial lift, and fuel station)	Prior to construction	Issuing of LP by SEMAS Comply with LP conditions Site inspections by SEMAS	Lodged on 3 April 2024 Under analysis by SEMAS
Project Operating Licence (LO)	Prior to commencement of operations	Issuing of LI by SEMAS Comply with LI conditions Site inspection by SEMAS 80% of Project built	Not yet commenced. Required Q2 2027
Project Water Permit - creek diversions, settling ponds, culverts, channels, IWL and water intake	Prior to construction	Issuing of LP by SEMAS Submission of Water Resources Use Licence application for surface abstraction from the Igarapé Mogno and damming in a water body, in accordance with Article 4 of SEMAS Normative Instruction 02/2012, along with RCA/PCA	Water intake Technical Report submitted to SEMAS on 21 May 2024; Stream diversion Technical Report submitted to SEMAS on 22 May 2024. Other technical reports to obtain permission for use/intervention in water currently being prepared.
Project Vegetation Clearing Permit	Prior to construction	Issuing of the LP by SEMAS Submission of Vegetation Clearing applications along with RCA/PCA	LI Application - RCA/PCA study (requested 3 April 2024); Technical report to obtain permission for intervention in flora (vegetation clearing) - Submitted to SEMAS on 7 June 2024.
Project Mining Lease (PAE)	Prior to commencement of operations	PAE approval by ANM Issuing of LI	LI application currently being assessed by SEMAS
Project LI - subsequent IWL lifts	Two years prior to requirement	Application to be made according to annexure B of EIA/RIMA terms of reference	Not yet commenced
Project Firefighting system design permit	Six months prior to issuing of LI	Application to be made and to be done after RCA/PCA lodgement Architectural design of Project facilities	Architectural design of Project facilities currently being prepared
Project Approval of archaeological work (National Historic and Artistic Heritage Institute - IPHAN)	Prior to construction	IPHAN approval to carry out the work	Approval issued by IPHAN - Process N° 01492.000555/2019-48
Project Construction Permit from São Félix do Xingu administration	Prior to commencement of construction	Architectural design of Project	Architectural design of Project facilities currently being prepared
Project Operating Permit from São Félix do Xingu municipality	Prior to commencement of operations	Project LI – Project construction	Not yet commenced Required Q2 2027
230kV Transmission line LP/LI	Prior to construction	Transmission line RCA/PCA approval	LP/LI approval received 2 February 2024 (LI No. 3450/2024)

Licensing / Permitting Requirement	Timing	Prerequisite	Status as at 21 June 2024
230kV Transmission line LO	Prior to commencement of operations	Approval of the LP/LI Comply with LI conditions. Site inspection by SEMAS	Not yet commenced Required Q2 2027
230kV Transmission line Vegetation Clearing Permit	Prior to construction	Transmission line RCA/PCA approval Flora technical report approval	received 9 February 2024
230kV Transmission line Approval of archaeological work (National Historic and Artistic Heritage Institute - IPHAN)	Prior to construction	IPHAN approval to carry out the work	Approval issued by IPHAN - Process nº 01492.000044/2021-41
Sanitary permit from Pará State	Application to be made six months prior to issuing of LI	Architectural design of Project facilities	Architectural design of Project facilities currently being prepared
Road upgrades	Prior to construction of plant	Application to local authorities	Permits received - Municipalities: São Félix do Xingu issued on March 21, 2023 Tucumã issued on June 16, 2023 Ourilândia do Norte issued on January 18, 2024.
Road upgrades Vegetation Clearing Permit	Prior to construction	Application to local authorities with a submitted flora technical report	Flora technical report submitted to local authorities for analysis and issuance of the license Under analysis
Culverts and Bridges Water Permit (interference with a watercourse)	Prior to construction	Application to SEMAS	Approval received 27 February 2024 for the bridges on the road to site Water Permit received 27 Feb 2023 (Process nº 2023/39077)
Explosives - authorisation to store and have third-party use explosives	Prior to commencement of operations or construction	Submission of the controlled product safety plan to the Brazilian Army Safety plan for products controlled by the Brazilian Army approval	Application made in April 2024 Under analysis

Table 1:10 – Status of Project Approvals

## 1.11 ENVIRONMENTAL, SOCIAL AND COMMUNITY

### 1.11.1 Environmental

The Brazilian environmental permitting and approvals legislation, governed by CONAMA, under which the Project is being assessed, guided the design of the programs to understand and assess the existing environmental aspects and potential impacts on those aspects because of the Project activities.

Detailed programs of environmental and social baseline surveys and studies were undertaken over several years for the Project and for the 230kV Transmission Line by teams of specialist environmental and social scientists. The programs covered the physical, biotic and socio-economic environments at the local and region scales.

Data from these surveys and studies were then integrated into the Project's engineering designs and options for Project layout to allow Centaurus to complete an assessment of potential impacts and risks to the social and environmental resources and receptors at these local and regional levels and select the optimal site layout. The outcome of this work was summarised into the EIA/RIMA based on the terms of reference defined by SEMAS and incorporated into the RCA/PCA report.

In addition to Brazilian environmental and social legislation, Centaurus also aligns its Policies, Standards and other non-statutory frameworks to the Equator Principles and the IFC's Performance Standards to address environmental, social and governance framework (ESG) requirements, where applicable, for the development of the Project.

Control, mitigation, monitoring, compensation and enhancement measures were submitted to SEMAS, so that the potentially negative impacts of the Project can be adequately managed through a proposed series of controlled actions, and that positive impacts could be maximised.

A set of 29 environmental and social management plans were included in the EIA/RIMA and subsequently approved by SEMAS, of which nine relate to aspects of the Physical Environment, five of the Biotic Environment, eight of the socio-economic and cultural heritage environments and the remaining seven management plans relating to Project implementation activities.

#### **1.11.2 Community**

Centaurus has a strong history of community engagement in the region since acquiring the Project. With Centaurus' commitment to establishing an environmentally and socially responsible economic mining operation at the site, a comprehensive consultation program with all potential stakeholders commenced following the acquisition of the Project from Vale in 2019.

The program has been progressively expanded as the Project progresses toward development. This program was designed to ensure all relevant stakeholders were identified and effectively consulted to address potential stakeholder concerns and to identify the statutory requirements with regards to the Project.

Social programs will be developed for the Project that align with Centaurus' policies and vision to create value for all stakeholders. Programs will be developed which focus on socio-economic development, effective communication, and job training to foster local employment, among others.

Numerous community engagement meetings have been held to consult with and update local officials, the general public and other stakeholders on the Project development plans and seek feedback on any concerns from the community in relation to conducting exploration activities and the development of the Project and supporting infrastructure.

During each of these community meetings a comprehensive presentation of the main outcomes of the EIA/RIMA was undertaken and this has led to the positive result of both public hearings held in São Félix do Xingu and Tucumã/Ourilândia do Norte. The local support received during the public hearings helped Centaurus obtain the LP unanimously in the COEMA meeting.

The overall response from stakeholders continues to remain very positive and Centaurus has been encouraged to maintain the level and frequency of consultation, as the Project progresses toward development. Additionally, Centaurus has undertaken extensive consultation with existing landowners and other key stakeholders and continues to work to honour any commitments and obligations that ensue from the approval process.

## 1.12 IMPLEMENTATION

### 1.12.1 Project Implementation

The key criteria applied to the overall Project implementation includes:

- Deliver the Project with zero lost time and medical treatment injuries;
- Achieve zero major environmental incidents;
- Conform to all statutory requirements regarding licenses and approvals;
- Maintain positive community relations;
- Have minimal impact on surrounding communities;
- Implement and deliver the Project to achieve the availability, reliability and operational performance as set out in the Study;
- Design and construct a safe to operate and fit-for-purpose facility, and
- Recruit and train the operational workforce with a focus on local employment and skills development to become the region's employer of choice.

The implementation of the Project has two key components:

*Project Implementation:* The design and development of the open pit mining operation, the construction of the Process Plant, supporting infrastructure and services.

*Operational Readiness:* To prepare Centaurus in the transition from explorer to operator with the development of the necessary systems and processes to enable this transition to occur safely, seamlessly and effectively. This includes the recruitment, employment and training, where necessary, of the operational workforce.

The delivery strategy for the Process Plant, supporting infrastructure and services scope is summarised as follows:

- Engineering, procurement and construction management (**EPCM**) will be completed by an experienced engineering contractor, managed and controlled by Centaurus Owner's Team.
- Specialised work packages, including the off-site access road upgrades, 230kV transmission line and substation and IWL design and construction management will be directly managed by the Centaurus Owner's Team.
- The development of the open pit mine will be managed by Centaurus utilising a contract mining approach.
- Some site services, including Environmental and Community, Site Security and Emergency Response services will be provided by Centaurus utilising personnel from the operations team to facilitate a smooth transition from construction to operations and maintain consistency of approach.

Centaurus will establish an Owner's Team which will consist of experienced management and technical personnel necessary to administer all aspects of the Project.

The Operations team will be progressively mobilised at the appropriate time during the Project, to implement the operational readiness plan and ensure a smooth transition from construction to operations.

A number of contract structures will be implemented as part of the Project execution model, including lump sum, schedule of rates, build own operate and build own operate transfer. The appropriate structure implemented will reflect pricing, risk and expertise required to deliver the entire Project scope on time and within approved capital budget.

### 1.12.2 Schedule

The overall duration of the Development schedule from FID (April 2025) to commissioning of the plant is 2.4 years or 29 months. The key activities and durations are shown in Table 1:11.

Preliminary work commences in Q3/2024 with design activities for the Process Plant water dam, IWL and 230kV transmission line and substation and the development and issue of the tenders for the mining services and support contracts enabling commencement for mining contractor mobilisation in Q2/2025.

Preliminary site works, including construction of the Plant water dam, will commence in Q2/2025. Mining and associated activities are scheduled to commence in May 2025 with initial works involving clearing and site establishment.

The EPCM contractor commences in Q2/2025 with the detailed engineering design and procurement and mine development for commencement of the IWL construction.

In 2026, on-site construction of the Process Plant commences with earthworks, foundations, structural steel erection and buildings with IWL construction and mine development activities ongoing. Site construction will be completed by the end of Q2/2027, with commissioning activities commencing thereafter.

Commencement of ore commissioning and ramp up of the Process Plant is scheduled for August 2027.

	Q3 2024		Q4 2024			Q1 2025			Q2 2025			Q3 2025			Q4 2025			Q1 2026			Q2 2026			Q3 2026			Q4 2026			Q1 2027			Q2 2027			Q3 2027			Q4 2027									
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec						
Installation Licence (LI)																																																
Mining Licence (ML)																																																
Project Funding																																																
FID																																																
Owners Team																																																
Off-Site Roads																																																
EPCM Contractor Start																																																
Process Plant Water Dam Complete																																																
Mine Contractor Mobilisation																																																
Mining Start																																																
IWL Facility Start																																																
Process Plant Construction Start																																																
Concentrator Earthworks Start																																																
Concentrator Civil/Concrete Start																																																
Concentrator Electromechanical Start																																																
Power Line & HV Substation Complete																																																
Permanent Power Available																																																
IWL Facility Complete																																																
Concentrator Dry Commissioning Start																																																
Concentrator Practical Completion																																																
Concentrator Commissioning Ore																																																

Table 1:11 –Project Key Activities

### 1.13 OPERATIONAL ACTIVITIES

#### 1.13.1 Operational Readiness

The preparation and use of a detailed and comprehensive Operational Readiness Plan (**OR Plan**) forms part of the integrated project management process to successfully deliver the Project and business outcomes required by Centaurus. The OR plan being developed ensures the required associated commercial, logistics, customer management and quality assurance systems are thoroughly planned and integrated appropriately.

### 1.13.2 Site Operations

The Project will be operated by Centaurus with local workforce engaged and trained to operate and maintain the production facilities with key contractors brought in to undertake mining activities including mine development, grade control and explosive supply and blasting and future IWL lifts. Additional specialist contractors and consultants will be engaged as required.

#### 1.13.2.1 Organisation

The site-based Operations Team will manage the day-to-day operations of the Project within respective functional departments and in accordance with Centaurus systems and business requirements, Figure 1:17.

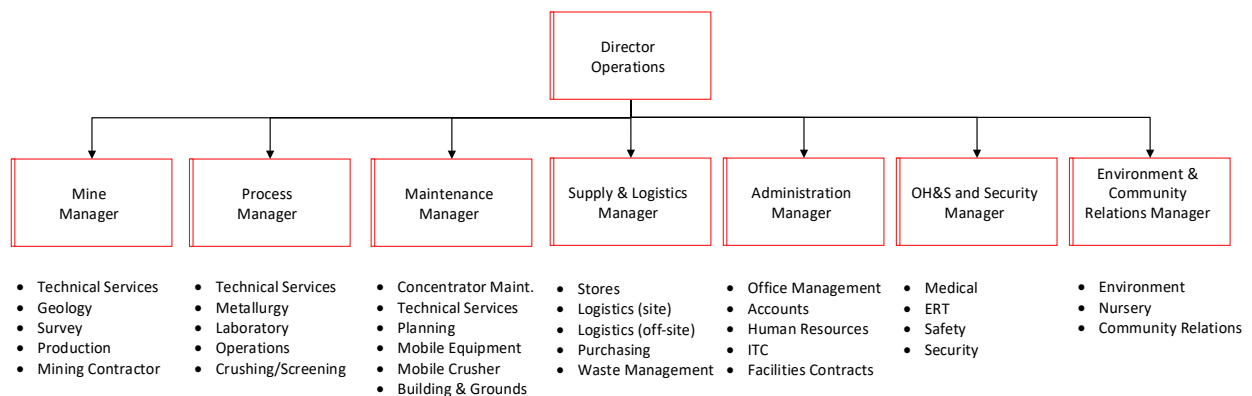


Figure 1:17 – Operations Organisation Chart

The Project’s workforce includes 490 direct hire employees and 630 mining contractors totalling a site-based contingent of 1,120 personnel at peak. Departments with continuous shifts will operate 4 crews, over 3 panels working 8-hour shifts, in compliance with local laws and regulations.

The workforce will be sourced using a priority zone-base system drawn primarily from the State of Pará and predominately from within the Carajás Mineral Province which provides Centaurus access to highly skilled labour, contractors and suppliers for the Project.

The local townships and communities near the Project have approximately 137,000 residents with São Félix do Xingu the largest in population with 65,000, followed by Tucumã with approx. 40,000 and Ourilândia do Norte with approx. 32,000 residents. Both Tucumã and Ourilândia do Norte are situated approximately 40km from the Project and with existing mining companies operating in the region, a ready-made and mining-experienced workforce is accessible for many of the Project’s operational roles. Employees will be bussed in / out of the towns of Tucumã and Ourilândia do Norte.

#### 1.13.2.2 Compensation & Benefits

All terms and conditions of employment, including workplace policy and procedures will reflect contemporary workplace practices and be developed to ensure compliance with any applicable industrial instrument and labour law legislation, including the Consolidated Labor Code - Consolidação das Leis do Trabalho [CLT] 1964 (CLT) (last amended in 2021).

Annually, Centaurus will administer a formal salary review process in line with the CLT, the Brazilian Federation Constitution, and other industrial agreements including Union Collective Bargain Agreements (UCBA).

A fully catered restaurant will provide meals to all site personnel working each shift.



### 1.13.3 Product Transport and Logistics

Concentrate will be trucked from the Project Site to the Port of Vila do Conde where it will be stockpiled before being containerised and loaded on to vessels for export.

The port of Vila do Conde is one of the main ports in the North region of Brazil and has received significant investment in recent years. The port has eight berths with one dedicated to containers and two for solid bulk operations.

## 1.14 CAPITAL COST ESTIMATE

### 1.14.1 Pre-Production Capital Cost

Centaurus finalised the Project capital estimate for the Study following receipt of costs estimated for the concentrator and infrastructure based on Ausenco engineering and estimation work. The capital estimate was prepared with a  $\pm 15\%$  level of accuracy and uses third quarter (Q3), 2023 base pricing. The estimate has been determined from first principals engineering with equipment vendor budget pricing and bulk quantity, concrete/steel/piping/earthworks, for Brazilian suppliers/vendors.

The non-mining portion of the estimate includes all costs associated with engineering, procurement, construction, construction management, mobilisation and demobilisation of contractors, freight, commissioning, first fills and spares, owner's costs with provisions for design growth and contingency.

The mining capital estimate is based on a contract mining approach including contractor mobilisation and establishment for the provision principally of suitable bulk fill for IWL construction.

