Centaurus Metals Limited

The Jaguar Nickel Sulphide Project

BASE CASE SCOPING STUDY

EXECUTIVE SUMMARY

MARCH 2021

www.centaurus.com.au

Contents

This JNP Base Case Scoping Study has been prepared by Centaurus Metals with assistance from the following advisors:

Plant Engineering: DRA Global (Australia)
Mining & Geotech: Entech (Australia) & ReMetallica (Brazil)
Resource Estimation: Trepanier Pty (Australia)
Metallurgical Testwork: ALS Metallurgy (Australia)
Mineralogy: McArthur Ore Deposit Assessments (Australia)
Power: Malc Engenharia Ltda. & Conexão Energia (Brazil)
Tailings Storage Facility: L&MGSPL (Australia)
Environmental Study: Bicho do Mato (Brazil)

The Centaurus Jaguar Nickel Sulphide Project team included:

Managing Director: Darren Gordon
Country Manager & Executive Director: Bruno Scarpelli
Operations Manager: Roger Fitzhardinge
CFO & Company Secretary: John Westdorp
Principal Metallurgist: John Knoblauch
Principal Geoscientist: Grant 'Rocky' Osborne
Exploration Manager: Gaudius Montresor
Environmental Manager: Antonio Kalil
OHS Manager: Antonio Campos
Administration Coordinator (Brazil): Bianca Peloso Braga

1. Executive Summary

1.1 INTRODUCTION

Centaurus Metals Ltd has completed a Scoping Study for the development of the Jaguar Nickel Sulphide Project (JNP), located in the State of Pará, Brazil. The Base Case Scoping Study assesses the construction of a Conventional Flotation Concentrator to produce a nickel concentrate from open pit and underground mining operations.

In September 2019, CTM through its subsidiary Aliança Mineração Ltda (Aliança) executed a Sales & Purchase Agreement with Vale Metais Básicos SA (Vale) that transferred 100% of the JNP to Aliança. Drilling at Jaguar commenced in November 2019.

In February 2021, the Company completed a JORC 2012 Indicated and Inferred Mineral Resource Estimate (MRE) update of 58.6Mt at 0.95% Ni for 557,800 tonnes of contained nickel which was further updated during the delivery of the Base Case Scoping Study to a MRE of 58.9Mt at 0.96% Ni for 562,600 tonnes of contained nickel.

Centaurus engaged DRA Pacific Ltd (DRA) and Entech Pty Ltd (Entech) to complete the JNP Scoping Study based on the March 2021 MRE. Resource development and greenfields drilling is ongoing and a further MRE update is planned for Q3 2021. Future Mineral Resource updates will underpin the JNP Pre-Feasibility Study planned for completion in Q4 2021.

The JNP is 100% owned by Aliança, a wholly owned Brazilian subsidiary of Centaurus Metals Ltd (CTM).

1.2 PROJECT LOCATION

The JNP is located within a 30km² tenement package in the São Félix do Xingú municipality in the western portion of the world-class Carajás Mineral Province in the state of Pará (Figure 1). The Carajás Mineral Province is Brazil's premier mining hub, containing one of the world's largest known concentrations of bulk tonnage IOCG deposits as well as hosting the world's largest high-grade iron ore mine at S11D.

The JNP is ideally located close to existing infrastructure, just 35km north of the regional centre of Tucumã (population +35,000) where a 138kV power sub-station is located.

The commercial airports closest to the project area are in the cities of Marabá and Parauapebas, accessible by paved roads from Tucumã, 380km and 260km respectively. There is a regional airport for smaller flights in Ourilândia do Norte (population +30,000), which is 9km east of Tucumã. The project is located about 640km southwest of Belém, the capital of Pará State. The project is centred at 6°29'15" S latitude and 51°12'10" W longitude.

1.3 PROJECT CONCEPT

The development of the JNP Base Case Scoping Study comprises the following project concepts:

- The establishment of a conventional open pit mining operation and underground mining operations (from year 4) to supply 2.7Mtpa of ore to the processing plant for 10 years;
- The establishment of a conventional flotation nickel processing plant based on the treatment of 2.7 Mtpa of ore, to produce a nickel sulphide concentrate;
- Upgrade of a 40km access road from Tucumã to the JNP site;
- Construction of a tailings storage facility utilising the mine waste as the principal construction material;
- Construction of a 39km – 138 kV power line from the Tucumã sub-station to site to supply up to 24MW peak power demand;
- Construction of a village to accommodate 400 workers for the project implementation stage; and
- Construction of office and administration buildings, gate house, warehousing, heavy vehicle workshop, dams, ponds and general facilities and non-process site infrastructure.