The pre-production capital cost for the Project is estimated to be US\$371.4M, Table 1:12.

Pre-Production Capital	US\$M
Mining	67.8
Process	101.0
Tailings Management	18.5
Non-Process Infrastructure	77.3
<b>Direct Costs</b>	<b>264.6</b>
Construction In-directs	22.3
Engineering (EPCM/Spares/First Fills)	23.1
Owner's Costs	26.8
<b>Indirect Costs</b>	<b>72.2</b>
Contingency (incl growth)	34.6
<b>TOTAL PRE-PRODUCTION CAPITAL COSTS</b>	<b>371.4</b>

Table 1:12 – Capital Cost Breakdown

### 1.14.2 Sustaining Capital (Included in AISC) and Closure Costs

The Sustaining Capital and Closure cost estimate is based on an 18 year mine life, Table 1:13.

Sustaining Capital Cost	US\$M
Mining	93.2
Process	36.4
Tailings Management	99.4
Non-Process Infrastructure	2.5
Jaguar Deferred Acquisition Payment to Vale	5.0
<b>TOTAL SUSTAINING CAPITAL COST (LOM)</b>	<b>236.5</b>
<b>CLOSURE COSTS</b>	<b>18.6</b>

Table 1:13 – Sustaining and Closure Cost Estimate

Sustaining capital includes provisions for:

- Mining:
  - Pit dewatering;
  - Delivery of waste for the IWL
  - LV mobile equipment replacement, and
  - Replacement of direct capital items in technical services.
- Process: Provision of sustaining capital to maintain and support the established facilities;
- Tailings Management: ongoing IWL wall raises to maintain tailings capacity over the mine life;
- Non-Process Infrastructure: creek diversion for site water management, and
- Jaguar deferred acquisition payment due to Vale on achieving commercial production.

The Closure Provision represents an allowance for project rehabilitation as required in Brazil including 2 years of post-closure monitoring activities.

## 1.15 OPERATING COST ESTIMATE

### 1.15.1 Summary

The operating cost estimates have been derived using a first principles approach to build up cost estimates and includes third party pricing for power, diesel, reagents and grinding media. Mining estimations were based on contractor proposals for load & haul, explosives supply and grade control drilling. Labour and overhead costs are determined by Centaurus.

The Study has been based on a nominal 3.5Mtpy processing plant, treating 63Mt million tonnes of ore over an 18 year evaluation period, recovering 2.727Mt (dry basis) of nickel concentrate. Table 1:14 provides life of mine cost and unit costs both in US\$/t milled and US\$/lb Ni in concentrate.

Operating costs cover all onsite costs directly associated with mining, processing, and administration activities and include costs related to sustaining production of the operation over the lifecycle of the Project including royalties (governmental and Vale), community investment, indirect taxes and other non-production costs.

### 1.15.2 Key Assumptions

Labour base salary costs are based on benchmark mining industry salary data obtained from a specialist Brazilian-based compensation consultancy firm who conduct annual surveys in the region. The rates are built up with all relevant statutory taxes and employer obligations to create an all-in labour cost.

The price to supply electrical energy to the Project was derived from data provided by Conexão Energia to Centaurus. This is based on forecast pricing for the 2028-2029 period from three power supplier pricing submissions.

Diesel consumption was estimated for each activity based on OEM data with costs allowed for anticipated use. Diesel supply cost was sourced from Raizen, a Brazilian fuel supply company. The diesel price applied to the estimate is R\$4.79 per litre delivered. Key Operating Cost metrics are in Table 1:14.

Area	LOM Cost	Unit	Unit
	(U\$M)	(U\$/t Ore milled)	(U\$/lb Ni in concentrate)
<b>Mining<sup>1</sup></b>			
Contractor Overheads	264.9	4.20	0.36
Ore	130.7	2.07	0.18
Waste	589.0	9.35	0.80
Labour	94.7	1.50	0.13
Owners cost	63.1	1.00	0.09
<b>TOTAL Mining Costs</b>	<b>1,142.3</b>	<b>18.13</b>	<b>1.55</b>
<b>Processing</b>			
Power	74.9	1.19	0.10
Consumables (incl reagents & media)	164.6	2.61	0.22
Maintenance	82.0	1.30	0.11
Technical Services	8.5	0.13	0.01
Labour	76.5	1.21	0.10
Other Services	28.1	0.45	0.04
<b>TOTAL Processing Costs</b>	<b>434.6</b>	<b>6.90</b>	<b>0.59</b>
<b>General &amp; Administration (G&amp;A)</b>			
Roads	9.6	0.15	0.01
ESG	32.4	0.51	0.04
Labour	67.4	1.07	0.09
Administration	11.2	0.18	0.02
<b>TOTAL G&amp;A Costs</b>	<b>120.6</b>	<b>1.91</b>	<b>0.16</b>
<b>TOTAL C1 CASH COSTS</b>	<b>1,697.5</b>	<b>26.94</b>	<b>2.30</b>
<b>Other Costs</b>			
Product Transportation	436.1	6.92	0.59
Royalties	267.4	4.24	0.36
<b>TOTAL Other Costs</b>	<b>703.5</b>	<b>11.16</b>	<b>0.95</b>
<b>TOTAL COST (Ex Sustaining Capex)</b>	<b>2,401.0</b>	<b>38.10</b>	<b>3.25</b>

Notes: 1. Excludes capitalised stripping and development

Table 1:14 – Forecast Operating Cost (Average) Summary

## 1.16 NICKEL MARKET OUTLOOK & NICKEL PRICING

### 1.16.1 Market Outlook

Nickel demand continues to grow and is expected to have exceeded 3Mt in 2023. Consumption remains dominated by the stainless-steel sector which last year accounted for approximately two thirds of total demand. Despite the steady on-going expansion of this sector the main driver of increasing future nickel use is the production of battery materials, particularly for electric vehicles, which is forecast to grow from 11.5% of consumption in 2023 to 30% by the early 2030s. Non-ferrous alloys, electroplating, and other applications account for the rest of demand.

### 1.16.2 Nickel Price

The LME nickel price declined virtually unchecked through 2023, as a result of a surplus stemming primarily from growing Class II nickel output in Indonesia which led to a number of production cuts and project deferrals across the rest of the world. This also led to a slowdown in the development of new projects in Indonesia which has supported a floor in the nickel price. Since falling below US\$16,000/t in early January 2024 the price recovered to touch US\$20,000/tonne in May 2024 before pulling back in recent weeks with the rest of the commodity suite to levels around US\$17,000/t.

### 1.16.3 Forward Nickel Price Assessment

In determining the appropriate long term nickel price to be used in the Study, the Company engaged AME Mineral Economics Pty Ltd (AME) to produce an industry report on the nickel market. AME have assessed the supply demand balance over the long term with their price forecast model being based on the relationship of global market balance of demand and supply and estimated the cost of production based on energy cost assumptions.

According to AME, global stimulus spending has resulted in strong demand for stainless-steel, while forecasts of stronger and quicker uptake of electric vehicles in the future continues to firm support for the view of a positive outlook for nickel concentrate. The AME nickel price forecast, Figure 1:18, for 2030 is US\$19,700/tonne and continues with an upward trend such that their 2040 price forecast is over US\$21,000/tonne.

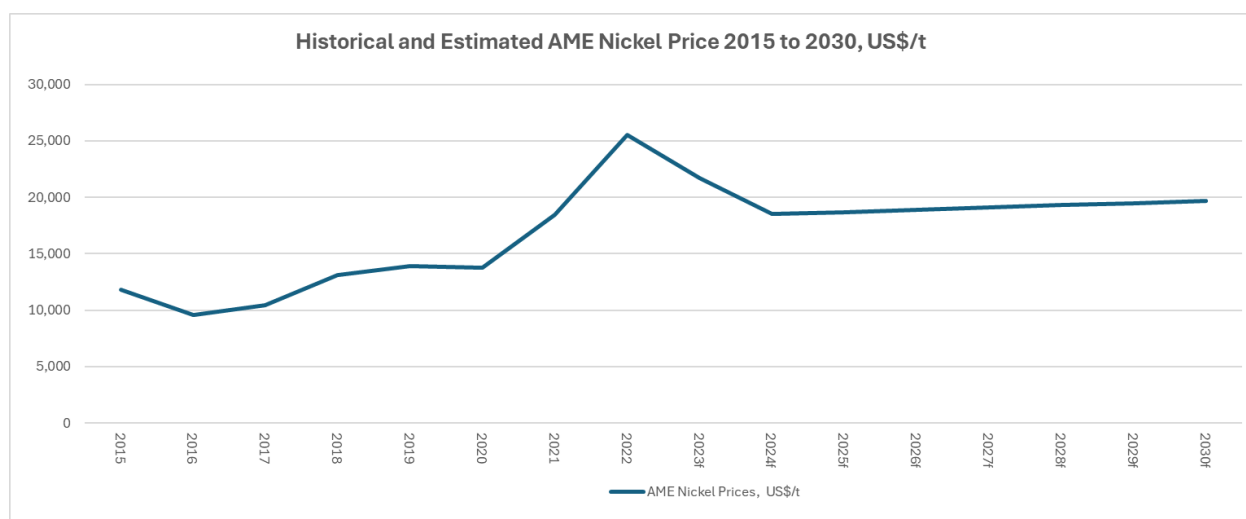


Figure 1:18 – AME Historical and Forecast Nickel Prices

In addition to the input provided by AME, to assist with evaluating a suitable long term nickel price, Centaurus has also considered the consensus forecast for nickel prices prepared by major investment banks. A summary of this consensus forecast shows a long-term nickel price that averages US\$19,053/tonne (2024 real terms).

#### 1.16.4 Jaguar Nickel Concentrate

The Jaguar Nickel Concentrate average life of mine specification is set out in Table 1:15 with month-to-month production varying depending on the location of where the ore is sourced.

Ni (%)	Cu (%)	Co (%)	Zn (%)	Fe (%)	S (%)	MgO (%)	Fe/MgO
12.3	0.85	0.24	2.6	28.0	32.0	3.9	7.2

Table 1:15 – Average LOM Jaguar Nickel Concentrate Specification for Study

The life of mine concentrate grade is 12.3% Ni with a Fe:MgO ratio of 7.2. Based on the grade of copper and cobalt in the test work results, nickel is likely to be the only payable metal in most months of operations. Deleterious elements such as arsenic, antimony, lead and zinc, traditionally viewed as penalty elements in nickel concentrates, have been studied in comprehensive concentrate assaying and all these deleterious elements other than zinc have been determined not to reach threshold limits.

The Jaguar concentrate product does contain elevated levels of zinc compared to more traditional nickel concentrates but discussion with potential strategic and offtake partners in the battery materials sector has indicated that no penalty would be applicable to zinc in the Jaguar concentrate.

#### 1.16.5 Off-take terms

Due to the limited volume of new nickel sulphide concentrate sources available to the market, off-take terms have been and remain very strong historically, despite a weakening in nickel price during 2023. This situation appears set to continue with limited new mine production, particularly nickel sulphides, incentivised at current prices and potential new processing capacity being constructed in Asia principally to support the growing EV battery market.

Recent discussions with potential customers for Jaguar concentrate have expressed a clear desire to diversify nickel sourcing away from Indonesia amid growing concerns around ESG standards and GHG emissions as well as a general overdependence on sourcing nickel supplies from a single country.

#### 1.16.6 Study Long Term Nickel Price Assumption

For this Study, Centaurus has adopted a long-term nickel price of US\$19,800/tonne (US\$8.98/lb) with the pricing assumption supported by a detailed market summary prepared by AME Mineral Economics Pty Ltd (AME), consensus price forecasts by global investment banks and Centaurus's assessment of the nickel supply/demand balance and cost curve from the commencement of planned operations from Jaguar. Jaguar production is planned to commence in H2 2027 and based on the open pit mine life alone, will have a mine life of 18 years.

The Study also assumes 76% payables from the sale of its nickel concentrate. This payability assessment is a conservative assessment of nickel payability based on the discussions referred to above with off takers and potential strategic partners in the battery materials sector and the current nickel concentrate specification noted above. The pricing structures used in the financial model is reflective of the discussions held to date with these groups.

The Company anticipates that the Jaguar concentrate product grade may lift as the project implementation plan is rolled out and this could well lead to a higher nickel grade in the final concentrate specification.

### 1.17 FINANCIAL ANALYSIS

The financial analysis models an ~18 year project life mine life based on a mining inventory of 63Mt of ore and the production of 2.7Mt of nickel concentrate from the mining and processing schedule. Key assumptions used in the financial model are summarised in Table 1:16.

### 1.17.1 Assumptions

Assumption	Units	Base Case
Average LOM Exchange Rate	USD/BRL	5.30
Average LOM Exchange Rate	AUD/BRL	3.50
Average LOM Exchange Rate	EUR/BRL	5.80
Ni Price (2024 real terms)	US\$/t	19,800
Ni Price	US\$/lb	8.98
Nickel Concentrate Price (76% Payable)	US\$/t	15,048
Corporate tax rate (Amazon Region)	%	15.25
Income Tax rate (including 9% social contribution tax)	%	34.00
Discount Rate – Real	%	8%
CFEM Royalty (%NSR - (Road + Ocean Freight))	%	2%
Pre-Production period	Months	28
Mine Life	Years	17.9

Physicals	Units	Study Case
Total tonnes mined	Mt	394
Total waste tonnes mined	Mt	331
LOM Strip Ratio	W:O	5.3:1
Grade	%	0.73
Total Ore tonnes	Mt	63
Concentrator Plant Availability	%	91.3
Total mill feed tonnes	Mt	63
Mill Feed	Mt/y	3.1 – 4.1
Life of Mine Mill Head Grade	Ni %	0.73
	Cu %	0.05
	Co ppm	232
Life of Mine Concentrate Grade	Ni %	12.3
	Cu %	0.9
	Co %	0.24
Life of Mine Concentrate Recovery	Ni %	73.0
	Cu %	78.0
	Co %	46.8
Life of Mine Concentrate Production	dry t/y	114,000 – 183,000
	dry t	2,727,000

Table 1:16 – Project Assumptions

### 1.17.2 Methodology Used

The Project economics have been modelled on a post-tax, unlevered basis at the Project level, using discounted cashflow analysis at a discount rate of 8%. The analysis does not factor in revenue for copper or cobalt payables.

Sensitivity analysis was performed to assess impact of variations in nickel prices, nickel recovery, the USD/BRL exchange rate, discount rate, operating costs and capital costs.

The capital and operating cost estimates were developed specifically for this Project and are summarized in Sections 1.14 and 1.15 of this Executive Summary Report.

The economic analysis has been completed without inflation (constant dollar basis).

### 1.17.3 Financial Model Parameters

The economic analysis was performed using the following inputs from the mine plan and input assumptions:

- Construction period of 28 months,
- Mine life of 18 years,
- United States Dollar (USD) to Brazilian Real (BRL) exchange rate assumption of 5.30 (USD/BRL),
- Cost estimates in constant Q3/2023 US\$ with no inflation or escalation factors considered following this date,
- Results are based on 100% ownership of the Project,
- A 2.0% CFEM (government) royalty,
- All cash flows discounted to FID,
- All concentrate product is assumed sold within 30 days of production; and
- Project revenue is derived from the sale of Nickel concentrate into the international marketplace. For the Study a long-term nickel price of US\$19,800/tonne (US\$8.98/lb Ni) has been used based on independent market analysis and forecasts.

### 1.17.4 Income Tax

Brazilian corporate income tax is a federal tax charged on net taxable income. It applies at a basic rate of 15%, plus a surtax of 10% on annual income that exceeds R\$240k per year.

The social contribution tax on profits is also a federal tax levied on net taxable income and is applied at a rate of 9%. It is not deductible for corporate income tax purposes. The social contribution tax is applied to the same tax base as corporate income tax.

Expenses relating to the ordinary conduct of a trade or business of a company, properly documented and necessary to maintain a company's source of income are generally deductible. Tax losses may be carried forward indefinitely (there is no statute of limitations). The offset is limited to a maximum 30% of annual taxable income and no carry back of losses is allowed.

The Financial Model assumes a headline corporate income tax rate of 34%, which comprises the base rate of 15%, the 10% surtax and the 9% social contribution tax. This headline rate is reduced to 15.25% by the operation of the SUDAM tax concession which is described further below. Credits accumulated through the payment of federal PIS and COFINS indirect taxes levied on mining and processing operating costs have also been applied against income tax payable in the financial model. Corporate income tax payments of US\$281M are forecast to be made over the life of the Project.