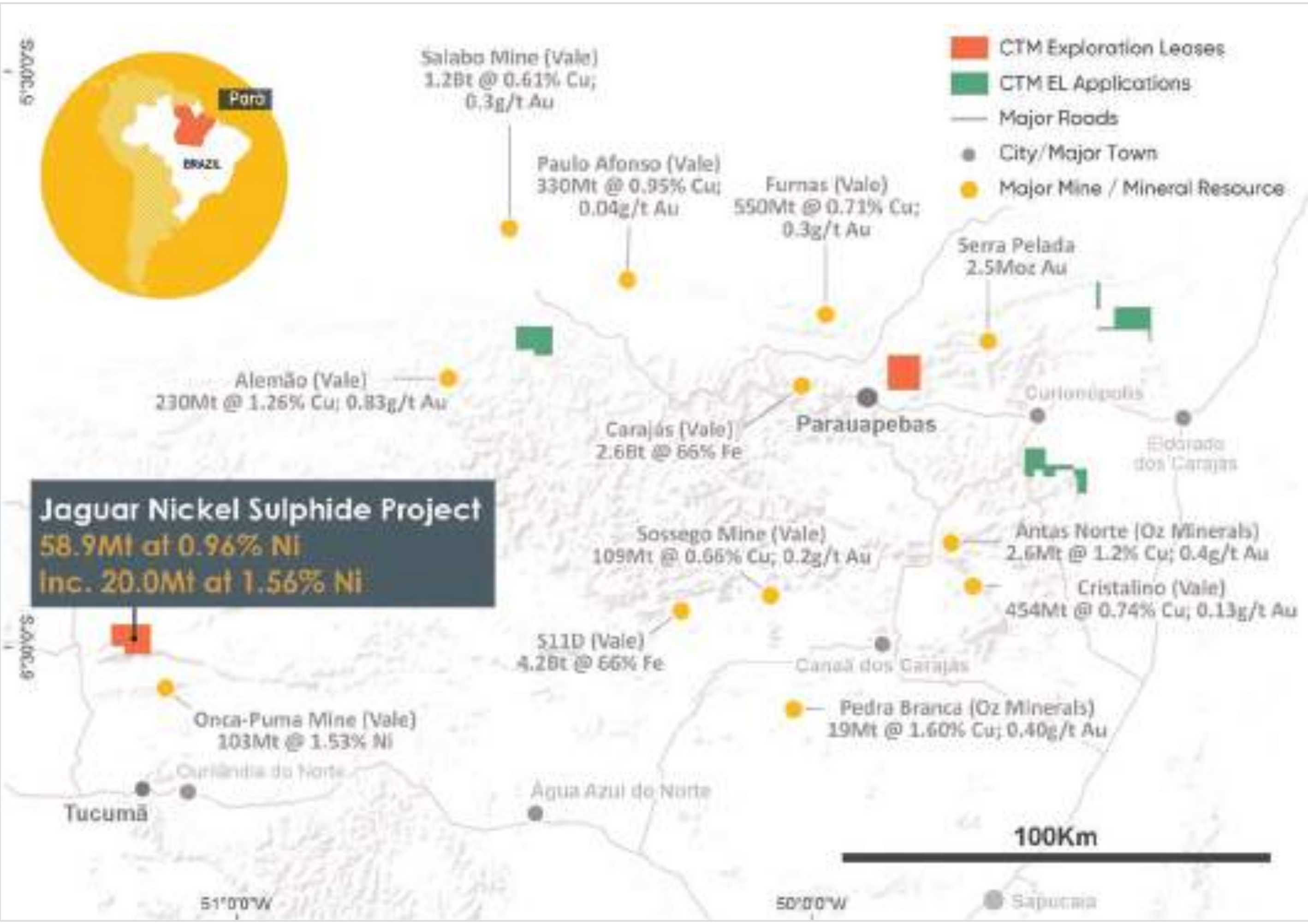

Figure 1 - *The Jaguar Nickel Sulphide Project location in the Carajás Mineral Province, Brazil*

1.4 KEY PROJECT METRICS

Assumption	Units	Base Case
Average LOM Exchange Rate	USD/BRL	5.00
Average LOM Exchange Rate	USD/AUD	0.75
Average LOM Exchange Rate	EUR/BRL	5.80
Ni Price	US$/t	16,530
Ni Price	US$/lb	7.50
Corporate tax rate (Amazon Region)	%	15%
Discount Rate - Real	%	8%
Physicals		
Production Target		32.8Mt @ 0.84% Ni for 275,600t Contained Ni
Mill Feed	Mt	24.0
Mill Feed Head Grade	% Ni	1.08%
Contained Ni in Mill Feed	t	260,300
Recovery to Concentrate	%	78%
Concentrate Grade	%	15.8%
Recovered Ni in concentrate	t	203,300

***Table 1** - Financial Model Assumptions*

Table 2 summarises the results of the JNP Base Case Scoping Study. The study confirms that the base case for the JNP is capable of delivering outstanding financial outcomes with an estimated project post tax NPV8 of A$603.7M, a post tax IRR of 54% and a rapid capital payback of 1.9 years.

C1 cash costs of US$2.41/lb of nickel metal in concentrate (including by-product credits and on a 100% payability basis) reflect both the significant open pit volumes and the low operating cost environment in Brazil and provide the JNP with a significant competitive advantage over other much deeper underground nickel sulphide projects and nickel laterite projects. A revenue to C1 cost ratio of 2.2 positions the JNP as a high margin operation, resilient to unfavourable movements in nickel price and exchange rates.

Project NPVs are estimated from the assumed Financial Investment Decision (FID) date for the project which for the purposes of the Study, coincides with the commencement of construction activities. C1 cash costs include by-product credits. Project cashflows are on a real, pre finance basis.

Key Results	Units	Base Case
Capital Costs		
Development Capital	US$M	178
Sustaining and Deferred Capital	US$M	138
Operating Costs (100% payable basis)		
C1 Cash Costs	US$/lb	2.41
Royalties	US$/lb	0.25
Total Operating Costs	**US$/lb**	**2.66**
Sustaining and Deferred Capital	US$/lb	0.31
All-in Sustaining Costs (AISC)	**US$/lb**	**2.97**
Development Capital	US$/lb	0.40
All-in Costs	**US$/lb**	**3.37**
Financial Metrics		
Total Revenue	US$M	2,422
Project Cashflow - pre-Tax	US$M	914
NPV_8 - pre-Tax	**US$M**	**543**
EBITDA	**US$M**	**1,230**
IRR - pre-Tax	%	62%
Tax Paid	US$M	(137)
Project Cashflow - post Tax	US$M	777
NPV_8 - post Tax	**US$M**	**453**
Project Cashflow - post Tax	A$M	1,036
NPV_8 - post Tax	**A$M**	**604**
IRR - post Tax	%	54%
Capital Payback Period – post Tax	**Years**	**1.9**

***Table 2** - Key Project Results*

1.5 CONCLUSIONS AND RECOMMENDATIONS

The JNP Base Case Scoping Study confirms that the development of a 2.7Mtpa mine and flotation concentrator (Base Case) at the JNP is technically and commercially feasible. Given the robust results delivered by the Scoping Study, the Board of Centaurus has approved the Company proceeding to Pre-Feasibility Study (PFS) for the Base Case.

Completion of a Scoping Study which considers value-added processing of nickel concentrate via a hydrometallurgical process (POx) to produce nickel metal (Value-Added Case) is due in 3-4 weeks.

The study of both options in the PFS stage will allow the Company to complete the required trade-off analysis to a level that will allow an informed decision on how to maximise value for the Company at acceptable risk levels and consequently move the project forward to the Definitive Feasibility stage.

2. Geology & Resources

The various deposits at the JNP differ from most nickel sulphide deposits mined to date globally because it is of hydrothermal origin, with the nickel sulphide mineralisation being of high tenor (tenor referring to the Ni concentration in 100% sulphides) with low Cr and Mg contents and not directly associated with mafic-ultramafic rocks. It is interpreted that the JNP mineralisation represents a hybrid hydrothermal style between magmatic Ni-Cu-PGE sulphide and IOCG mineralisation.

2.1 GEOLOGY

The JNP is located in the Carajás Mineral Province (Carajás), which contains one of the world's largest known concentrations of large tonnage IOCG deposits. The Igarapé Bahia Cu-Au deposit was discovered in 1985 and it was recognised that the deposit belonged to the IOCG deposit class. Since then, many IOCG deposits of three principal ages (NeoArchean- 2.72-2.68Ga, 2.6-2.45Ga and PaleoProterozoic 1.8Ga) have been discovered making the Carajás one of the world's premier IOCG regions.

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 JNP 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 host to the Puma Lateritic Nickel deposit (Figure 2).

The Jaguar mineralised bodies are hosted within sheared sub-volcanic porphyritic dacites of the Serra Arqueada Greenstone belt, adjacent to the boundary with 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 structurally controlled by regional ductile-brittle mylonitic shear zones.

Sulphide assemblages are similar in both ore 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 (Figure 3).

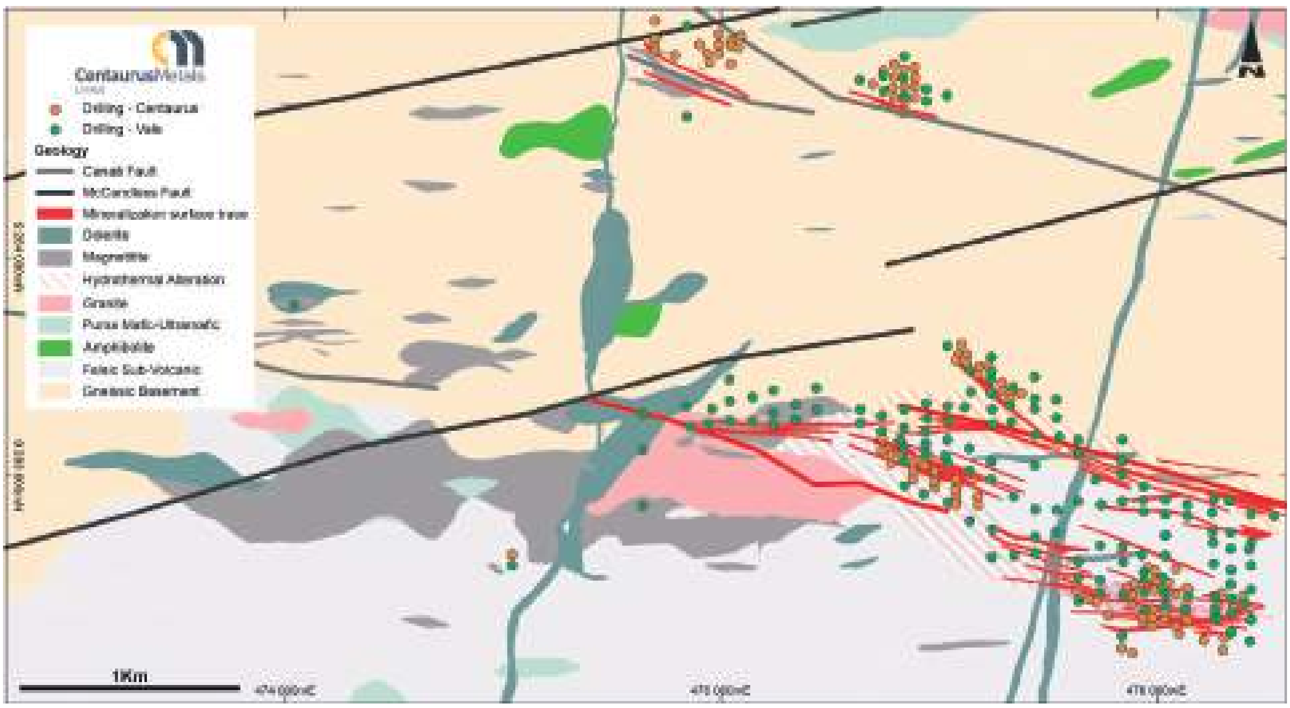

Figure 2 *- The Jaguar Nickel Sulphide Project Geology*

Figure 3 - Core photos from drill hole JAG-DD-20-034; 128.2.2 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

The most abundant type 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 (Figure 4).

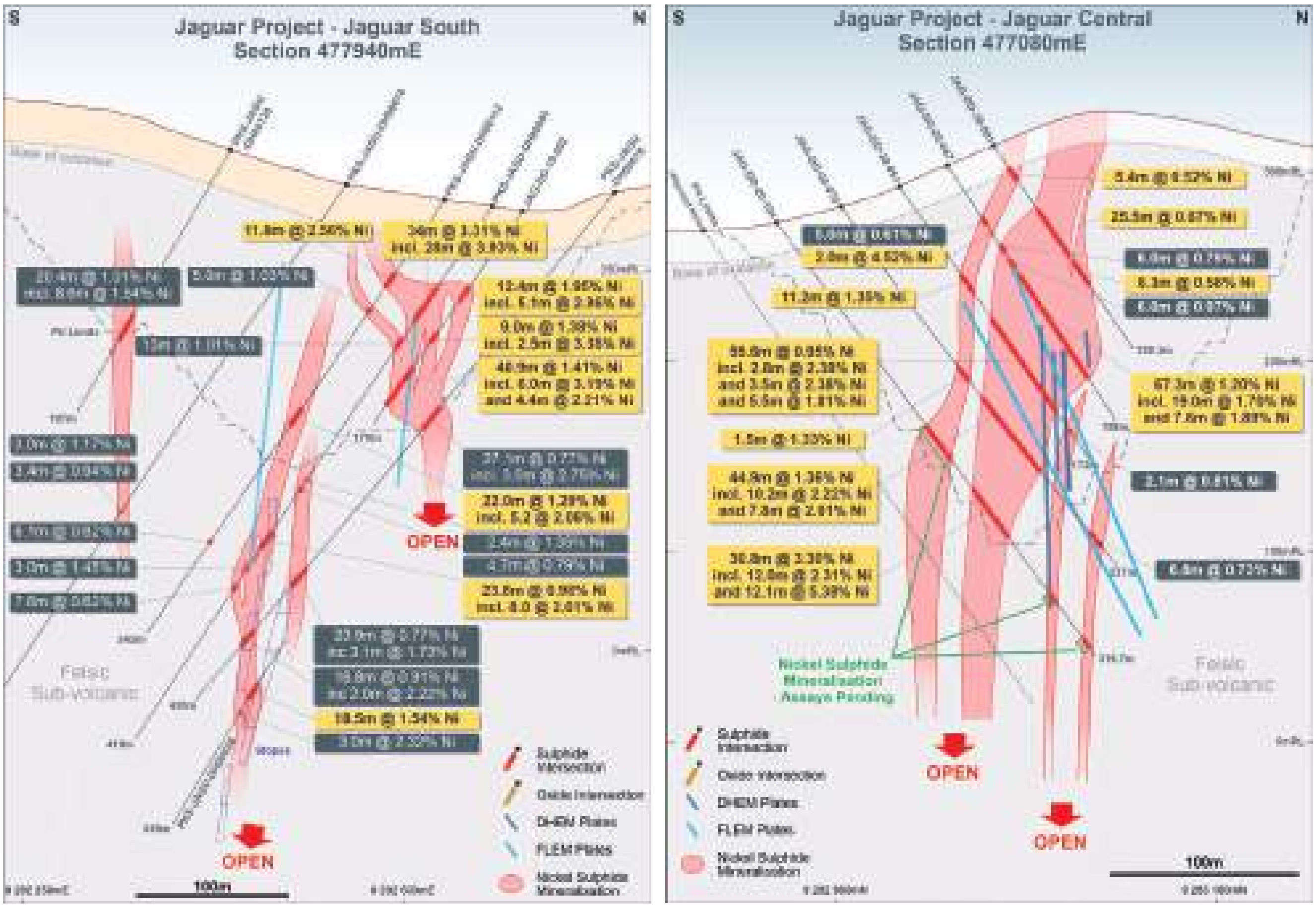

Figure 4 - Cross-Sections of the Jaguar South Deposit 477940mE (left) and Jaguar Central Deposit 477080mE (right)
(showing a number of significant drill intersections (in yellow) with DHEM conductor plates in blue)