### 1.17.5 Indirect Taxes

The Brazilian indirect tax system is complex and includes taxes levied at a federal, state and municipal level. Estimates for both capital and operating costs have included the applicable indirect taxes, sourced from either vendor pricing or internal analysis.

The key indirect taxes that will impact on the capital and operating costs for the Project are described below.

- **Import Tax (II).**

II applies to the cost, insurance and freight (CIF) value of imported products at various rates. This is a final tax, meaning that no credits are granted. The taxable event is the customs clearance. The rate applicable is based on the Tabela de Incidência do IPI (TIPI) which classifies products using an 8 digit NCM code (Nomenclatura Comum do Mercosul). Rates range from 0% to 35% with the typical rate applicable to the Jaguar project approximately 11%.

- **Federal Excise Tax (IPI).**

IPI is a federal tax levied on the import and manufacture of goods. It operates in a similar manner to a value added tax, which is charged on the value aggregated to the final merchandise. The applicable rate depends on the product and its classification under the IPI Tax Rates Table (TIPI). IPI is not levied on export sales. The IPI rates applicable for the Project range from 3% to 15%.

- **Social Integration Program (PIS) and Social Contribution on Revenues (COFINS).**

PIS and COFINS are federal taxes charged on gross revenues at a rate of 1.65% and 7.6% respectively. Under the non-cumulative regime, tax payers may recognize PIS and COFINS credits over certain costs and expenses. Credits may be used to offset PIS and COFINS due on taxable revenue, or in the case of exporters, may be offset against other federal taxes, including income tax. PIS and COFINS are payable by the Company for both capital and operating costs. PIS and COFINS paid on mining and processing operating costs have been accumulated and credited against corporate income tax in the financial model.

- **State Value-Added Tax (ICMS).**

ICMS is a state value added tax levied on the import of products and certain transactions involving goods (including electricity), inter-municipal and interstate transportation services and communication services. The taxable base is equal to the value of the transaction, including the ICMS itself (gross-up), insurance, freight and conditional discounts.

In general, when transactions involve 2 different states, the rates are 7% when the purchaser is located in the states of the North, Northeast and Centre West regions or in the state of Espírito Santo or 12% for purchasers located in other states. For interstate transactions, ICMS is collected by the state where the supplier of the goods is located and the difference between the internal and interstate rates is paid by the purchaser to the state in which the purchaser is located, representing the so-called ICMS DIFAL (Diferencial de Alíquota do ICMS).

For transactions within the state of Pará and in the case of imports, the rate of ICMS will be 19% which may be reduced under various concession arrangements. The CONFAZ arrangement will reduce the rate from 19% to 8.8% on capital purchases, depending on the NCM code. Reductions of 50% (fifty percent) of the ICMS rate on purchases of fuel oil used in the production process and on the acquisition of electricity are available under the State of Pará Incentives for Nickel projects.

- **Municipal Service Tax (ISS).**

ISS is a municipal tax levied on revenues derived from the provision of services other than those subject to ICMS (transportation, power and telecommunication supply). The tax base for ISS is the price or value of the service. The rates vary from 2% to 5%, depending on the municipality where the service provider is located, where the service itself is provided and the type of the service. Generally speaking, it is levied by the municipality where services are carried out.

All cashflows included in the financial model incorporate outflows for relevant indirect taxes, with concessional rates applied where appropriate.



### 1.17.6 Concession Regimes

The use of government incentives is a significant feature of the Brazilian business environment. The regimes are intended to encourage investment in Brazil and in particular, support new project development or expansion. The Study includes the application of a number of concession regimes that apply to both corporate income tax and to indirect taxes levied on Project cost inputs. Independent advice has been received by Centaurus to assist in clarifying the operation of the concessions and to determine their treatment in the financial model.

The key regimes under which concessional tax treatments have been applied in the Study are summarised below.

- **Superintendence of Amazonas Development (SUDAM)**

Companies located in the Amazon region may benefit from certain tax incentives. SUDAM is an administratively and financially independent federal government agency that oversees development in the Amazon region. The region includes the state of Pará in which the Project is located. Under the concession program, companies can receive either partial or complete tax exemption on income taxes for Brazilian companies.

The tax exemption applies only to income from facilities operating in the designated region. For the purposes of the Study, the financial model factors in a reduction of the headline income tax rate of 34% to the 15.25% rate available under the SUDAM regime for the Project. The concession is available for an initial period of 10 years with further extension of the program available upon application. The financial analysis assumes the concession is available for the 18 year life of the project.

- **Ex Tarifário**

The Ex-Tarifário regime is applicable on imports of capital, computing and telecommunications equipment which have no nationally manufactured equivalent. In most cases the regime operates to reduce the rate of Import Tax (II) to nil.

The basis for assessing the availability of a nationally manufactured equivalent is the 8 digit NCM code (Nomenclatura Comum do Mercosul). Brazil is part of the Southern Common Market referred to as Mercosul which includes Argentina, Paraguay and Uruguay as member countries. The international equivalent is the Harmonized Commodity Classification and Coding System (HS), which is an international method of product classification based on a 6 digit code structure and related descriptions used to facilitate and classify international import and export transactions.

The schedule of imported capital equipment for the Project has been assessed for the application of the Ex Tarifario concession using the NCM code with the II reduced to nil for qualifying equipment.

- **RECAP**

RECAP is a tax regime that allows special tax conditions for the acquisition of fixed assets by exporters. Export companies under RECAP regime are exempted from PIS and COFINS on the acquisition of capital goods.

- **CONFAZ 52/1991**

CONFAZ ICMS Agreement 52/1991 is an agreement between all Brazilian states to grant concessions on ICMS tax on the acquisition of industrial machines, devices and equipment listed on Annex I of the agreement. The concession applies to both capital equipment imported and acquired locally.

This benefit consists of a reduction on the ICMS tax basis (depending on the NCM/HS Code) from a tax burden on average of 19% to 8.80%. If the equipment is shipped from South/Southeast regions to destinations in the North/Northeast/Central-West regions or Espírito Santo state, the tax rate is 5.14% applied at the point of origin plus the difference of 3.66% due at the state of delivery. For supply originating in other regions, the rate is 8.80% - including for transactions within the state of Pará.

- **State of Pará Incentives for Nickel**

The Pará State Decree 1,729/2005 establishes the State of Pará Incentives for Nickel producers. Specific incentives under this decree include;

- a reduction of 50% of the ICMS tax basis levied on domestic purchases of diesel used in the production process and on electricity acquisition by taxpayers who have operations related to the exploration and processing of nickel and its byproducts inside Pará;
- an ICMS exemption for the import of machinery and equipment without a national equivalent;
- an exemption for the interstate acquisitions of machinery and equipment, in relation to ICMS Difal.
- an ICMS exemption on the supply, in local Pará state operations, of goods used in the construction of fixed assets for mining and industrial operations for the mining and processing of nickel and its byproducts.

A number of other concession regimes may be applicable to the Project but have not been considered in the financial analysis mainly due to the level of detailed information required in order to attribute the concessions to the relevant cost input.

#### 1.17.7 Royalties

Financial Compensation for the Exploitation of Mineral Resources (**CFEM**) is payable to the Brazilian federal government. The Project is subject to a 2.0% CFEM royalty. This royalty has a regulated split of 65% to the municipality where the project is located (Sao Felix do Xingu), 25% to the State of Pará and 10% to the Federal treasury.

In addition, royalties are payable to Vale and to the Brazilian National Development Bank (BNDES) at the rates of 2% and 1.8% respectively, in accordance with the Project sale and purchase agreement. The royalty rates are based on gross revenue less the cost of product transport.

#### 1.17.8 Economic Analysis

The economic analysis was performed using an 8% discount rate.

The post-tax NPV<sub>8</sub> is US\$663M (A\$997M), the post-tax IRR is 31% pa, and post-tax capital payback is 2.7 years.

A summary of the Key Project Economic Metrics is included below in Table 1:17

<b>Capital and Operating Costs</b>		
<b>Pre-Production &amp; Sustaining Capital Costs</b>	<b>Units</b>	<b>Feasibility Study</b>
Pre-Production Capital (Pre strip)	US\$M	67.8
Development Capital (Processing & Non-Process Infrastructure)	US\$M	269.0
Design growth allowance and contingency	US\$M	34.6
<b>Total Pre-Production Capital</b>	<b>US\$M</b>	<b>371.4</b>
<b>Sustaining and Deferred Capital (Included in AISC below)</b>	<b>US\$M</b>	<b>236.5</b>
<b>Operating Costs [contained nickel basis]</b>		
<b>C1 Cash Costs</b>	<b>US\$/lb</b>	<b>2.30</b>
Royalties	US\$/lb	0.36
Product Logistics	US\$/lb	0.59
<b>Total Operating Costs</b>	<b>US\$/lb</b>	<b>3.25</b>
Sustaining and Deferred Capital	US\$/lb	0.32
<b>All-in Sustaining Costs (AISC)</b>	<b>US\$/lb</b>	<b>3.57</b>
Development Capital	US\$/lb	0.50
Closure Costs	US\$/lb	0.02
All-in Costs (AIC)	US\$/lb	4.09

<b>Key Project Financial Metrics</b>		
<b>Key Financial Results</b>	<b>Units</b>	<b>Feasibility Study</b>
Total Revenue (Net of Payabilities)	US\$M	5,046
EBITDA	US\$M	2,631
Tax Paid	US\$M	(282)
<b>Project Cashflow</b>		
Pre-Tax	US\$M	2,020
Post Tax	US\$M	1,738
Post Tax	A\$M	2,614
<b>Net Present Value (NPV<sub>8</sub>)</b>		
Pre-Tax	US\$M	795
Post Tax	US\$M	663
Post Tax	A\$M	997
<b>Internal Rate of Return (IRR)</b>		
Pre-Tax	% pa	34
Post Tax	% pa	31
<b>Capital Payback Period</b>		
Pre-tax	Years	2.5
Post Tax	Years	2.7

Key Environmental and Social (ES) Statistics		
LOM State Royalties & Corporate Taxes	US\$M	373.7
LOM Mine Gate (C1) Expenditure	US\$M	1,697.5
LOM Total Expenditure (Total Operating Costs + Pre-production Capital)	US\$M	3,018.1
Estimated Carbon intensity	CO <sub>2</sub> /t of Ni Eq.	7.27t

Table 1:17 – Jaguar Project Key Economic Metrics

Annual project cashflows are shown in Figure 1:19.

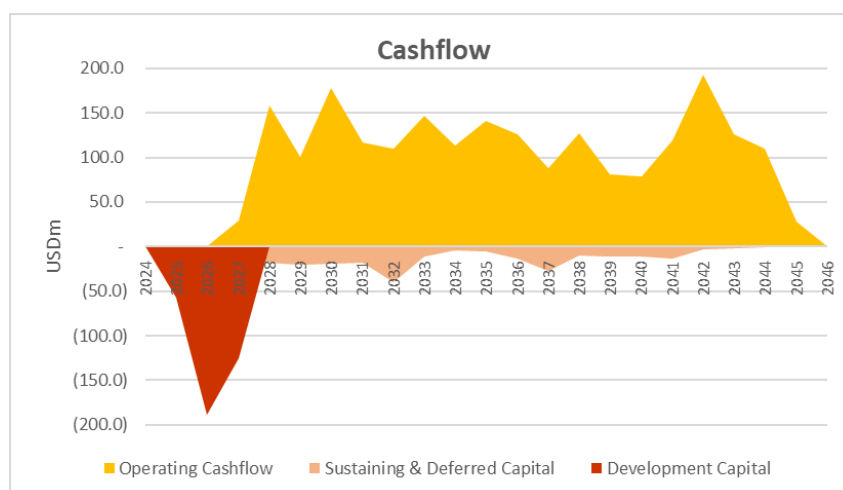


Figure 1:19 – Jaguar Project Cashflow Summary

Sensitivity analysis has been completed for NPV by assuming a 10% movement above and below the value of specified base case assumptions. The variables chosen for analysis and the outcome on Project economics are shown in Figure 1:20.

Variable	Base Case	Sensitivity	NPV8 after Tax US\$663M	
Ni price	US\$19,800/t	+/- 10%	474.9	877.6
Ni Recovery	73%	+/- 10%	474.9	850.4
USD/BRL	5.30	+/- 10%	538.4	764.4
Discount Rate	8%	+/- 1%	580.8	735.4
Operating Costs	LOM US\$	+/- 10%	597.7	727.8
Capital Cost (Development)	US\$371M	+/- 10%	631.9	693.5

Figure 1:20 – Jaguar Project Sensitivities

## 1.18 RISKS

As part of the Study a risk assessment process was used involving Centaurus and Ausenco personnel to ensure that, at a Study level, technical risks were identified and mitigated within the constraints of the Study engineering. Centaurus has also undertaken corporate risk assessments. Consideration has been given to opportunities which may enhance the performance of the Project during further value engineering exercises.

It is recognised that there are uncertainties in implementing and operating any project including this nickel sulphide concentrate project in Brazil. There is a risk that forecasts may not be achieved in some areas however, there may be opportunities and avenues for improving the performance of the Project in others.

### 1.18.1 Technical Risks

#### *Water Supply*

Water supply to the Project, both under and over supply, in the long-term due to impacts of climate change with lower rainfall than currently occurs is a risk that Centaurus has considered. To mitigate this risk, a water dam is included plus water harvesting/recycle to return tailings decant water to the processing plant.

Water balance studies modelled the catchment of the tailings impoundment and process facilities and using historic and current rainfall data and determined the need for discharge of excess water at times. With the operation recycling as much water as possible, there is, at times, a positive water balance making it necessary to discharge water to the environment. A water treatment facility has been included in the process plant to treat water to reduce contaminants to below the limits in Brazilian water standards so that this excess water can be discharged to the environment.

#### *Mining*

Mining operations have inherent risks and liabilities. The occurrence of any safety, ground disturbance or environmental incident could delay production or increase production costs.

The mining services contract proposed will incorporate a fixed and variable pricing structure to mitigate the risks associated with seasonal variation in the mining rates/ grade as well as significant design and production schedule changes.

Mine waste will be stored in dumps. Waste characterisation testing for acid generation potential and release of metal leachates has been undertaken and concludes that there is a low potential for acid generation. Geotechnical stability of waste dumps has been modelled and confirms that construction parameters are stable under normal and seismic loads.

#### *Processing*

The process technology adopted for the Project is based on a conventional processing flowsheet. The process for treating sulphide ore is well understood and used throughout the nickel industry thus providing low technology risk to the Project. Key processing equipment has been specified duty/standby to avoid downtime due to maintenance or equipment failure.

#### *Tailings Storage*

Following two recent tailings dam failures in which people were killed and significant environmental damage occurred, the licencing and operation of tailings storage facilities in Brazil is under increased regulatory focus.

To ensure a stable tailings facility was designed and to reduce licencing risk, experienced local consulting companies were engaged for the geotechnical and geochemical characterisation of tailings, characterisation of construction materials and the design of the impoundment. Dam break studies were completed assuming worst case scenarios to assess the risk of downstream impacts which found that no communities would be impacted in the event of a failure. Geotechnical stability assessment, including susceptibility to blast induced failure concluded that the design would be stable under normal and seismicity loadings.

Prior to the commencement of the implementation phase, construction and monitoring plans will be initiated, while operational standards and management systems which will govern operations and mitigate risks through the life of the Project will be developed under the operational readiness program.

### *People*

People and support resources are readily available within the region with large support service centres and workshops.

Centaurus has maintained a good working relationship with local unions over the past 5 years in exploring and developing the Project. The plan is to continue engagement and discussion with unions to enable transition of workers into an operating environment without construction legacies.

The Company has undertaken a detailed workforce planning process to identify and recruit key personnel in advance of the Project startup, with a strong focus on recruiting from within the local municipalities and the State of Pará where possible.

### *Supply chain*

The site is accessible on national and state highways to Tucumã and good quality municipal gravel roads to site. Road haulage contractors service the communities around the project and so deliveries of equipment and consumables will be reliable and regular. The storage quantities of bulk reagents and consumable supplies was considered to determine suitable inventory levels in the event of supply disruption.

Product logistics will be managed using specialist contractors to deliver bulk nickel sulphide concentrate to the port for loading onto vessels. The selected contractors have existing operations including facilities for safe storage and handling of concentrates and the loading of vessels.

#### **1.18.2 Political / Country Risk**

Brazil is a mining friendly, diversified middle-income economy with developed large mining, manufacturing, and service sectors. Brazil occupies a place among the top five mineral producers in the world producing and marketing more than 90 mineral commodities with revenues in excess of R\$250B (US\$50B) from more than 7,300 companies providing 204Kt direct jobs and 2.25M indirect jobs. Brazil is the world's largest producer of niobium and second largest producer of iron ore according to IBRAM - Brazil Country Mining Guide - 2023.

In 2023 Brazil ranked 29<sup>th</sup> out of 86 countries in the Fraser Institute Survey of Mining Companies (2023) on the 'Investment Attractiveness Index', ranking only behind 3 particular states of Argentina in South America.

#### **1.18.3 Environment and Approval Risk**

##### *Approvals and Land*

Centaurus has received Preliminary License (**LP**) approval from SEMAS for the Project and the joint LP and LI approval for the 230kV transmission line. Approval of the LI for the Project is expected by Q4 2024 without significant amendment or inclusion of additional conditions. Following issue of the LI and the Mining License, the Project can proceed.

Although Brazil has a complex regulatory framework the Project approval process is well defined and regulated with clear processes to obtain and maintain development and operations licences. The jurisdiction and approval process is divided among municipal, state, and federal (**Union**) governments. At the federal level the main institutions involved directly in the mining sector are the ministry the Ministry of Mines and Energy (**MME**), the National Mining Agency (Agência Nacional de Mineração) (**ANM**), and the Geological Service of Brazil (**CPRM**).

## Environment and Climate

The Project is subject to laws and regulations concerning the environment. The Project activities will impact on the environment. A detailed whole of project risk assessment was conducted and included in the EIA RIMA submitted which has considered all known processing and operational risks together with appropriate mitigation strategies and risk mitigation plans that will be incorporated into management plans and operational procedures to ensure compliance with the Projects licence to operate. It is Centaurus's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws to manage its risk profile an As Low As Reasonably Practical (ALARP) level.

Climate change is a risk that Centaurus has considered, particularly related to its operations in the mining industry. The climate change risks particularly attributable to the Project include the emergence of new or expanded regulations associated with the transitioning to a lower carbon economy and market changes related to climate change mitigation.

The Project may be impacted by changes to local or international compliance regulations related to climate change mitigation efforts, or by specific taxation or penalties for carbon emissions or environmental damage. Climate change may cause certain physical and environmental risks that cannot be yet predicted.

### 1.18.4 Implementation Risk

Centaurus has undertaken early engagement with local contractors for the mining and construction of the Project and received strong participation during the Study phase from potential contractors and equipment suppliers.

### 1.18.5 Funding and Offtake Risk

The ability to fund the Project is impacted by the ability of the Company to sell its product under offtake agreements. It is important for customers entering long term off-take arrangements to have comfort that the Project can withstand all market cycles and remain in production for the intended life of the operation. Operating costs, particularly relative to other global operations are a key criterion used to assess an operation's potential as a stable, long-term source of nickel supply. The Projects forecast low operating costs, as demonstrated by the Study de-risks customers supply chain risks as the operating cost places the Project in the lowest quartile of the global all-in sustaining cost curve.

Nickel demand continues to grow and is expected to have exceeded 3Mt in 2023. Despite the steady on-going expansion of this sector the main driver increasing future nickel use is the production of battery materials, which is forecast to grow from 11.5% of consumption in 2023 to 30% by the early 2030s.

This anticipated growth and need for low emission nickel to service this demand, combined with the low operating cost environment at Jaguar significantly diminishes the risk of not securing offtake on acceptable terms for the Project.

In respect to overall funding package required for the Project, the Company's preferred approach is to bring in a strategic partner at a project level. Extensive discussions have been had with a number of parties over the last 6-12 months in conjunction with the Company's Financial Adviser, Standard Chartered Bank (SCB). With the delivery of the FS and the very favourable economics, led by the lower quartile operating costs, the Company can now commence a formal strategic partnering process in conjunction with SCB with a view to securing a suitable project funding package – supported by offtake – to allow the Company to make a Final Investment Decision in Q2/2025.

To achieve the range of outcomes indicated in the FS, pre-production funding of approximately US\$371M will likely be required by way of debt and/or project or corporate level equity. There is no certainty that Centaurus will be able to source that amount of funding when required but the work done with SCB over the last 12 months provides the Company with confidence that this risk can be managed. 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.

## 1.19 INSURANCE PLAN

Underpinning the assessment of risk for the various phases of the Project is the requirement to develop an insurance strategy in the event that injury or damage arises from the performance of activities on the Project.

Centaurus will maintain all insurance policies statutorily required to be maintained and will require the EPCM contractor and the various consultants/contractors/suppliers and sub-contractors to maintain appropriate insurances via contract conditions during the performance of works or services.

## 1.20 PROJECT OPPORTUNITIES

Through the development of the Study, opportunities were recognised for potential improvements to the Project that could realise technical and financial benefits if implemented. In particular, the change in project scope late in the Study to produce a nickel sulphide concentrate (nickel, copper, cobalt) rather than nickel sulphate with copper, cobalt and zinc by-products brings opportunities not fully explored in this Study. The removal of the refinery for this Study does not, however, mean that a refinery could not be considered at a later date.

The opportunities stem from the simpler process flowsheet and removal of constraints on mine scheduling to control ore feed characteristics to satisfy the refinery circuit. These opportunities will be explored during a value adding process ahead of detailed engineering, FID and construction commencement.

The following are some of the opportunities to be considered in the value adding stage.

### 1.20.1 Mineral Resource Growth

- 2023 drilling at Jaguar has shown nickel mineralisation continues beyond current MRE limits and regional greenfields discoveries have been made at the Twister and Flipperama Prospects.
- More than 50,000 metres of the exploration and step-out diamond drilling completed in 2023 will be included in the updated MRE planned for H2 2024.
- The hydrothermal nature of the mineralisation at the Jaguar Project points to a deep plumbing system which remains open beyond the current drill depths. The 2023 “Deeps” drilling at Jaguar South has shown nickel mineralisation beyond 700 metres whilst mineralisation at Onça Preta extends to depths of 1,000 metres. Additionally, regional exploration successfully identified new mineralisation outside of the current MRE with discoveries made at the Twister Prospect.

### 1.20.2 Underground Operations

- The Study considers open pit Measured and Indicated Resources only based on the November 2022 MRE. An additional 15.1Mt at 1.49%Ni for 224kt of contained nickel metal<sup>4</sup> of Mineral Resources, considering a 1.0% Ni cut-off grade, sit below the Study final pit designs. More than 75% of these resources are hosted in the Jaguar South and Onça Preta Deposits.
- A focused economic study will be completed on underground operations at the Jaguar South and Onça Preta Deposits to determine the potential upside of bringing high-grade nickel feed to the plant. This study will be underpinned by the updated MRE planned for release in Q3 2024.

### 1.20.3 Mining

- Re-optimize and redesign the open pits and associated waste containment facilities for a concentrate product scenario not constrained by back-end refinery metallurgical constraints.
- Reschedule mine plan to further enhance project economics for concentrate product.

---

<sup>4</sup> Includes 8.8Mt at 1.50% Ni Measured and Indicated Resources and 6.3Mt at 1.48% Ni Inferred Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources.



- Early-stage testing of Jaguar and Onça Preta composite samples has shown they are amenable to ore sorting to improve grade with low nickel losses through rejection of both dilution waste and waste within the ore intersections. Further work is required to quantify the amenability throughout the various deposits. If successful, inclusion of an ore sorting stage to remove dilution waste ahead of the main process plant could result in higher effective plant feed grade thus saving power, reducing reagent consumption and possibly improving flotation nickel recovery.

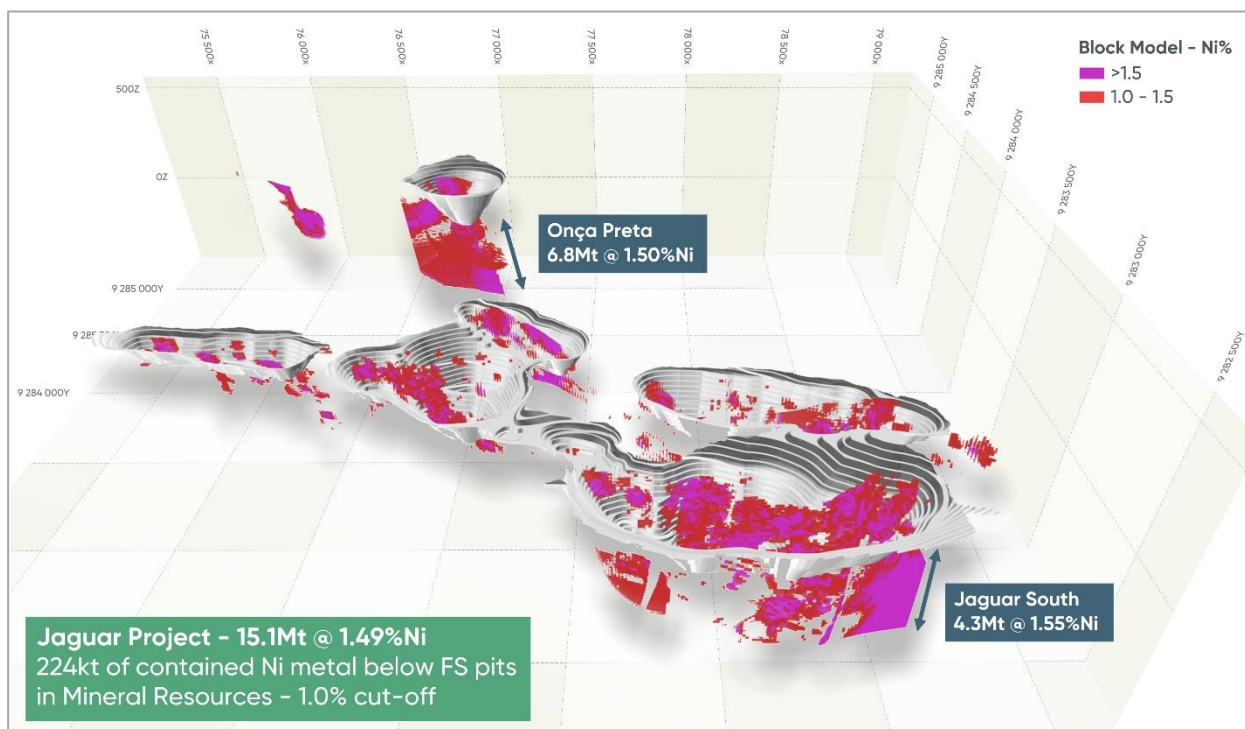


Figure 1:21– Jaguar MRE Block Model showing blocks greater than 1.0% Ni

#### 1.20.4 Process

- During the implementation phase of work.
  - Revise concentrator layout to further reduce earthworks, conveyor, piping and cable runs.
  - Revise concrete and structural steel designs.
  - Review concentrate filtration and storage requirements for lower volume, higher grade concentrate production.
- Undertake additional metallurgical testing to improve nickel grade/recovery and follow on impacts to process flowsheet design and equipment selection.

#### 1.20.5 Non-Process Infrastructure

- During the implementation phase of work:
  - Review process and non-process infrastructure layout for a more compact site.
  - Review all buildings and services requirements for smaller workforce.
  - Review earthworks designs for more compact and simpler layout.
- Re-assess viability of dry stack tailings.

For personal use only

#### 1.20.6 Engineering/Procurement

- Review contracting approach to promote the use of qualified local companies within the State of Pará.
- Review overall procurement approach and contracting plan.
- Review shift and working hours for 12 hour shifts rather than industry norm of 8 hours.

#### 1.21 RECOMMENDATION AND CONCLUSION

The FS has shown the Project to be both technically achievable and financially robust with low execution and operating risk benefitting from;

- The extensive in country experience Centaurus has in operating in Brazil;
- The mature nature of the Brazil mining regulatory framework;
- The existence of experienced labour, supplier and contractor market in Brazil to support both construction and operational activities;
- The use of conventional mining and processing techniques that are well understood and practised in Brazil and internationally;
- Strong market interest in nickel sulphide concentrates, and in particular the Jaguar nickel concentrate product, to support forecast demand growth in nickel consumption and the desire to diversify supply sources away from Indonesia; and
- Strong ESG credentials for low emission nickel.

It is recommended that the Board approve the proposed Project development plan that will include completing targeted value engineering activities, actively advancing partnering discussions to support the required funding of the Project and undertaking any necessary pre-development activities required to continue to meet the overall project development timeline. Specific project implementation activities to include:

- Mining, metallurgical and engineering value adding activities to further enhance project economics focussed on the mine plan and final process flow sheet design.
- Undertake strategic pre-development Project activities to support FID in Q2 2025.
- Commence a formal strategic partnering process in conjunction with Standard Chartered Bank, with partnering outcomes targeted for delivery in advance of FID.
- Advance debt funding discussions in parallel with the partnering discussions, supported by the Company's debt advisor, Orimco.
- Continue to refine the project implementation plan and contracting strategy.
- Work with the Environmental Agency, SEMAS, on the grant of the LI and the ANM for the formal issue of the Mining Lease prior to FID.

These steps will provide the Board with the necessary foundation for a formal Final Investment Decision on the Project at the conclusion of the project financing and project approval processes, expected in the second quarter of 2025.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## DETAILED TECHNICAL DISCUSSION AND SUPPORTING INFORMATION REQUIRED UNDER ASX LISTING RULES, CHAPTER 5.8

The Mineral Resource Estimate (MRE) in this announcement was first announced 10 November 2022 and revised on 28 April 2023. For a summary of the material information used to estimate the Mineral Resource please refer to ASX Announcement 10 November 2022 (for additional detail please refer to JORC Table 1, Sections 1 to 3 included below).

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 were presented have not been materially modified from the original announcements.

## DETAILED TECHNICAL DISCUSSION AND SUPPORTING INFORMATION REQUIRED UNDER ASX LISTING RULES, CHAPTER 5.9

In accordance with the ASX Listing Rule 5.9, the following summary of information material to understanding the reported Ore Reserve estimate is provided (for additional detail please refer to JORC Table 1, Sections 4 included below):

**Material assumptions - refer to Section 1.17 Financial Analysis of the Jaguar Feasibility Study Executive Summary for additional information.**

The following tables show the key economic inputs for the Jaguar Project:

**Key Model Assumptions and Ore Reserves**

Assumptions	Units	Base Case
Average LOM Exchange Rate	US\$/BRL	5.30
Nickel Price (2024 real terms)	US\$/tonne	19,800
Nickel Price	US\$/lb	8.98
Nickel Payability at Nickel Price	%	76
Corporate tax rate (under SUDAM Program)	%	15.25
Discount Rate (real terms)	%	8
<b>Physicals</b>		
Ore Reserves	63.0Mt @ 0.73% Ni for 459,200t Contained Ni	
Life of Mine Recovered Nickel	t	335,300
Average Life-of-mine Recovery to Concentrate	%	73
Concentrate Grade	Ni %	12.3

**Key Project Capital and Operating Costs**

Key Cost Information	Units	Feasibility Study
<b>Capital Costs</b>		
Pre-Production Development Capital	US\$M	371
Sustaining and Deferred Capital	US\$M	237
<b>Operating Costs (contained nickel basis)</b>		
<b>C1 Cash Costs</b>	<b>US\$/lb</b>	<b>2.30</b>
Product Logistics	US\$/lb	0.59
Royalties	US\$/lb	0.36
Sustaining and Deferred Capital	US\$/lb	0.32
<b>All-in Sustaining Costs (AISC)</b>	<b>US\$/lb</b>	<b>3.57</b>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Explanations of the methodologies used for key economic assumptions are noted:

- Capital cost estimates for establishment and construction of the processing plant and site surface non-processing infrastructure were prepared by Ausenco and Centaurus to a feasibility study level of detail and accuracy.
- Mine and waste facilities capital costs were based on a Request for Pricing (RFP) process involving local mining and civil contractors using the site layout and mining schedule results of this study.
- Mine operating costs were sourced from RFPs submitted by Brazilian mining contractors
- Operating costs for the processing plant were estimated by Centaurus with inputs from Ausenco to a feasibility study level of accuracy.
- Employee salaries and business services costs have been determined based on current industry benchmarks.
- Transport charges for the concentrate were sourced from the RFP from local and international logistics specialists to a feasibility study level of accuracy.

**Criteria for classification - refer to Section 1.5 and 1.6 of the Jaguar Feasibility Study Executive Summary for additional information.**

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database, a combination of search volume and quantity of data used for the estimation plus availability of bulk density information.