Mineralisation at the Onça Preta and Onça Rosa deposits is predominantly of the second type, forming tabular semi-continuous to continuous bodies both along strike and down dip (Figure 5).

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. 34m).

Within the JNP tenement there are also several untested targets characterised by magnetic and/or electromagnetic anomalies located along favourable structures.

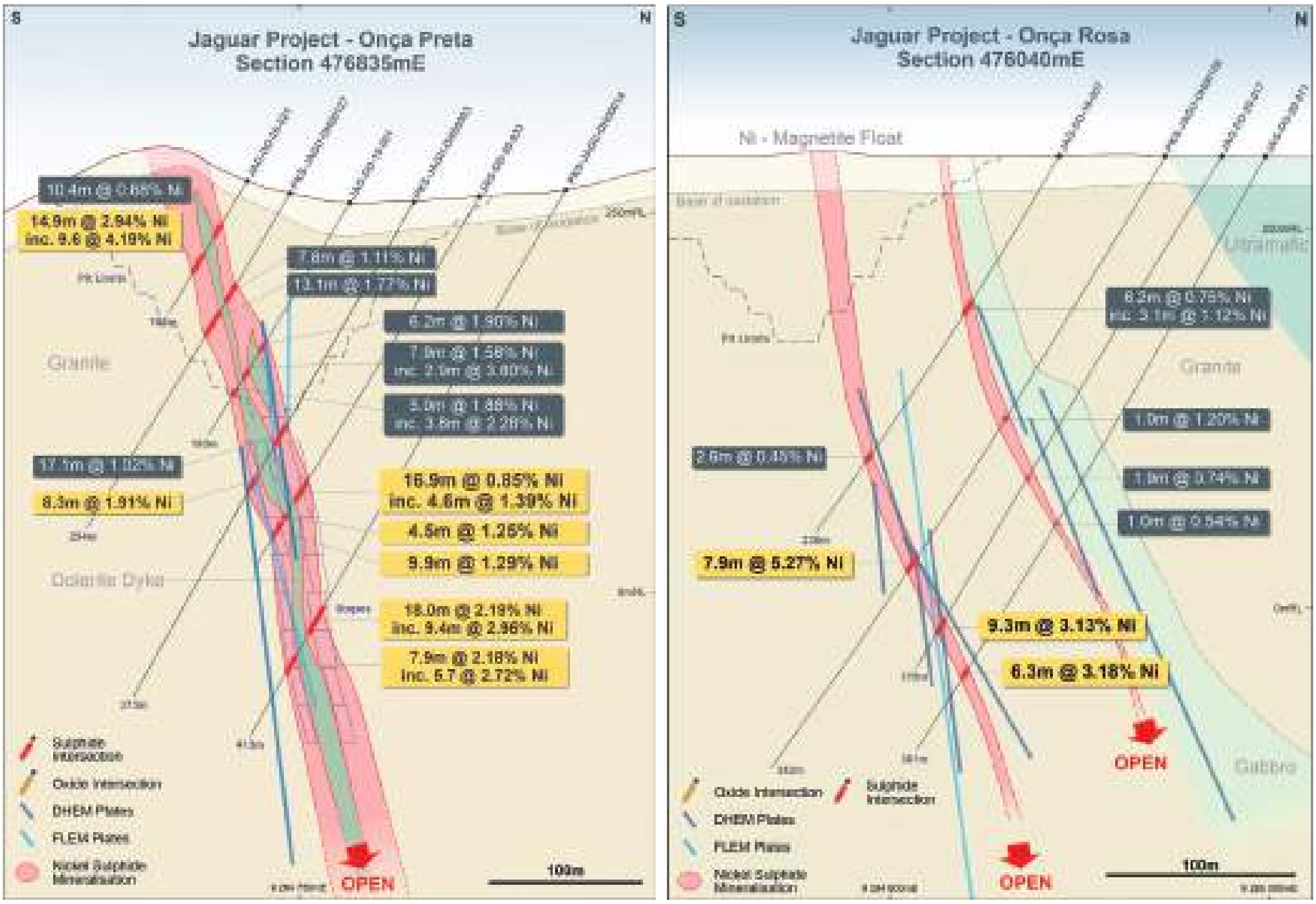

Figure 5 - Cross-Section of the Onça Preta Deposit 476835mE (left) and the Onça Rosa Deposit 476040mE (right)
(showing the significant drill intersections (in yellow) with DHEM conductor plates in dark blue and FLEM plates in light blue).

2.2 GEOTECHNICAL

Entech completed a geotechnical study for the JNP to determine the pit slope angles to be used for the pit and stope optimisation runs and final design of the mine.

The typical rock mass can be characterised as 'Good' in the near-surface open-pittable environment. Final pit slopes have 10m (oxide) – 20m (fresh) benches and 5-10 m wide berms. The final pit walls of the deepest pit (Jaguar South) reach maximum heights of 290m at the highwall located on the southern side of the pit. Final slopes are expected to have average inter-ramp angles of between 40° - 49° in fresh rock and 33° in oxide material.

For the underground mining environment, the rock mass conditions improve with depth and can be generally classified as 'Good' to 'Very Good'. The orebody geometry and rock mass conditions at the Jaguar deposits favours the use of a top down longhole open stoping method. For the proposed stope heights of 25m, preliminary stope open spans ranging from 30-50m have been recommended, dependent on the deposit.

2.3 RESOURCES

The JORC 2012 Mineral Resource Estimate (MRE) update was completed by independent resource specialists Trepanier Pty Ltd in February 2021 and further updated as part of this study (March 2021 MRE). The updated JORC MRE is 58.9Mt at 0.96% Ni for 562,600 tonnes of contained nickel.

The JNP MRE is based on 169 Vale drill holes for a total of 56,592m of drilling and 98 Centaurus drill holes for a total of 17,941m of drilling (total project drilling 74,533m). All drill holes were drilled at 55 -75 towards azimuth of either 180° or 360°.