Measured Mineral Resources are defined nominally on 20m E x 20m N spaced drilling, Indicated Mineral Resources are defined nominally on 50m E x 40m N spaced drilling and Inferred Mineral Resources are defined nominally on 100m E x 40m to 100m N with consideration given for the confidence of the continuity of geology and mineralisation. The Jaguar Mineral Resource in part has been classified as Measured and Indicated with the remainder as Inferred according to JORC 2012. For detailed information on the Mineral Resource Estimate please refer to ASX Announcement 10 November 2022.

The Jaguar and Onça Preta deposits feature multiple steeply dipping mineralised zones of varying widths. To maximize metal recovery, a Movable Shape Optimiser (MSO/SO) method was employed to identify mining ore blocks, or Selective Mining Units (SMUs), greater than 2 meters. Any type of material within the shape of 2 metres width or greater was coded as ore and these mining blocks were then used to develop a mining block model for the optimisation process. Notably, 40% of the minable ore tonnage is contained in mining blocks less than 5 meters wide. To account for local variability, an additional 5% of tonnage at zero grade was included in all ore feed blocks, resulting in an overall dilution of 11% and a nickel metal recovery rate of 97.7%.

The metal recoveries are deposit specific life of mine forecasts based on metallurgical test work results received to date, for which the average nickel recovery is 73%.

The open pit designs are based on optimisation shells run for the refinery case. A nickel price of \$22,000/t was used for the pit optimisations that generated a series of nested pit shells. Confirmation optimisations were run by the Ore Reserve Competent Person based on concentrator economics and confirmed that the pit designs generated for the refinery case remain valid for the concentrator case.

The Ore Reserve estimate represents that portion of the mine plan based on Measured and Indicated Mineral Resources only. All material classified as Inferred Mineral Resources was considered waste for the purposes of the Ore Reserve estimation. All oxide mineralisation was considered waste.

The confidence in the modifying factors is considered high based on the following considerations:

- The mine is in a favourable jurisdiction within the Carajás Mineral Province, close to the city of Tucumã.
- The mine plan assumes low complexity open cut mining methods that have been successfully implemented at various sites within the mining jurisdiction.
- Mining costs are based on a detailed RFP process involving multiple mining contractors.
- Processing costs have been built from first principles and reflect metallurgical testwork, process plant flow sheet and market pricing for reagents, consumables, labour and power

**Mining method - refer to Section 1.6 of the Jaguar Feasibility Study Executive Summary for additional information.**

The proposed open pit mining method is to blast on 7.5m benches, with 2.5m flitches in ore, using 43t trucks, 70-90t excavators and associated ancillary fleet. Mining costs are based on contract mining and include clearing, topsoil removal, drill, blast, load, haul, dewatering and rehabilitation. Overall pit slope angles used for the optimisation, including provision for ramps, were 34°(oxide) and 61° (fresh).

Open pit grade control will be based on sampling from surface RC drilling. Drilling will be on a 12.5 x 10m pattern covering 30 vertical metres per campaign.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Drill and blast will use top hammer rigs to drill 114mm diameter holes on a 7.5m bench with bulk emulsion explosives (nominally a 70% emulsion 30% ANFO blend) used due to expected wet ground conditions.

**Processing method - refer to Section 1.8 of the Jaguar Feasibility Study Executive Summary for additional information.**

To date 22 float composites have been selected across all geological domains for testing. Non-sulphide nickel was found to be fixed by zone with little influence of the total nickel grade on the non-sulphide nickel contents of the geological domains. All the Jaguar deposits, with the exception of Jaguar West, have a non-sulphide nickel content of 0.13%, Jaguar West with a non-sulphide level of 0.22% and Onça Preta with the lowest non sulphide level of 0.09% all aligning with host rock lithology.

A conventional nickel flotation plant has been selected with a nominal throughput capacity of 3.5Mt/y to produce between 113,000 and 183,000t/y of nickel sulphide concentrate. The plant will incorporate conventional crushing, milling, flotation and dewatering activities with testwork programs demonstrating that nickel sulphide recovery by flotation is feasible.

From test work, relationships between mass recovery and sulphur feed grade were developed. The relationships predicated on nickel sulphides head grade and the influence of all sulphides (along with magnesium silicate gangue) were developed for the nickel recovery by domain for fresh ore. For any transitional ore identified, a 30% recovery reduction to fresh ore response was applied. From the test work completed, the total nickel recovery of the composites tested average 73%.

The life of mine concentrate grade is 12.3% Ni with a Fe:MgO ratio of 7.2. Based on the grade of copper and cobalt in the test work results, nickel is likely to be the only payable metal in most months of operations. Deleterious elements such as arsenic, antimony, lead and zinc, traditionally viewed as penalty elements in nickel concentrates, have been studied in comprehensive concentrate assaying and all these deleterious elements other than zinc have been determined not to reach threshold limits.

The Jaguar concentrate product does contain elevated levels of zinc compared to more traditional nickel concentrates but discussion with offtakers and potential strategic partners in the battery materials sector has indicated that no penalty would be applicable to zinc in the Jaguar concentrate.

**Cut-off grades - refer to Section 1.6 of the Jaguar Feasibility Study Executive Summary for additional information.**

Cut-off grades were estimated based on forecast project operating costs, metallurgical recoveries, royalties, revenue factors and corporate objectives. The Ore Reserve was estimated using the Net Smelter Return (NSR) method considering a cut-off value of US\$12.02 per tonne.

**Estimation methodology - refer to Section 1.5 of the Jaguar Feasibility Study Executive Summary for additional information.**

For the estimation methodology of the Mineral Resource please refer to ASX Announcement 10 November 2022.

The Ore Reserve estimate represents the portion of the Feasibility Study mine plan based on Measured and Indicated Mineral Resources only, in accordance with the recommendations of the JORC code. All material classified as Inferred Mineral Resource was set to waste grade for the purposes of the Ore Reserve evaluation.

**Material modifying factors - refer to Sections 1.9 to 1.11 of the Jaguar Feasibility Study Executive Summary for additional information.**

## *Environmental Approvals*

The Project has commenced the approvals and permitting process, the Preliminary Licence (LP) is the key environmental approval required for the Project was granted in January 2024. The Company has reasonable grounds to expect that all necessary approvals and contracts will eventuate within the anticipated time frame required by the mine plan.

No further licences other than those indicated under the Environmental section are believed to be contingent to project implementation.

## *Mining Approvals & Tenure*

The Project is located in Brazilian Mining Agency (ANM) process number 856.392/1996, a Mining Lease application that covers 2,963.75ha. The tenement is 100% owned by Centaurus Niquel Ltda, a Centaurus Metals subsidiary.

In January 2024 the technical approval of the Plan of Economic Assessment (PAE) from the ANM was received, this is an important validation of the Jaguar Project and allows for the formal issue of the Mining Lease to proceed once the Installation Licence (LI) is issued by the Environmental Agency SEMAS.

The technical approval of the PAE indicates that all technical requirements have been met in relation to the grant of the Mining Lease as well as recognition of the Company's capacity to implement the Project.

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## *Other Government & Social Factors*

The Jaguar Project is located 35km from the local towns of Tucumã or Ourilândia do Norte, with a combined population of 70,000 people. The workforce will be mainly sourced from the local population that reside in these towns, supplemented by experienced external operational and technical staff as required. The social impact of the project will be positive in providing additional job opportunities and training in mining skills. With a peak construction workforce of over 1,200, full-time operational personnel of 490 and more than 630 mining contractor employees, the Project will not only provide direct employment but will also stimulate the local economies, creating indirect employment and business opportunities.

Centaurus Metals is in liaison with both government and key stakeholders regarding development of the project.

## *Infrastructure Requirements*

The site is located on farmland and Centaurus has secured possession rights to three properties over the Jaguar Project. There is sufficient land within the lease area for the establishment and operation of the planned facilities including the processing plant and tailings dam.

Power will be sourced through a 38km connection to the 230kV national grid which currently feeds Vale's Onça Puma ferronickel plant. Approval was received from the Ministry of Mines and Energy to access the national infrastructure on 16 October 2023. Environmental approval to construct the powerline was received on 31 January and 1 February 2024 through the issuance of the Provisional and Installation Licences (LP and LI).

Access to site is via sealed highway to Tucumã and then on gravel Municipal roads to site. The roads and associated drainage will be upgraded as part of the construction program. Municipal permits have been received for this work.

Process and service water will be sourced from nearby river as well as water removed from mining operations and tailings facilities. All water requirements have been provided for in the environmental permitting process.

There are no known impediments to construction of all required infrastructure including power line.

The transport of reagent and fuel into the project and concentrate product out of the project will be carried out by highway b-double trucks that are common in the region. The project provided upgraded road network around site including connections to Tucumã.

For persons



# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



## APPENDIX A – Compliance Statements for the Jaguar Project

The following Tables are provided for compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results, Mineral Resources and Ore Reserves at the Jaguar Project.

### SECTION 1 - SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Historical soil sampling was completed by Vale. Samples were taken at 50m intervals along 200m spaced north-south grid lines.</li> <li>Surface material was first removed, and sample holes were dug to roughly 20cm depth. A 5kg sample was taken from the subsoil. The sample was placed in a plastic sample bag with a sample tag before being sent to the lab.</li> <li>Surface rock chip/soil samples were collected from in situ outcrops and rolled boulders and submitted for chemical analysis.</li> <li>The historical drilling is all diamond drilling. Drill sections are spaced 100m apart and generally there is 50 to 100m spacing between drill holes on sections. Core was cut and ¼ core sampled and sent to commercial laboratories for physical preparation and chemical assay.</li> <li>At the laboratories, samples were dried (up to 105°C), crushed to 95% less than 4mm, homogenized, split and pulverized to 0.105mm. A pulverized aliquot was separated for analytical procedure.</li> <li>Sample length along core varies between 0.3 to 4.0m, with an average of 1.48m; sampling was done according to lithological contacts and generally by 1m intervals within the alteration zones and 2m intervals along waste rock.</li> <li>Drilling was completed on spacing of 100m x 50m or 50m x 50m. Sample length along core varies between 0.5 to 1.5m. Core is cut and ¼ core sampled and sent to accredited independent laboratory (ALS).</li> <li>For metallurgical test work continuous downhole composites were selected to represent the metallurgical domain and both ¼ core and full core is sampled and sent to ALS Metallurgy, Balcatta, Perth.</li> <li>Samples from RC drilling are split to make 3-5kg samples. The sample is placed in a plastic sample bag with a sample tag before being sent to the laboratory.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Historical drilling was carried out between 2006 to 2010 by multiple drilling companies (Rede and Geosol), using wire-line hydraulic diamond rigs, drilling NQ and HQ core.</li> <li>Vale drilled 169 drill holes for a total of 56,592m of drilling in the resource area. All drill holes were drilled at 55°-60° towards either 180° or 360°. 530 Centaurus drill holes (459 diamond for 96,318m and 71 RC for 10,020m) for a total of 106,158m of drilling on the project. There are a further 40 diamond holes drilled that were used for the model</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
		<p>interpretation, but either were not assayed as they are dedicated geotech or metallurgical bulk sample holes or assays were pending and as such were not included in the model interpolation. Most drill holes were drilled at 55°-75° towards either 180° or 360°.</p> <ul style="list-style-type: none"> <li>• Drilling is a combination of HQ and NQ2 core (Servdrill).</li> <li>• The RC drilling was completed by Geosenda Sondagem using a face sampling hammer (4.5"). Sample is collected from the sample cyclone in large plastic sample bags. Samples are then split either by riffle splitters or manually (fish bone method) where there is high moisture content.</li> <li>• All RC holes were sampled on 1m intervals. Sample size, sample recovery estimate and conditions were recorded.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• Diamond Drilling recovery rates were calculated at each drilling run.</li> <li>• For all diamond drilling, core recoveries were logged and recorded in the database for all historical and current diamond holes. To date overall recoveries are &gt;98% and there are no core loss issues or significant sample recovery problems.</li> <li>• To ensure adequate sample recovery and representativity a Centaurus geologist or field technician was present during drilling and monitors the sampling process.</li> <li>• No relationship between sample recovery and grade has been demonstrated. No bias to material size has been demonstrated.</li> <li>• RC sample weights are taken for all samples and a recovery estimate are made where the sample is not wet. Where the sample is wet a visual estimate of the sample recovery is made. The estimated recovery is approximately 90%, which is considered acceptable for the deposit type.</li> <li>• To ensure the representative nature of the sample, the cyclone and sample hoses are cleaned after each metre of drilling, the rig has two cyclones to facilitate the process. Additionally, extra care is taken when drilling through the water table or other zones of difficult ground conditions.</li> <li>• No quantitative twinned drilling analysis has been undertaken at the project to date.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Historical outcrop and soil sample points were registered and logged in the Vale geological mapping point database.</li> <li>• All drill holes have been logged geologically and geotechnically by Vale or Centaurus geologists.</li> <li>• Drill samples are logged for lithology, weathering, structure, mineralisation and alteration among other features. Logging is carried out to industry standard and is audited by Centaurus CP.</li> <li>• Logging for drilling is qualitative and quantitative in nature.</li> <li>• All historical and new diamond core has been photographed.</li> </ul>

Personal use only



## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Geologists complete a visual log of the RC samples on 1m intervals at the time of drilling. Logging captures colour, rock-type, mineralogy, alteration and mineralisation style. Logging is both qualitative and quantitative.</li> <li>• Chip trays have been collected, photographed and stored for all drill holes to-date.</li> <li>• Diamond Core (HQ/NQ2) was cut using a core saw, ¼ core was sampled. Sample length along core varies between 0.3 to 4.0m, with an average of 1.48m; sampling was done according to lithological contacts and generally by 1m intervals within the alteration zones and 2m intervals along the waste rock.</li> <li>• There is no non-core sample within the historical drill database.</li> <li>• For RC sampling 1m samples are taken from the cyclone and then split by riffle splitter (if dry) or manually (if wet) using the fish-bone technique. Sample weight is between 3-5kg.</li> <li>• QAQC: Standards (multiple standards are used on a rotating basis) are inserted every 20 samples. Blanks have been inserted every 20 samples. Field duplicates are completed every 30 samples. Additionally, there are laboratory standards and duplicates that have been inserted.</li> <li>• Centaurus has adopted the same sampling QAQC procedures which are in line with industry standards and Centaurus's current operating procedures.</li> <li>• Sample sizes are appropriate for the nature of the mineralisation.</li> <li>• All historical geological samples were received and prepared by SGS Geosol or ALS Laboratories as 0.5-5.0kg samples. They were dried at 105°C until the sample was completely dry (6-12hrs), crushed to 90% passing 4mm and reduced to 400g. The samples were pulverised to 95% passing 150µm and split further to 50g aliquots for chemical analysis.</li> <li>• New samples are being sent to ALS Laboratories. The samples are dried, crushed and pulverised to 85% passing 75µm and split further to 250g aliquots for chemical analysis.</li> <li>• During the preparation process grain size control was completed by the laboratories (1 per 20 samples).</li> <li>• Metallurgical samples are crushed to 3.35mm and homogenised. Samples are then split to 1kg sub-samples. Sub-samples are ground to specific sizes fractions (53-106µm) for flotation test work.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model,</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical analysis for drill core and soil samples was completed by multi element using Inductively Coupled Plasma ICPAES (multi-acid digestion); ore grade analysis was completed with Atomic Absorption (multi-acid digestion); sulphur analysis was completed with Leco, and Au and PGEs completed via Fire Assay.</li> <li>• New samples are being analysed for 48 elements by multi element using ME-MS61 (multi-acid digestion) at ALS Laboratories; ore grade analysis was completed with ICP-</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	<p>reading times, calibrations factors applied and their derivation, etc.</p> <ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p>AES (multi-acid digestion); sulphur analysis was completed with Leco, and Au and PGEs completed via Fire Assay.</p> <ul style="list-style-type: none"> <li>ALS Laboratories insert their own standards at set frequencies and monitor the precision of the analysis. The results reported are well within the specified standard deviations of the mean grades for the main elements. Additionally, ALS perform repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). These compare very closely with the original analysis for all elements.</li> <li>Vale inserted standard samples every 20 samples (representing 5%). Mean grades of the standard samples are well within the specified 2 standard deviations.</li> <li>All laboratory procedures are in line with industry standards. Analysis of field duplicates and lab pulp duplicates have returned an average correlation coefficient of over 0.98 confirming that the precision of the samples is within acceptable limits.</li> <li>Vale QAQC procedures and results are to industry standard and are of acceptable quality.</li> <li>All metallurgical chemical analysis is completed by ALS laboratories using a combination of Fusion XRF, 4-Acid digest followed by ICP-MS/AES, Specific Ion electrode and volumetric analyses.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All historical samples were collected by Vale field geologists. All assay results were verified by alternative Vale personnel. The Centaurus CP has verified the historical significant intersections.</li> <li>Centaurus Exploration Manager and Senior Geologist verify all new results and visually confirm significant intersections.</li> <li>Twin holes have been completed of both historical drilling and DD/RC drilling. There is good correlation between both drilling campaigns and sample bases.</li> <li>All primary data is now stored in the Centaurus Exploration office in Brazil. All new data is collected on Logchief software, validated and then sent to independent database administrator (MRG) for storage (DataShed).</li> <li>No adjustments have been made to the assay data.</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All historical collars were picked up using DGPS or Total Station units. Centaurus has checked multiple collars in the field and has confirmed their location. All field sample and mapping points were collected using a Garmin handheld GPS.</li> <li>An aerial survey was completed by Engemec Topografia and has produced a detailed surface DTM at (1:1000 scale).</li> <li>The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements.</li> <li>New drill holes are sighted with handheld GPS and after completion are picked-up by an independent survey consultant periodically. Downhole survey for all the historical drill</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
		holes and Centaurus hole up to JAG-DD-19-012 used Maxibor equipment. All new drill holes are being downhole surveyed using a Reflex digital down-hole tool, with readings every metre.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples were collected on 40m spacing on section with distance between sections of 200m and 400m depending on location.</li> <li>Sample spacing was deemed appropriate for geochemical studies.</li> <li>The historical drilling is all diamond drilling. Drill sections are spaced 100m x 50m or 50m x 50m apart and generally there is 50 to 100m spacing between drill holes on sections.</li> <li>No sample compositing was applied to the drilling.</li> <li>Metallurgical samples to date have been taken from Jaguar South, Jaguar Central, Jaguar North, Jaguar Northeast, Jaguar Central North and Onça Preta.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Historical drilling was oriented at 55°-60° to either 180° or 360°. This orientation is generally perpendicular to the main geological sequence along which broad scale mineralisation exists.</li> <li>Mineralisation is sub-vertical; the majority of the drilling is at low angle (55-60°) in order to achieve intersections at the most optimal angle.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All historical and current samples are placed in pre-numbered plastic sample bags and then a sample ticket was placed within the bag as a check. Bags are sealed and then transported by courier to the ALS laboratories in Vespasiano, MG.</li> <li>All remnant Vale diamond core has now been relocated to the Company's own core storage facility in Tucumã, PA.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The Company is not aware of any audit or review that has been conducted on the project to date.</li> </ul>

## SECTION 2 - REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding Section also apply to this section).

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting</li> </ul>	<ul style="list-style-type: none"> <li>The Jaguar project includes one exploration licence (856392/1996) for a total of circa 30km<sup>2</sup>. A Mining Lease Application has been lodged that allows for ongoing exploration and project development ahead of project implementation.</li> <li>The tenement is part of a Sale &amp; Purchase Agreement (SPA) with Vale SA. One final deferred consideration payment totalling US\$5.0M (on commencement of commercial production) and a production royalty (2.0% on a nickel concentrate product or 1.75% on a nickel sulphate product) are to follow. Centaurus has taken on the original</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	<p>along with any known impediments to obtaining a licence to operate in the area.</p>	<p>obligation of Vale to BNDES for 1.8% Net Operating Revenue royalty.</p> <ul style="list-style-type: none"> <li>• Mining projects in Brazil are subject to a CFEM royalty, a government royalty of 2% on base metal revenue.</li> <li>• Landowner royalty is 50% of the CFEM royalty.</li> <li>• Centaurus has secured possession rights to three properties over the Jaguar Project. The agreements remove exposure to the landowner royalty over the properties secured.</li> <li>• The project is covered by a mix of cleared farmland and natural vegetation.</li> <li>• The project is not located within any environmental protection zones and exploration and mining is permitted with appropriate environmental licences.</li> <li>• The environmental impact assessment has been approved by the Pará state environmental agency, Semas, and the key Preliminary Licence (LP) has been issued.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Historically the Jaguar Project was explored for nickel sulphides by Vale from 2005 to 2010.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Jaguar Nickel Sulphide is a hydrothermal nickel sulphide deposit located near Tucumã in the Carajás Mineral Province of Brazil.</li> <li>• Jaguar is located at the intersection of the WSW-trending Canaã Fault and the ENE-trending McCandless Fault, immediately south of the NeoArchean Puma Layered Mafic-Ultramafic Complex.</li> <li>• Iron rich fluids were drawn up the mylonite zone causing alteration of the host felsic volcanic and granite units and generating hydrothermal mineral assemblage. Late-stage brittle-ductile conditions triggered renewed hydrothermal fluid ingress and resulted in local formation of high-grade nickel sulphide zones within the mylonite and as tabular bodies within the granite.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to previous ASX Announcements for significant intersections from Centaurus drilling.</li> <li>• Refer to ASX Announcement of 6 August 2019 for significant intersections from historical drilling.</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	<p>exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous sample intervals are calculated via weighted average using a 0.3 % Ni cut-off grade with 2m minimum intercept width.</li> <li>• There are no metal equivalents reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation is sub-vertical; the majority of the drilling is at low angle (55-60°) in order to achieve intersections at the most optimal angle.</li> <li>• The historical drilling results in ASX Announcement 6 August 2019 reflect individual down hole sample intervals and no mineralised widths were assumed or stated.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to previous ASX Announcements for maps and sections from Centaurus drilling included in the resource estimate.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• All exploration results received by the Company to date are included in this or previous releases to the ASX.</li> <li>• For the current resource, a 0.3% Ni cut-off grade has been applied to material within a pit shell using modifying factors determined in the Jaguar Value-Add Scoping Study and metal prices of US\$22,000/t Ni, US\$44,092/t Co, US\$9,065/t Cu and US\$2,900/t Zn.</li> <li>• A 0.7% Ni cut-off grade has been used for resources below the pit shell reflective of the cut-off grade that was determined for the underground operations developed in the Scoping Study.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to):</li> </ul>	<ul style="list-style-type: none"> <li>• The Company has conducted DHEM and FLEM surveys and has received geophysical data from Vale that is being processed by independent consultant Southern</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Geoscience. Refer to ASX Announcements for geophysical information.
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>No further drilling is currently planned for the Jaguar Nickel Project.</li> <li>Diagrams in the main body of this document show the areas of possible extensions of the mineralisation.</li> </ul>

### SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this Section.)

Criteria	JORC Code Explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling database was originally held by Vale and received from them as csv exports.</li> <li>The drilling data have been imported into a relational SQL server database using Datashed™ (Industry standard drill hole database management software) by Mitchell River Group (MRG).</li> <li>All the available drilling data has been imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.</li> <li>Data validation checks were completed on import to the SQL database.</li> <li>Data validation has been carried out by visually checking the positions and orientations of drill holes.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person responsible for Sampling Techniques and Data and Exploration Results, Mr Roger Fitzhardinge, has visited the site multiple times and overseen exploration activity and assumes responsibility for the sampling and data management procedures.</li> <li>The Competent Person responsible for the Mineral Resource Estimate (MRE), Mr</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>• Nature of the data used and of any assumptions made.</li> <li>• The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>• The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>• The factors affecting continuity both of grade and geology.</li> </ul>	<p>Lauritz Barnes, visited site in August 2023</p> <ul style="list-style-type: none"> <li>• Sufficient drilling has been conducted to reasonably interpret the geology and the mineralisation. The mineralisation is traceable between multiple drill holes and drill sections.</li> <li>• Interpretation of the deposit was based on the current understanding of the deposit geology. Centaurus field geologist supplied an interpretation that was validated and revised by the independent resource geologist.</li> <li>• Drill hole data, including assays, geological logging, structural logging, lithochemistry, core photos and geophysics have been used to guide the geological interpretation.</li> <li>• Extrapolation of mineralisation beyond the deepest drilling has been assumed up to a maximum of 100m where the mineralisation is open.</li> <li>• Alternative interpretations could materially impact on the Mineral Resource estimate on a local, but not global basis. No alternative interpretations were adopted at this stage of the project.</li> <li>• Geological logging in conjunction with assays has been used to interpret the mineralisation. The interpretation honoured modelled fault planes and interpretation of the main geological structures.</li> <li>• Mineralisation at Jaguar occurs as veins and breccia bodies set in extensively altered and sheared host rocks. Continuity of the alteration and sulphide mineralisation zones is good, continuity of local zones of semi-massive to massive sulphide is not always apparent.</li> <li>• Mineralisation at the Onça Preta and Onça Rosa deposits plus the Tigre deposit predominantly forms tabular semi-continuous to continuous bodies both along strike and down dip.</li> <li>• Post-mineralisation faulting may offset mineralisation at a smaller scale than that which can be reliably modelled using the current drill hole data.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>• Jaguar South (primary mineralisation) covers an area of 1,350m strike length by 400m wide by 700m deep in strike length trending ESE-WNW. Individual domains dip sub-vertically with widths ranging from a few metres up to 20-30m thick.</li> <li>• Jaguar Central (primary mineralisation) covers an area of 1,000m strike length by 250m wide by 420m deep trending ESE-WNW. Individual domains dip sub-vertically with widths up to 20-30m.</li> <li>• Jaguar North (primary mineralisation) has a strike length of 600m by up to 25m wide by 300m deep, trending SE-NW.</li> <li>• Jaguar Central North (primary mineralisation) covers an area of 720m strike length by 100m wide by 500m deep, trending E-W. Individual domains dip sub-vertically with widths up to 20-30m.</li> </ul>

Personal use only

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• Jaguar Northeast (primary mineralisation) covers an area of 1,300m strike length by 300m wide by 550m deep, trending ESE-WNW. Individual domains dip sub-vertically with widths up to 10-15m.</li> <li>• Jaguar West (primary mineralisation) has a strike length of 850m by up to 80m wide by 350m deep, trending E-W. Individual domains dip sub-vertically with widths up to 10m.</li> <li>• Leão East (primary mineralisation) has a strike length of 275m by up to 10m wide by 130m deep, trending ESE-WNW.</li> <li>• Onça Preta (primary mineralisation) has a strike length of 450m by up to 15m wide by 680m deep, trending E-W.</li> <li>• Onça Rosa (primary mineralisation) has a strike length of 650m by up to 10m wide by 400m deep, trending ESE-WNW</li> <li>• Tigre (primary mineralisation) has a strike length of 500m by up to 10m wide by 250m deep, trending ESE-WNW.</li> </ul>
<p><b>Estimation and modelling techniques</b></p>	<ul style="list-style-type: none"> <li>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting</li> </ul>	<ul style="list-style-type: none"> <li>• Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Ni, Cu, Co, Fe, Mg, Zn and S.</li> <li>• Drill hole samples were flagged with wire framed domain codes. Sample data were composited to 1m using a using fixed length option and a low percentage inclusion threshold to include all samples. Most samples (80%) are around 1m intervals in the raw assay data.</li> <li>• Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, a top-cut was applied for Ni to Domain 121. A minor number of domains required top-cutting for Cu and one for S.</li> <li>• Directional variograms were modelled by domain using traditional variograms. Nugget values are low to moderate (around 15-25%) and structure ranges up to 200 in the primary zones. Variograms for domains with lesser numbers of samples were poorly formed and hence variography was applied from the higher sampled domains.</li> <li>• Block model was constructed with parent blocks for 10m (E) by 2m (N) by 10m (RL). All estimation was completed to the parent cell size.</li> <li>• Three estimation passes were used. The first pass had a limit of 75m, the second pass 150m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples.</li> <li>• Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li> <li>• Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included</li> </ul>

Personal use only



## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	<p>or capping.</p> <ul style="list-style-type: none"> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.</p>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The tonnages were estimated on an in-situ dry bulk density basis which includes natural moisture. Moisture content was not estimated but is assumed to be low as the core is not visibly porous.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Potential mining methods include a combination of open pit and underground. The new Jaguar MRE has been reported within a pit shell using modifying factors determined in the Jaguar Value-Add Scoping Study and metal prices of US\$22,000/t Ni, US\$44,092/t Co, US\$9,065/t Cu and US\$2,900/t Zn. Within the pit, a 0.3% Ni cut-off grade has been maintained. A 0.7% Ni cut-off grade has been used for resources below the pit shell reflective of the cut-off grade that was determined for the underground operations developed in the Scoping Study.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that the Jaguar deposits will be mined by a combination of open pit and underground mining methods.</li> <li>Conceptual pit optimisation studies have been completed by Deswik to ensure that there are reasonable prospects for the eventual economic extraction of the mineralisation by these methods.</li> <li>Input parameters were benchmarked from similar base-metal operations in Brazil and Australia.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical test work has been undertaken on multiple composite samples sourced from the Jaguar South, Jaguar Central, Jaguar West, Jaguar North, Jaguar Central North, Jaguar Northeast, Onça Rosa and Onça Preta deposits. Material selection for test work was focused on providing a good spatial representation of mineralisation for the deposits to date.</li> <li>Bench scale test work to date has demonstrated that a conventional crushing, grinding and flotation circuit will produce life of mine nickel concentrate grades of 10-15% and nickel recoveries of 73%.</li> <li>See ASX Announcements of 18 February 2020, 17 March 2020, 31 March 2020 and 8 December 2021 for metallurgical test results.</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Tailings analysis and acid drainages tests have been completed which underpin the preliminary tailing storage facility design (TSF), which is in progress.</li> <li>Waste rock will be stockpiled into waste dumps adjacent to the mining operation.</li> <li>The TSF and waste dumps will include containment requirements for the management of contaminated waters and sediment generation in line with Brazilian environmental regulations.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk densities were determined on 15 to 30 cm drill core pieces every 1m in ore and every 10m in waste. On the historical drilling the bulk densities were determined on drill core at each sample submitted for chemical analysis.</li> <li>Bulk density determinations adopted the weight in air /weight in water method using a suspended or hanging scale.</li> <li>The mineralized material is not porous, nor is the waste rock.</li> <li>A total of 52,868 bulk density measurements have been completed.</li> <li>Of these, 9,524 were included in the analysis and are within the defined mineralised domains – and 9,235 are from fresh or transitional material leaving 289 measurements from saprolite or oxide material.</li> <li>Oxide and saprolite material are excluded from the reported resource.</li> <li>Fresh and transitional measurements from within the mineralised domains we analysed statistically by domain and depth from surface and compared to Ni, Fe and S. A reasonable correlation was defined against Fe due to the magnetite in the system.</li> <li>The bulk density values assigned to the mineralised domains by oxidation were as follows:             <ul style="list-style-type: none"> <li>➤ Oxide: 2.0</li> <li>➤ Saprolite: 2.0</li> <li>➤ Transition and Fresh: by regression against combined estimated Ni+Cu+Co+Fe+S+Zn (all as %) using:                 <ul style="list-style-type: none"> <li>○ Jaguar South: <math>BD = (NiCuCoFeSZn * (0.0212)) + 2.5823</math></li> <li>○ Jaguar Central: <math>BD = (NiCuCoFeSZn * (0.0186)) + 2.5830</math></li> <li>○ Jaguar Central-(Domain 60): <math>BD = (NiCuCoFeSZn * (0.0216)) + 2.5827</math></li> <li>○ Jaguar West: <math>BD = (NiCuCoFeSZn * (0.0267)) + 2.4973</math></li> <li>○ Jaguar Central North: <math>BD = (NiCuCoFeSZn * (0.0220)) + 2.6596</math></li> </ul> </li> </ul> </li> </ul>

personal use only

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>○ Jaguar North-east: <math>BD = (NiCuCoFeSZn * (0.0209)) + 2.5552</math></li> <li>○ Jaguar North: <math>BD = (NiCuCoFeSZn * (0.0206)) + 2.6318</math></li> <li>○ Jaguar Leão East: <math>BD = (NiCuCoFeSZn * (0.0226)) + 2.7974</math></li> <li>○ Onça Preta: <math>BD = (NiCuCoFeSZn * (0.0194)) + 2.7705</math></li> <li>○ Onça Rosa: <math>BD = (NiCuCoFeSZn * (0.0271)) + 2.4386</math></li> <li>○ Tigre: <math>BD = (NiCuCoFeSZn * (0.0287)) + 2.3421</math></li> </ul> <ul style="list-style-type: none"> <li>• Work is ongoing to further refine the relationships between bulk density and mineralised domains, and updates will be applied to any future iterations of the resource model.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralised zones, drilling density, confidence in the underlying database, a combination of search volume and number of data used for the estimation plus availability of bulk density information.</li> <li>• Measured Mineral Resources are defined nominally on 20mE x 20mN spaced drilling, Indicated Mineral Resources are defined nominally on 50mE x 40mN spaced drilling and Inferred Mineral Resources nominally 100mE x 100mN with consideration given for the confidence of the continuity of geology and mineralisation.</li> <li>• Oxide and saprolite material are excluded from the Mineral Resource.</li> <li>• The Jaguar Mineral Resource in part has been classified as Measured and Indicated with the remainder as Inferred according to JORC 2012.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• The Company has completed four Mineral Resource Estimates. The previous models were reviewed by Entech as part of the RPEEE assessment. The current model was reviewed by Deswik as part of the Reserve Estimate and FS.</li> <li>• Cube Consulting Pty Ltd (Cube) were engaged to provide an external peer review and risk analysis. Cube was satisfied with the MRE and determined no fatal flaws, however, cautioned that the current JORC Code classification scheme used may understate the risk of unknown nickel metal continuity within the interpreted mineralisation domains.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>• The statement relates to global estimates of tonnes and grade.</li> </ul>