The JNP is unique in terms of nickel sulphide orebodies as the high-grade nickel sulphide mineralisation comes almost to surface and continues at depth. More than 80% of the nickel metal in the maiden MRE is within 200m of surface, demonstrating the strong open pittable potential of the Project. Over 97% of the Resource is comprised of fresh sulphides, with no oxide material being reported (Table 3).

Potential mining methods include a combination of open pit and underground. As such, a 0.3% Ni cut-off grade has been applied to material less than 200m vertical depth from surface to reflect potential open cut mining opportunities. A Ni cut-off grade of 1.0% Ni was applied below 200m from surface to reflect higher cut-offs expected with potential underground mining. The JNP MRE at various cut-off grades is shown in Table 4, with the reported JNP MRE highlighted in dark grey.

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. Indicated Mineral Resources are defined nominally on 50m E x 40m N spaced drilling (predominantly where CTM has completed infill 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. The Jaguar Mineral Resource has therefore been partially classified as Indicated with the remainder being Inferred according to JORC 2012, Figure 6.

		Tonnes	Grade			Contained Metal Tonnes		
Classification	**Ore Type**	**Mt**	**Ni %**	**Cu %**	**Co ppm**	**Ni**	**Cu**	**Co**
Indicated	Transition Sulphide	0.7	0.96	0.08	250	6,900	600	200
	Fresh Sulphide	19.4	1.13	0.07	326	218,900	14,200	6,300
	Total Indicated	**20.1**	**1.12**	**0.07**	**323**	**225,800**	**14,800**	**6,500**
Inferred	Transition Sulphide	0.9	0.79	0.07	239	6,800	600	200
	Fresh Sulphide	37.9	0.87	0.06	230	330,000	23,500	8,700
	Total Inferred	**38.8**	**0.87**	**0.06**	**230**	**336,800**	**24,100**	**8,900**
Total		**58.9**	**0.96**	**0.07**	**262**	**562,600**	**38,800**	**15,400**

Table 3 - The Jaguar JORC Mineral Resource Estimate (MRE)

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

Ni% Cut-off Grade		Tonnes	Grade			Metal Tonnes		
Surface - 200m	**+ 200m**	**Mt**	**Ni %**	**Cu %**	**Co ppm**	**Ni**	**Cu**	**Co**
0.3	**1.0**	**58.9**	**0.96**	**0.07**	**262**	**562,600**	**38,800**	**15,400**
0.4	1.0	56.0	0.99	0.07	270	552,200	38,100	15,100
0.5	1.0	49.9	1.05	0.07	287	524,900	36,300	14,300
0.6	1.0	42.0	1.15	0.08	311	481,200	33,500	13,100
0.7	1.0	34.8	1.25	0.09	339	434,500	30,400	11,800
0.8	1.0	28.6	1.36	0.09	367	388,400	26,900	10,500
0.9	1.0	23.8	1.46	0.10	394	347,700	23,800	9,400
1.0	1.0	20.0	1.56	0.10	419	311,100	20,600	8,400
1.1	1.1	16.1	1.68	0.11	468	270,700	18,400	7,500
1.2	1.2	13.0	1.81	0.13	526	235,300	16,700	6,900
1.3	1.3	10.8	1.92	0.14	581	208,100	15,300	6,300

Table 4 - The Jaguar JORC Indicated and Inferred MRE at various Ni% Cut-Off Grades*

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

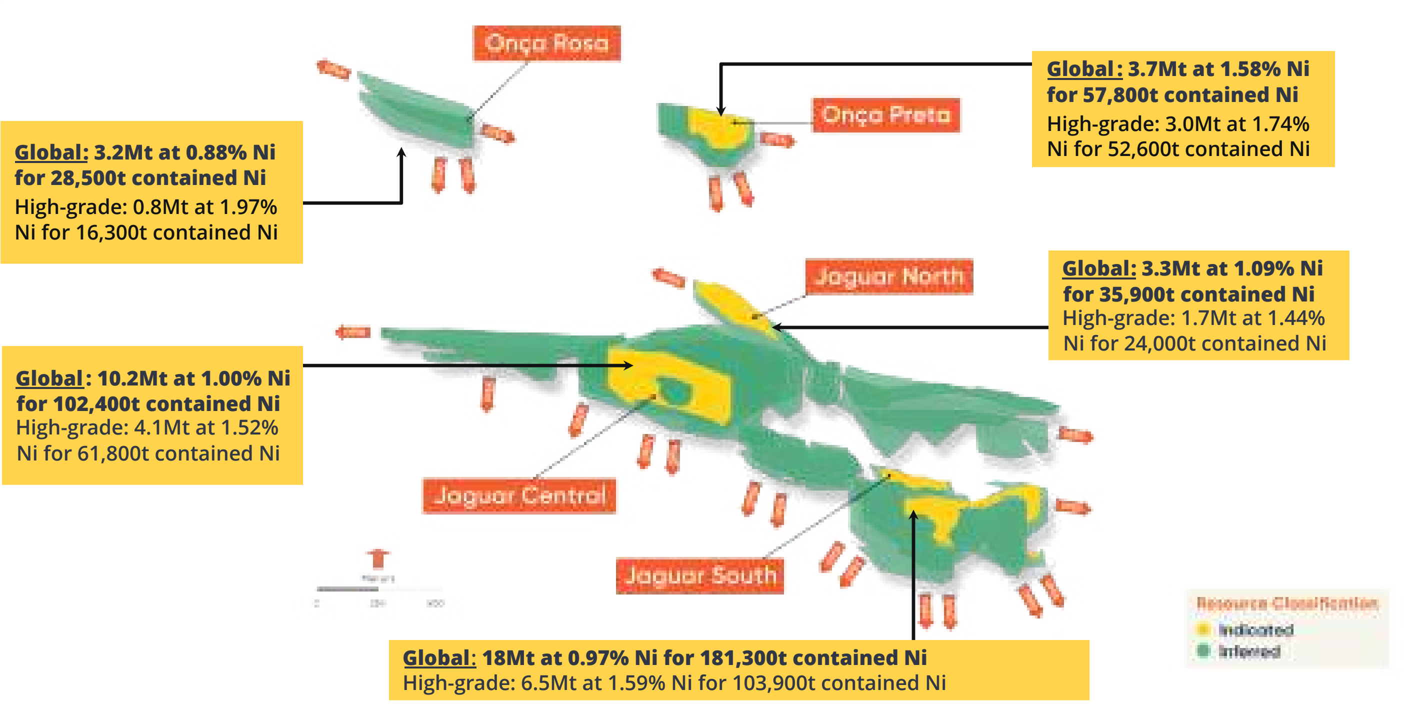

Figure 6 - The Jaguar MRE Block Model

Resource Classification, Indicated Resources in yellow and Inferred Resources in green.