Personal use only  
 JORC Code  
 Personal use only

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

## SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate (MRE) used as the basis for this Ore Reserve was estimated by an independent geology consultant, Mr. Lauritz Barnes, employee of Trepanier Pty Ltd. The MRE was first announced 10 November 2022 and amended on 28 April 2023. For a summary of the material information used to estimate the Mineral Resource please refer to ASX Announcements 10 November 2022 and 28 April 2023.</li> <li>Mineral Resources are reported inclusive of Ore Reserves.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Competent Person, Adriano Carneiro, Mining Plus employee, visited the Jaguar site from 25th to 27th April 2023.</li> <li>The visit provided the opportunity to gather information and inspect physical features, existing infrastructure, geologic evidence, waste dump and pit footprint, accesses, and licensing.</li> <li>The second Competent Person, Peter Lock, Mining Plus employee, did not visit the site.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimates are supported by a Feasibility Study, whereby legal, permitting, technical, environmental and social aspects were addressed, geology studies and Mineral Resource estimates were produced, geotechnical and hydrogeological aspects were evaluated as well as tailings and waste disposal, mining, metallurgical performance and marketing aspects were also assessed. A mine plan was produced with the required detail for design and scheduling to complete the definition of the Modifying Factors. The production plan, revenue, and costs for initial development, sustaining operations and closure were included in the financial analysis, resulting in positive economic outcomes.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>As a result of the nickel price correction through 2023 Centaurus has adapted plans for the Jaguar Project with the intention now being to initially produce a nickel sulphide</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary										
		<p>concentrate for sale internationally as opposed to the original plan to produce a nickel sulphate product.</p> <ul style="list-style-type: none"> <li>The cut-off used in the Ore Reserve estimate is based on a Net Smelter Return (NSR) of US\$12.02/tonne with provision for the feed grade, recovery, and treatment costs as well as freight and commercial terms based on Refinery scenario. The Project will produce a Ni concentrate product instead, which is reflected in the sales revenues. The assumption for metal price (as of January 2023) is USD22,000 per tonne of nickel.</li> <li>The metal recoveries were based on metallurgical test work models and are projected for the life of mine.</li> <li>Mass and metal recoveries are applied according to geometallurgical domains:</li> </ul> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th></th> <th style="text-align: center;">Refinery Case - Fresh Rock</th> </tr> </thead> <tbody> <tr> <td><b>Metallurgical Recovery – Ni Sulphide - All Jaguars Except North (*)</b></td> <td style="text-align: center;">-0.7816 * Fe (Mill Feed) + 108.72 (capped at 98%)</td> </tr> <tr> <td><b>Metallurgical Recovery - Ni Sulphide - Jaguar North, Onça Preta and Onça Rosa (*)</b></td> <td style="text-align: center;">3.5994 * In (S (Mill Feed)) + 86.418 (capped at 98%)</td> </tr> <tr> <td><b>Mass Recovery - All Jaguars Except Jaguar North</b></td> <td style="text-align: center;">3.0389 * S (Mill Feed) (capped at 18%)</td> </tr> <tr> <td><b>Mass Recovery – Jaguar North, Onça Preta and Onça Rosa</b></td> <td style="text-align: center;">12%</td> </tr> </tbody> </table> <p style="margin-left: 40px;">(*) For Transitional rock a factor of 70% is applied on Mass and Metallurgical Recoveries</p> <ul style="list-style-type: none"> <li>Oxide material is not recoverable hence is treated as waste.</li> <li>Royalties applied on the COG calculation were CFEM 2%, Vale Royalties 0.55% and BNDES 1.80%, based on the refinery case.</li> <li>Additional optimisation checks were performed on producing Ni concentrate with correlated recoveries (metallurgical capped at 98%, no cap for mass recovery, no limit on concentrate grade) and the ultimate mining pit dimensions remained the same within pit shell RF100 for the analysis. The competent person recommends subsequent studies to revisit pit optimization and the mining plan using updated assumptions of mass and metallurgical recoveries for the concentrate scenario, dilution, the volatility of the NI commodity price, and forward projections.</li> </ul>		Refinery Case - Fresh Rock	<b>Metallurgical Recovery – Ni Sulphide - All Jaguars Except North (*)</b>	-0.7816 * Fe (Mill Feed) + 108.72 (capped at 98%)	<b>Metallurgical Recovery - Ni Sulphide - Jaguar North, Onça Preta and Onça Rosa (*)</b>	3.5994 * In (S (Mill Feed)) + 86.418 (capped at 98%)	<b>Mass Recovery - All Jaguars Except Jaguar North</b>	3.0389 * S (Mill Feed) (capped at 18%)	<b>Mass Recovery – Jaguar North, Onça Preta and Onça Rosa</b>	12%
	Refinery Case - Fresh Rock											
<b>Metallurgical Recovery – Ni Sulphide - All Jaguars Except North (*)</b>	-0.7816 * Fe (Mill Feed) + 108.72 (capped at 98%)											
<b>Metallurgical Recovery - Ni Sulphide - Jaguar North, Onça Preta and Onça Rosa (*)</b>	3.5994 * In (S (Mill Feed)) + 86.418 (capped at 98%)											
<b>Mass Recovery - All Jaguars Except Jaguar North</b>	3.0389 * S (Mill Feed) (capped at 18%)											
<b>Mass Recovery – Jaguar North, Onça Preta and Onça Rosa</b>	12%											
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resources were converted to the Ore Reserve after pit designs for the concentrate case using a NSR USD \$12.02/tonne cutoff and further detailed design and scheduling.</li> <li>The deposit consists primarily of hard rock overlain by transitional and oxide material. The mining method is conventional open pit whereby excavation, loading and hauling</li> </ul>										

Personal use only

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
	<p>mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</p> <ul style="list-style-type: none"> <li>• The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>• The mining dilution factors used.</li> <li>• The mining recovery factors used.</li> <li>• Any minimum mining widths used.</li> <li>• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>• The infrastructure requirements of the selected mining methods.</li> </ul>	<p>will be executed by 70t excavators matched to 45t trucks after drilling and blasting the majority of the ore and waste.</p> <ul style="list-style-type: none"> <li>• There is an assumption that mining operations will be contracted out to one or more qualified, experienced mining contractor(s).</li> <li>• Production drilling will be executed with 114 mm diameter holes on 7.5m benches.</li> <li>• A 15m high berm to berm bench height will be mined using two, 7.5 fitches with face angles of 45 degrees, 50 degrees and 85 degrees for oxides, transitional and fresh rock respectively, resulting in inter-ramp angles of 34 degrees, 37 degrees and 61 degrees.</li> <li>• Mine roads are designed to be suitable for the largest equipment travelling along routes, typically 9m wide for single lane and 13m wide for dual lanes.</li> <li>• Mine pre-stripping is focused on winning material for the site infrastructure construction requirements including the Run-Of-Mine pad, Integrated Waste Landform, and site road construction.</li> <li>• Detailed geotechnical logging and mapping, empirical design method applications, and numerical stability analysis were completed as part of the studies (reference/Geotech). Geomechanical considerations defined the suitability of the mining method and the pits geometry.</li> <li>• The Jaguar and Onça deposits feature multiple steeply dipping mineralised zones of varying widths. To maximize metal recovery, a Mineable Shape Optimiser (MSO/SO) method was employed to identify mining ore blocks, or Selective Mining Units (SMUs), greater than 2 meters. Any type of material within the shapes was coded as ore and these mining blocks were then used to develop a mining block model for the optimisation process. Notably, 40% of the minable ore tonnage is contained in mining blocks less than 5 meters wide. To account for local variability, an additional 5% of tonnage at zero grade was included in all ore mining blocks, resulting in an overall dilution of 11% and a nickel metal recovery rate of 97.7%.</li> <li>• Measured and Indicated Mineral Resources above the NSR cutoff were evaluated and Inferred Resources were assigned to waste.</li> <li>• Grade control drilling by RC drilling method will be undertaken on a 12.5m x 10m pattern over 30 m vertical intervals.</li> <li>• Infrastructure design was completed during the mine design to address the required waste and tailings disposal requirements, access roads, mine dewatering, power supply, workshops, warehouses, offices, explosives preparation facilities and other support facilities.</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>• Whether the metallurgical process is well-tested</li> </ul>	<ul style="list-style-type: none"> <li>• The plant will produce a conventional nickel sulphide concentrate via flotation concentration. The plant will incorporate conventional crushing, milling, flotation and dewatering activities. The design of the processing facility is based on laboratory testwork programs demonstrating that nickel sulphide recovery by flotation is feasible.</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary																																	
	<p>technology or novel in nature.</p> <ul style="list-style-type: none"> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul style="list-style-type: none"> <li>Mineralogical and metallurgical samples were selected from all deposits within the project providing geochemical information coupled with flotation responses to produce metallurgical recovery factors. The samples selected are both mineralogically and spatially representative of the deposits. This sampling and testing provide the basis for the metal recovery and throughput estimates. 247 continuous drill intervals derived from 2,966m of NQ core were selected to allow for detailed mineralogy and compositing to 23 comminution/flotation samples for development/variability test work. An additional 437m of PQ drilling was completed, twinning existing resource holes, to provide sufficient mass for detailed comminution testing and the production of bulk flotation concentrate.</li> <li>Mineralogical examinations identified the nickel sulphide minerals present, being predominately millerite/pentlandite/violarite minerals.</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Mineral</th> <th>Number of Analyses</th> <th>Nickel (%)</th> </tr> </thead> <tbody> <tr> <td>Millerite</td> <td>77</td> <td>63.3</td> </tr> <tr> <td>Pentlandite</td> <td>95</td> <td>40.0</td> </tr> <tr> <td>Violarite</td> <td>18</td> <td>43.4</td> </tr> <tr> <td>Polydymite</td> <td>8</td> <td>53.9</td> </tr> <tr> <td>Crystalline Pyrite</td> <td>129</td> <td>0.12</td> </tr> <tr> <td>Porous Pyrite</td> <td>43</td> <td>1.88</td> </tr> <tr> <td>Pyrrhotite</td> <td>12</td> <td>0.16</td> </tr> <tr> <td>Chalcopyrite</td> <td>37</td> <td>0.32</td> </tr> <tr> <td>Sphalerite</td> <td>28</td> <td>0.16</td> </tr> <tr> <td>Magnetite</td> <td>180</td> <td>0.16</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>The testwork including mineralogy identified 8 geometallurgical domains for fresh mineralisation plus transition material.</li> <li>For each domain mass recovery to concentrate and nickel recovery algorithms have been developed together with mill throughput parameters based on the comminution circuit selected.</li> <li>The analysis of the transitional material flotation testwork metallurgical performance indicated that up to a maximum of 30% lower Ni recoveries were achieved compared to the equivalent estimation for fresh material.</li> <li>Concentrate grade determined from testwork has indicated deleterious elements such as arsenic and cadmium. Traditional penalty elements have been assayed and found not to reach threshold penalty limits.</li> </ul>	Mineral	Number of Analyses	Nickel (%)	Millerite	77	63.3	Pentlandite	95	40.0	Violarite	18	43.4	Polydymite	8	53.9	Crystalline Pyrite	129	0.12	Porous Pyrite	43	1.88	Pyrrhotite	12	0.16	Chalcopyrite	37	0.32	Sphalerite	28	0.16	Magnetite	180	0.16
Mineral	Number of Analyses	Nickel (%)																																	
Millerite	77	63.3																																	
Pentlandite	95	40.0																																	
Violarite	18	43.4																																	
Polydymite	8	53.9																																	
Crystalline Pyrite	129	0.12																																	
Porous Pyrite	43	1.88																																	
Pyrrhotite	12	0.16																																	
Chalcopyrite	37	0.32																																	
Sphalerite	28	0.16																																	
Magnetite	180	0.16																																	

Personal use only

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary																																																						
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Onça Preta</th> <th style="text-align: center;">Onça Preta + Jaguar South</th> <th style="text-align: center;">Jaguar South</th> </tr> </thead> <tbody> <tr> <td>Nickel (%)</td> <td style="text-align: center;">13.2</td> <td style="text-align: center;">11.4</td> <td style="text-align: center;">12.6</td> </tr> <tr> <td>Copper (%)</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">0.9</td> <td style="text-align: center;">1.4</td> </tr> <tr> <td>Cobalt (%)</td> <td style="text-align: center;">0.54</td> <td style="text-align: center;">0.41</td> <td style="text-align: center;">0.25</td> </tr> <tr> <td>Zinc (%)</td> <td style="text-align: center;">2.0</td> <td style="text-align: center;">1.6</td> <td style="text-align: center;">0.06</td> </tr> <tr> <td>Arsenic (ppm)</td> <td style="text-align: center;">140</td> <td style="text-align: center;">220</td> <td style="text-align: center;">80</td> </tr> <tr> <td>Cadmium (ppm)</td> <td style="text-align: center;">90</td> <td style="text-align: center;">57</td> <td style="text-align: center;">21</td> </tr> <tr> <td>Sulphur (%)</td> <td style="text-align: center;">37.5</td> <td style="text-align: center;">35.4</td> <td style="text-align: center;">30.4</td> </tr> <tr> <td>Iron (%)</td> <td style="text-align: center;">31.5</td> <td style="text-align: center;">29.7</td> <td style="text-align: center;">25.9</td> </tr> <tr> <td>MgO (%)</td> <td style="text-align: center;">2.6</td> <td style="text-align: center;">3.7</td> <td style="text-align: center;">5.2</td> </tr> <tr> <td>Iron:MgO</td> <td style="text-align: center;">12.2</td> <td style="text-align: center;">8.4</td> <td style="text-align: center;">5.2</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Due to the variable hardness of the deposits the throughput rate for processing the process plant has been designed to accommodate the required range of 3.0 to 3.9 Mtpa.</li> <li>• For the financial analysis, mass and recoveries formulas were applied according to the concentrate scenario: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: center;"><b>Concentrate case - Fresh Rock</b></th> </tr> </thead> <tbody> <tr> <td>Metallurgical Recovery – Ni - All Jaguars Except North and West (*)</td> <td style="text-align: center;">12.396 * In (NiS/(Mg+S) (Mill Feed)) +106.29</td> </tr> <tr> <td>Metallurgical Recovery - Ni - Jaguar North, West and Onça Preta (*)</td> <td style="text-align: center;">24.162 * In (NiS/(Mg+S) (Mill Feed)) + 129.36</td> </tr> <tr> <td>Mass Recovery - All Jaguars Except Jaguar North (*)</td> <td style="text-align: center;">1.8976 * S (Mill Feed)</td> </tr> <tr> <td>Mass Recovery – Jaguar North and Onça Preta (*)</td> <td style="text-align: center;">0.9262 * S (Mill Feed)</td> </tr> </tbody> </table> </li> </ul> <p>(*) For Transitional rock a factor of 70% is applied on the above Mass and Metallurgical Recoveries</p> <ul style="list-style-type: none"> <li>• A maximum 16% Ni concentrate grade is applied. This is applied by increasing the concentrate mass recovery maintaining recovered Ni metal.</li> </ul>		Onça Preta	Onça Preta + Jaguar South	Jaguar South	Nickel (%)	13.2	11.4	12.6	Copper (%)	0.8	0.9	1.4	Cobalt (%)	0.54	0.41	0.25	Zinc (%)	2.0	1.6	0.06	Arsenic (ppm)	140	220	80	Cadmium (ppm)	90	57	21	Sulphur (%)	37.5	35.4	30.4	Iron (%)	31.5	29.7	25.9	MgO (%)	2.6	3.7	5.2	Iron:MgO	12.2	8.4	5.2		<b>Concentrate case - Fresh Rock</b>	Metallurgical Recovery – Ni - All Jaguars Except North and West (*)	12.396 * In (NiS/(Mg+S) (Mill Feed)) +106.29	Metallurgical Recovery - Ni - Jaguar North, West and Onça Preta (*)	24.162 * In (NiS/(Mg+S) (Mill Feed)) + 129.36	Mass Recovery - All Jaguars Except Jaguar North (*)	1.8976 * S (Mill Feed)	Mass Recovery – Jaguar North and Onça Preta (*)	0.9262 * S (Mill Feed)
	Onça Preta	Onça Preta + Jaguar South	Jaguar South																																																					
Nickel (%)	13.2	11.4	12.6																																																					
Copper (%)	0.8	0.9	1.4																																																					
Cobalt (%)	0.54	0.41	0.25																																																					
Zinc (%)	2.0	1.6	0.06																																																					
Arsenic (ppm)	140	220	80																																																					
Cadmium (ppm)	90	57	21																																																					
Sulphur (%)	37.5	35.4	30.4																																																					
Iron (%)	31.5	29.7	25.9																																																					
MgO (%)	2.6	3.7	5.2																																																					
Iron:MgO	12.2	8.4	5.2																																																					
	<b>Concentrate case - Fresh Rock</b>																																																							
Metallurgical Recovery – Ni - All Jaguars Except North and West (*)	12.396 * In (NiS/(Mg+S) (Mill Feed)) +106.29																																																							
Metallurgical Recovery - Ni - Jaguar North, West and Onça Preta (*)	24.162 * In (NiS/(Mg+S) (Mill Feed)) + 129.36																																																							
Mass Recovery - All Jaguars Except Jaguar North (*)	1.8976 * S (Mill Feed)																																																							
Mass Recovery – Jaguar North and Onça Preta (*)	0.9262 * S (Mill Feed)																																																							
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste</li> </ul>	<ul style="list-style-type: none"> <li>• The Jaguar project includes one exploration license (ANM 856.392/1996) for a total of circa 30 km<sup>2</sup>. A Mining Lease Application has been lodged that allows for ongoing exploration and project development ahead of project implementation. The Mining Lease application was approved at a technical level in January 2024 indicating that the technical requirements have been met in relation to the grant of the Mining Lease as</li> </ul>																																																						