2.4 NEAR MINE RESOURCE & EXPLORATION UPSIDE

The JORC MRE for the JNP considers the six Jaguar Deposits and two Onça Deposits. There is significant potential to expand both the shallow and deeper high-grade Resources within the Project via several growth fronts.

2.4.1 Mineral Resource Growth

Drilling in 2021 will focus on the following target areas ahead of the next Resource update expected in Q3 2021 to support planned Pre-Feasibility Study activities:

→ **Jaguar Central**

- Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the high-grade mineralisation shoot; and
- Further drilling is planned along strike and down-plunge to test new DHEM and FLEM conductors to the west and east where drilling on historical sections is wide-spaced (over 100m between holes).

→ **Jaguar South**

- Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the high-grade mineralisation within the main mineralised zones; and
- Drilling is planned along strike to test an interpreted high-grade plunge to the east-northeast, targeting new DHEM conductors.

→ **Jaguar Central North**

- In-fill drilling to upgrade the resource category within the Scoping Study open pit limits; and
- Drill the target 'Z-structure', part of a set of newly identified fold axis and high-grade mineralisation shoots at the intersections of the Jaguar Central North Deposit with the Jaguar Central and Jaguar North Deposits;

→ **Jaguar West & Jaguar North-east**

- Maiden in-fill and extensional drilling is planned to target historical high-grade zones and EM conductor plates with a focus on potential in-pit resources.

→ **Jaguar North**

- Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the high-grade mineralisation; and
- Drilling is planned along strike to test new FLEM conductors coincident with large ground magnetic anomalies to the northwest and southeast (at the 'Z-structure'), both untested areas.

→ **Onça Preta & Onça Rosa**

- Step-out drilling is planned to test DHEM conductors and potential down-dip extensions of the high-grade mineralisation. The Onça deposits are less than 250m from the Puma Layered Mafic-Ultramafic Complex which is interpreted to be the potential source of the hydrothermal nickel, and itself representing an outstanding target for more high-grade nickel sulphide mineralisation.

2.4.2 Exploration Upside

The JNP sits at the intersection of two of the most important mineralising structures in the Carajás, the Canãa and McCandless Faults. There are multiple prospects and targets that have yet to be drill-tested within the JNP, characterised by magnetic and/or electromagnetic (EM) anomalies coincident with significant soil geochemical support.

Detailed soil sampling and FLEM surveys have identified multiple priority drill targets. The first three priority targets to be tested are (Figure 7):

The Filhote Prospect – A 300m Fixed Loop Electromagnetic (FLEM) conductor plate coincident with a broad (+1.1km) ground magnetic signature and PGE-Ni-As-Cr-Cu soil geochemical anomaly. Historical hole PKS-JAGU-DH00075 returned 18.0m @ 0.35g/t Pd and 0.03g/t Pt from 95.0m;

The Leão Prospect – more than 2.5km of strike hosted multiple GeoTEM and ground magnetic anomalies coincident with a Ni-Cu-Cr-V-Au soil anomaly. Only three holes have ever been drilled at this Prospect with one hole returning 3.0m at 1.06% Ni and 0.21% Cu; and

The Tigre Prospect – a strong discrete (+800m) GeoTEM anomaly coincident with multiple ground magnetic anomalies and supported by a +1.0km continuous Ni-Cr-As-Au geochemical signature. There are no historical drill holes in the Tigre Prospect.

RC drilling of the greenfields targets is set to re-start in April 2021 with results expected to be received before the end of Q2 2021. Any new discoveries will be followed up and included in the Pre-Feasibility resource update expected later in 2021.

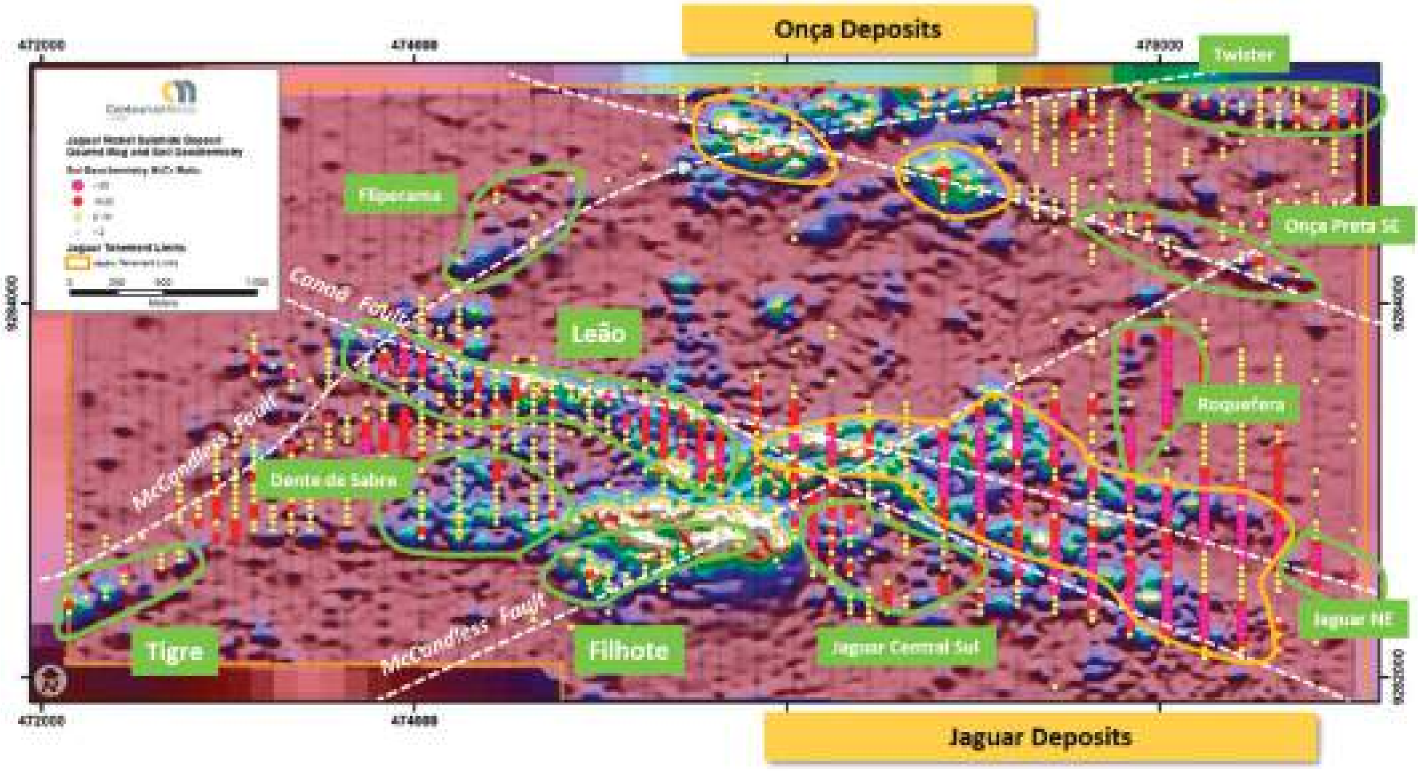

Figure 7 *- The Jaguar Nickel Project – Soils Geochemistry (Ni/Cr) over Ground Magnetics (Analytic Signal)*

3. Mine Operations & Production Target

The Scoping Study for the JNP considers an integrated open pit and underground Production Target estimate of 32.8 Mt at 0.84% Ni for a total of 275,600t of contained nickel metal. The deposits will deliver a Mill Feed of 24.0Mt at 1.08% Ni to a conventional flotation circuit at a nominal rate of 2.7Mtpa for 10 years.

Centaurus engaged Australian mining specialist Entech to undertake the Mining and Geotechnical studies for the Scoping Study. Re-Metallica, a Brazilian mining engineering consultancy firm, was engaged to carry out a peer review and support Entech on local mining productivities and costs.

3.1 OPEN PIT

Pit Optimisations

Pit optimisations were based on the Indicated and Inferred Mineral Resource categories only. The Mineral Resource models for Jaguar and Onça were re-blocked to a Smallest Mining Unit (SMU) dimension of 5 mE x 4 mN x 5 mR. The impact of re-blocking is that the narrow-modelled lodes from the original MRE are diluted out into larger blocks resulting in an ore dilution of 25% and ore loss of 10% for the Jaguar Deposits and ore dilution of 38% and ore loss of 6% for the Onça Deposits.

Various pit optimisations were run, and the pit shells derived at conservative nickel prices of US$12,450/t (Jaguar – Pit 83) and US$12,000/t (Onça – Pit 80) were selected. These shells were selected to provide the basis for a robust and conservative pit design. In total there are eight (8) open pit mining areas within the Onça and Jaguar deposits, see Figure 8 and Figure 9 below.

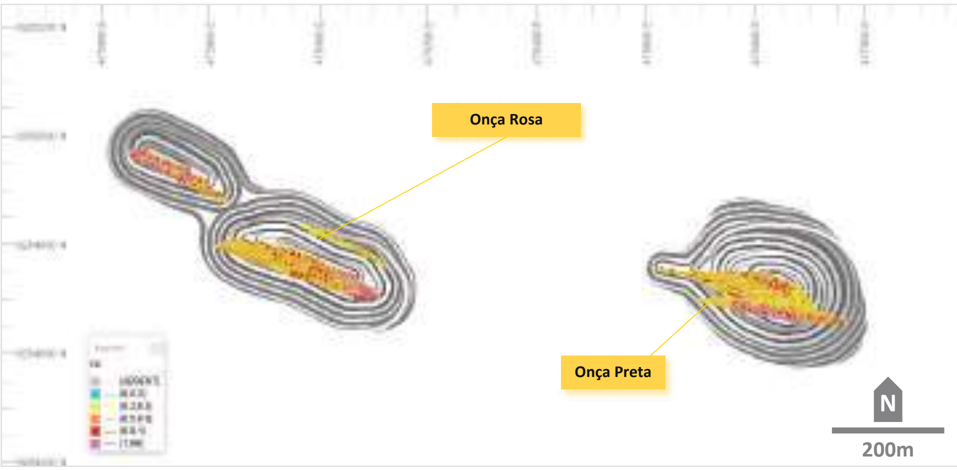

Figure 8 *- Selected Optimisation Shells and Proposed Mine Design – Onça Pits*

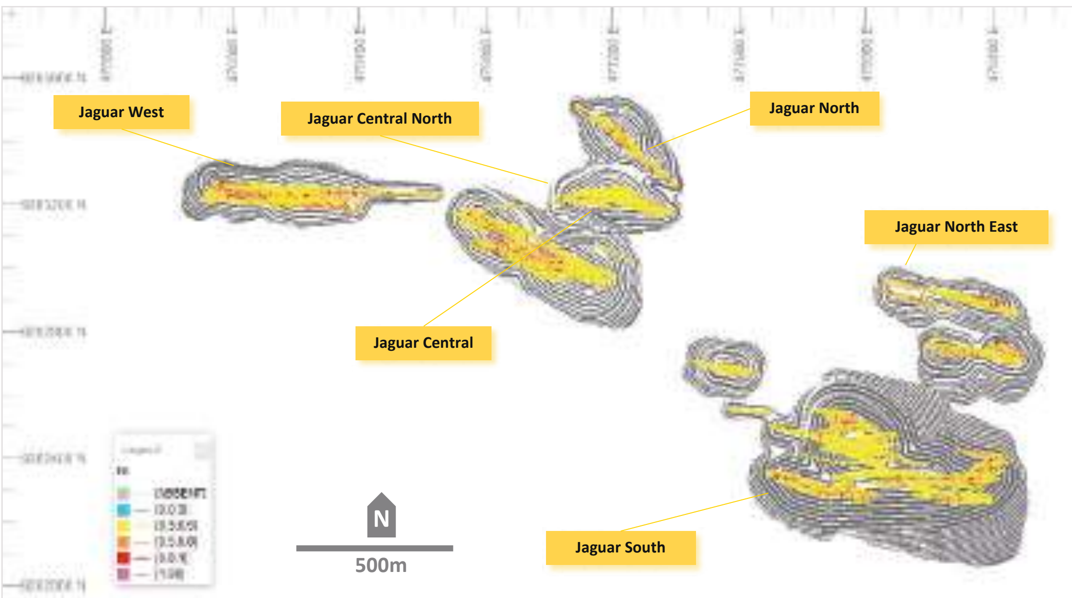

Figure 9 *- Selected Optimisation Shells and Proposed Mine Design – Jaguar Pits*

Pre-Operations Preparation

An initial stage of mine development will prepare the site to ensure the continuity of production during operations.

The focus will be to construct the required access roads from the mine to the process plant, waste dumps, low grade ore stockpiles and the Integrated Waste Landform (IWL) tailings facility. The starting IWL requires 3.58M bcm of waste material to be delivered and compacted in place ahead of the start of processing.

Additionally, the removal of the necessary topsoil and preparation of waste dumps and low-grade stockpiles will be completed. The topsoil will be stockpiled in areas that will allow easy access for future rehabilitation of degraded areas. Pre-strip will be completed by the chosen mining contractor.