Personal use only



## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
	<p>dumps should be reported.</p>	<p>well as the recognition of the Company's capacity to implement the Project. The Mining Lease will be issued once SEMAS approves the Installation Licence (LI) for the project.</p> <ul style="list-style-type: none"> <li>• The Environmental Impact Assessment (EIA) and Preliminary License (LP) were approved by COEMA (the Pará State Environmental Committee) in early February 2024. A set of 29 environmental and social management plans were approved by SEMAS/PA, of which nine (9) relate to aspects of the Physical Environment, five (5) of the Biotic Environment, eight (8) of the socio-economic and cultural heritage environments, and another seven (7) management plans relating to Project implementation.</li> <li>• Given the presence of sulphide minerals within the deposits, acid and metalliferous drainage studies were undertaken both on representative samples of waste rock and tailings for the purpose of estimating the acid drainage (ARD) potential. The ARD testwork methodology applied to the Project samples exceeded the requirements of Brazil and is more aligned to the international standards of waste rock geochemistry testwork practices. Modified Acid-Base Accounting (MABA) testwork was conducted on 64 representative waste rock, ore, flotation tailings samples from the Project's main orebody. Leaching testwork and solubilisation testwork was also conducted on a sub-group of 30 samples in accordance with recognised ARD testwork methodology. More recently, an additional 89 rock samples were selected from all other lithologies found in the Project area including all the Project deposits and subjected to the same ARD testwork to evaluate the potential for acid drainage generation.</li> <li>• Review of the geochemical properties of waste rock lithologies was undertaken to evaluate the potential for acid mine drainage and metal leaching from waste. The analysis concluded that the waste rock has low acid drainage and metal leachate generation potential.</li> <li>• Geochemical characterization of the process residues as well as leaching and solubilization tests were prepared by ALS Ambiental: for the flotation tailings to be disposed in the IWL. The material did not present parameters with concentrations above the limits recommended by the Brazilian standard NBR 10.004 (ABNT, 2004) and the waste was classified as Class IIB (non-hazardous and inert waste).</li> <li>• The next step consists of the assessment and approval of the environmental documentation (Plano de Controle Ambiental I- PCA) to be presented to the Pará State Environmental Agency (SEMAS) to allow for the issuance of the construction license – Licença de Instalação - Installation Licence (LI) which is anticipated in the 4th quarter, 2024.</li> <li>• Geotechnical drilling, foundation and slope stability assessments have been completed for waste dump and Integrated Waste Landform (IWL) designs for pit and process waste storage in accordance with Brazilian standards. The stability analyses for the waste dumps meet the Brazilian standard NBR 13.029 (ABNT, 2017b).</li> </ul>

personal use only

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.</li> </ul>	<ul style="list-style-type: none"> <li>The primary destination for the waste rock excavated from the mine will be for the construction of the IWL reservoir for the flotation tailings. The excess waste will be disposed of in two waste dumps to be established to accommodate the extra waste with adequate containment for the management of any potential contaminated water or sediment generation.</li> <li>The Jaguar Project is located in the municipality of São Félix do Xingú, approximately 40 km from the city of Tucumã, and 250 km from the city of Parauapebas, in the Carajás mineral province.</li> <li>The Project area lies in an established mining region. Local towns and cities provide support services for mining operations. The mines, along with agribusiness, are the major employers of the region and are well supported by the population and the municipalities.</li> <li>The workforce will be mainly sourced from the local population and reside in the neighbouring towns, supplemented by some experienced external operational and technical staff as required. The nearby towns support existing mining operations.</li> <li>Construction, Equipment and Mine Service suppliers and providers are readily available in the mineral province.</li> <li>The site establishment will require; a 38km 230Kv powerline to be connected to site from the national power grid, 40km of main access road upgrade from Tucumã to site.</li> <li>Water will be drawn from the Igarapé Mogno River, approximately 6.5km from the plant site.</li> <li>The Project is a greenfield site and all operating infrastructure will be required to be developed for the Project. The planned mine and processing facilities will require infrastructure and services to support the processing of 3.5Mt/y of run-of-mine (ROM) ore to produce nickel concentrate product. The skills to build, operate and maintain the necessary infrastructure are available locally. Security fencing will be installed in a number of locations around the site including the main access area to control the movement of personnel and vehicles entering and leaving the site safely.</li> <li>Centaurus owns the majority of land required for the project and is advancing negotiations for the remaining land through direct negotiations with the owner and through mining lease applications. There is no reason to expect that access to required land will not be resolved in an acceptable time frame.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> </ul>	<ul style="list-style-type: none"> <li>Capital costs were derived from “first principal” buildups based on supplier quotes, engineering calculations, and estimates of processing rates.</li> <li>Operating costs were derived from “first principal” buildups based on scopes of works, requests for pricing and analysis of supplier responses, engineering calculations, equipment performance statistics, test work results for consumption rates and experienced technical personnel knowledge.</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul style="list-style-type: none"> <li>When commercially and technically acceptable, equipment, contractors and suppliers from Brazil have been used with costs then converted to US dollars. Internationally sourced suppliers have been used when necessary.</li> <li>An escalation adjustment factor was applied to all costs to bring them to Q3 2023.</li> <li>The exchange rate for capex and opex estimates is 5.30 USD:BRL.</li> <li>Royalties payable to government and private royalties are detailed below:</li> <li>The Brazilian state royalty (Compensação Financeira pela Exploração Mineral- CFEM) is calculated as of 2% of the revenue for base metals. The landowner's royalties are as of 50% of the CFEM for production off the landholder's land.</li> <li>Centaurus owns the majority of the land directly affected by the Project and is in discussions with the landowner of the remaining parcel to acquire. Costs for purchase of this land are allowed for in the capital cost. No landholder royalty is expected.</li> <li>The tenement is part of a Sale &amp; Purchase Agreement (SPA) with Vale S.A. One final deferred consideration payment totalling US\$ 5.0M (on commencement of commercial production) and a production royalty (2.00% on a nickel concentrate product) are to follow.</li> <li>Centaurus has taken on the original obligation of Vale to the Brazilian National Development Bank (Banco Nacional de Desenvolvimento Econômico – BNDES for a 1.8% Net Operating Revenue royalty.</li> <li>Transport charges are derived from request for pricing for the transport, export duties and freight of the products from Vila do Conde, in Pará state, to Southeast Asia.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed feed grades were derived from the mine plan. Financial assumptions, including metal prices, exchange rates and NSR elements, treatment costs and transport, freight, and insurance costs were derived from Centaurus corporate financial and economic assumptions. These economic assumptions are generally derived from relevant industry references such as analyst forecasts and industry commercial terms for similar products.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul style="list-style-type: none"> <li>Centaurus engaged AME Mineral Economics Pty Ltd (AME) to provide an Industry Report on the Nickel Market which included information on nickel forecast supply, demand and pricing outlook.</li> <li>Engagement with potential offtake parties has confirmed the marketability of the Jaguar concentrate and potential terms. Third parties have reviewed concentrate assays and conducted their own tests and provided indicative terms including payability and penalty ranges. Based on these discussions, no revenue or penalties are expected for non-nickel content.</li> <li>A long-term nickel price for the Project of US\$19,800/tonne (US\$8.98/lb) and a 76% nickel payable was used for the purpose of the Study economics.</li> </ul>

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary																																												
		<ul style="list-style-type: none"> <li>A long-term Copper &amp; Cobalt Price of US\$9,900/tonne and US\$33,000/tonne respectively has been used in the Study albeit Centaurus does not expect to receive significant, if any, by-product credits over the life of the Project given the levels of copper and cobalt in the Jaguar Nickel Concentrate will usually be below payable levels.</li> <li>Centaurus will produce approximately 150,000 tonnes of nickel concentrate annually once at full scale production.</li> </ul> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Ni (%)</th> <th>S (%)</th> <th>Cu (%)</th> <th>Co (%)</th> <th>Zn (%)</th> <th>Fe (%)</th> <th>MgO (%)</th> <th>Fe/MgO</th> </tr> </thead> <tbody> <tr> <td>12.3</td> <td>32.0</td> <td>0.85</td> <td>0.24</td> <td>2.6</td> <td>28.0</td> <td>3.9</td> <td>7.2</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Revenue is determined by the metal content of the products, price assumptions with deductions for transport and shipping.</li> <li>The costs of sales include the transport costs from mine to customer, and any commercial adjustments for deleterious elements.</li> <li>The Jaguar Nickel Project is in the development phase. There are no off-take contracts currently in place.</li> <li>Assessed payables and penalties used in the Study is set out below</li> </ul> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>Unit</th> <th>Average LOM Jaguar Concentrate Specification</th> <th>Payable/Penalty Criteria</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;"><b>Payables</b></td> </tr> <tr> <td>Ni</td> <td>%</td> <td>12.3</td> <td>71 – 84% ≥ 10%</td> </tr> <tr> <td>Co</td> <td>%</td> <td>0.24</td> <td>25%- 45% ≥ 0.25% - 0.3%</td> </tr> <tr> <td>Cu</td> <td>%</td> <td>0.85</td> <td>40%-50% ≥ 1%</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>Penalties</b></td> </tr> <tr> <td>MgO</td> <td>%</td> <td>3.90</td> <td>US\$5-8 per 1% &gt; 5-7%</td> </tr> </tbody> </table>	Ni (%)	S (%)	Cu (%)	Co (%)	Zn (%)	Fe (%)	MgO (%)	Fe/MgO	12.3	32.0	0.85	0.24	2.6	28.0	3.9	7.2		Unit	Average LOM Jaguar Concentrate Specification	Payable/Penalty Criteria	<b>Payables</b>				Ni	%	12.3	71 – 84% ≥ 10%	Co	%	0.24	25%- 45% ≥ 0.25% - 0.3%	Cu	%	0.85	40%-50% ≥ 1%	<b>Penalties</b>				MgO	%	3.90	US\$5-8 per 1% > 5-7%
Ni (%)	S (%)	Cu (%)	Co (%)	Zn (%)	Fe (%)	MgO (%)	Fe/MgO																																							
12.3	32.0	0.85	0.24	2.6	28.0	3.9	7.2																																							
	Unit	Average LOM Jaguar Concentrate Specification	Payable/Penalty Criteria																																											
<b>Payables</b>																																														
Ni	%	12.3	71 – 84% ≥ 10%																																											
Co	%	0.24	25%- 45% ≥ 0.25% - 0.3%																																											
Cu	%	0.85	40%-50% ≥ 1%																																											
<b>Penalties</b>																																														
MgO	%	3.90	US\$5-8 per 1% > 5-7%																																											
<b>Economic</b>	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>A full financial analysis was produced for the Feasibility Study, resulting in a positive net present value.</li> <li>Metal prices forecasts and revenue assumptions, capital and operational costs estimates are detailed in the previous tables.</li> <li>Detailed feed grades were derived from the mine plan. Financial assumptions, metal prices, exchange rates and NSR elements, and treatment costs and transport, freight and insurance costs were derived from Centaurus corporate financial and economic assumptions. These economic assumptions are generally derived from relevant industry references such as analyst forecasts and industry commercial terms for similar products.</li> <li>The project Net Present Value (NPV) is sensitive to metal prices for Nickel and to metallurgical recoveries, and to a lesser extent, to exchange rate fluctuations, operational costs and capital costs.</li> </ul>																																												

Personal use only

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Gross revenue was estimated based on production schedule yearly quantities, grades and metallurgical recoveries.</li> <li>A discount rate of 8% was used in the analysis.</li> <li>The Competent Persons were provided with a Reliance Letter (24 June 2024) regarding the financial model's outcome of the Project.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <li>No further major licenses than those indicated under the Environmental section are believed to be contingent to the project implementation.</li> <li>Secondary licenses will be necessary for the implementation of the power line to the project, water supply and explosives preparation and storage.</li> <li>The social impact of the project will be positive in the provision of additional job opportunities and the training in mining skills. With workforce employment projected to be in excess of 800 persons once in full operation, the project implementation will provide direct employment and will also stimulate the local economies creating a number of indirect employment and business opportunities as well.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul style="list-style-type: none"> <li>As the permitting process is ongoing, there is, nevertheless, a risk of unplanned impacts to the license schedule or requests for additional compensation.</li> <li>The project financial outcomes are dependent on the exchange rate fluctuations: since costs are mostly denominated in Brazilian Reais and revenues are in US Dollars, US Dollar devaluations can result in negative impacts on of the project economic results.</li> <li>The project financial outcomes are positively impacted by tax benefits under the SUDAM (Superintendência de Desenvolvimento da Amazônia) investment program that will result in lower income tax. This requires submitting a timely application and then waiting for the granting of these benefits.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimates are based on the Mineral Resource estimates that are classified as Measured and Indicated and after considering all Modifying Factors including as legal, environmental, geological, geotechnical, mining, metallurgical, social, economic and financial aspects.</li> <li>Proven Ore Reserves were derived from the Measured Mineral Resources and Probable Ore Reserves were derived from Indicated Mineral Resources.</li> </ul>

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT & MEDIA RELEASE



Criteria	JORC Code explanation	Commentary
<b><i>Audits or reviews</i></b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>This document relates to a maiden Ore Reserve and no audits were undertaken for the Ore Reserve estimates to verify its compliance with the JORC Code (2012/reference).</li> </ul>
<b><i>Discussion of relative accuracy/ confidence</i></b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The Ore Reserve estimate is supported by appropriate legal and environmental considerations as well as engineering design, scheduling, and financial analysis meeting the requirements of a Feasibility Study.</li> <li>No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.</li> <li>Following the Mineral Resource, the Ore Reserve is a global estimate, derived from a block model that has sufficient local accuracy to be used for the mining studies and the derivation of the Modifying Factors to a Feasibility Study.</li> <li>The Modifying Factors, such as mining dilution, geotechnical parameters, NSR cutoff and metallurgical test work assumptions are subject to ongoing refinement which will better influence the accuracy of the Ore Reserve.</li> <li>There has been no production from Jaguar to reconcile estimates to actual production data.</li> </ul>

personal use only