Mine Design

A minimum mining width of 20m was used as a guide to open pit design when dealing with small mining areas within the open pit, as well as the pit floor working area and for any "goodbye cut" at the base of pit. A bench height of 20m within all fresh material and 10m within all weathered materials was employed for all open pit stage designs completed for Jaguar and Onça. The haul road width is determined to be 15m wide for a single lane ramp and 25m wide for a dual lane ramp.

Pit exit ramps have been designed to allow access to the ROM-pad area (for high-grade and low-grade material), primary crusher, and the primary waste storage areas including the Integrated Waste Landform (IWL) whilst maintaining a minimum haulage distance. Where possible, ramp development has been restricted to the footwall side of the pit to minimise the strip ratio.

Mining Operations

All open pit mining operations are proposed to be undertaken by a mining contractor. The mine operations will be run by the mining contractor working from Monday to Sundays (inclusive) in three shifts of eight hours with four operational teams. Results show the best equipment combination to be 45t excavators loading 45t capacity trucks on 5m flitch heights and blasting on a 10m bench height. All the proposed equipment is common in the local Brazilian mining industry.

The mining contractor will also provide all auxiliary service support such as maintenance of roads and accesses, dust control and site drainage. It is expected that the mining contractor will start with approximately 500 employees working on three shifts.

Waste Dumps and Stockpile Management

Three waste dumps have been planned, all being designed to be as flat as possible, with one of those being part of the Integrated Waste Landform (IWL) tailings storage facility. The lifts are planned to be a maximum of 10m with berms of 6m. Each lift is constructed at an approximate angle of repose of 33°. The maximum waste dump height will be 90m.

3.2 UNDERGROUND

Stope Optimisations

Stope optimisations were based on the Indicated and Inferred Resource categories only. Cut-off grades (COG) are based on a Net Smelter Return (NSR) and was determined from using NSR revenue, operating costs and processing information provided by CTM, with benchmarked mining costs from the Entech database and publicly available data on mining costs in South America.

Mineable Shape Optimiser (MSO) was used to generate economic stope shapes, based on cut off grades. Three scenarios were run for both the Onça and Jaguar mineral resource models. COGs were rounded to $50 and $75. Stope design inputs were from the Entech database and assumed a long-hole open stoping (LHOS) mining method.

Stope Optimiser Parameters	Units	Values
Minimum Mining Width	m	3.0
HW / FW Dilution	m	0.6/0.6
Maximum Footwall Angle	degrees	40
Stope Section Length	m	2.5
Sub-Level Height	m	25
Minimum Interstitial Pillar	m	10
Cut-off Grade	NSR (USD)	50, 75

Table 5 *- Stope Optimisation Inputs*

Scenarios were run excluding weathered material and value generated from material with an unclassified resource class was removed. A summary of the parameters used to generate the MSO shapes is shown in Table 5.

Although positive MSO optimisations were achieved for five separate deposits, Centaurus decided to focus only on the underground deposits with more than 20,000t of contained nickel metal. Consequently, only the Onça Preta and Jaguar South Deposits were considered for the purpose of the Scoping Study.

(A) OPTIMISATION RESULTS – ONÇA DEPOSITS

At the Onça Deposit, the MSO $75 inventory was adjusted by removing material that will either be depleted through open-pit mining or determined uneconomic when considering access development requirements. The resulting inventory was infilled with stope designs generated on the incremental cut-off grade (NSR $50), constrained to the fully costed cut-off grade boundaries. The resulting inventory was used as the basis of mine design and evaluation.

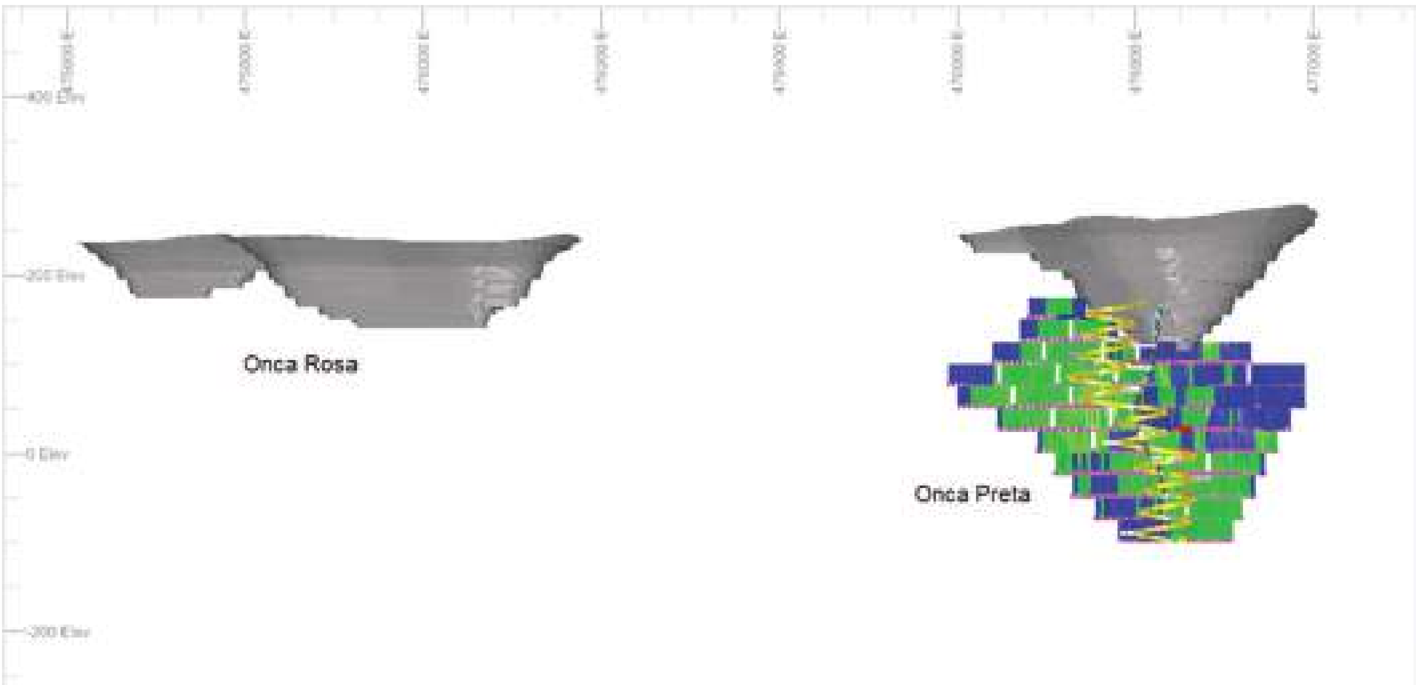

Figure 10 *- Section View looking North at the Onça Preta & Onça Rosa Deposits*

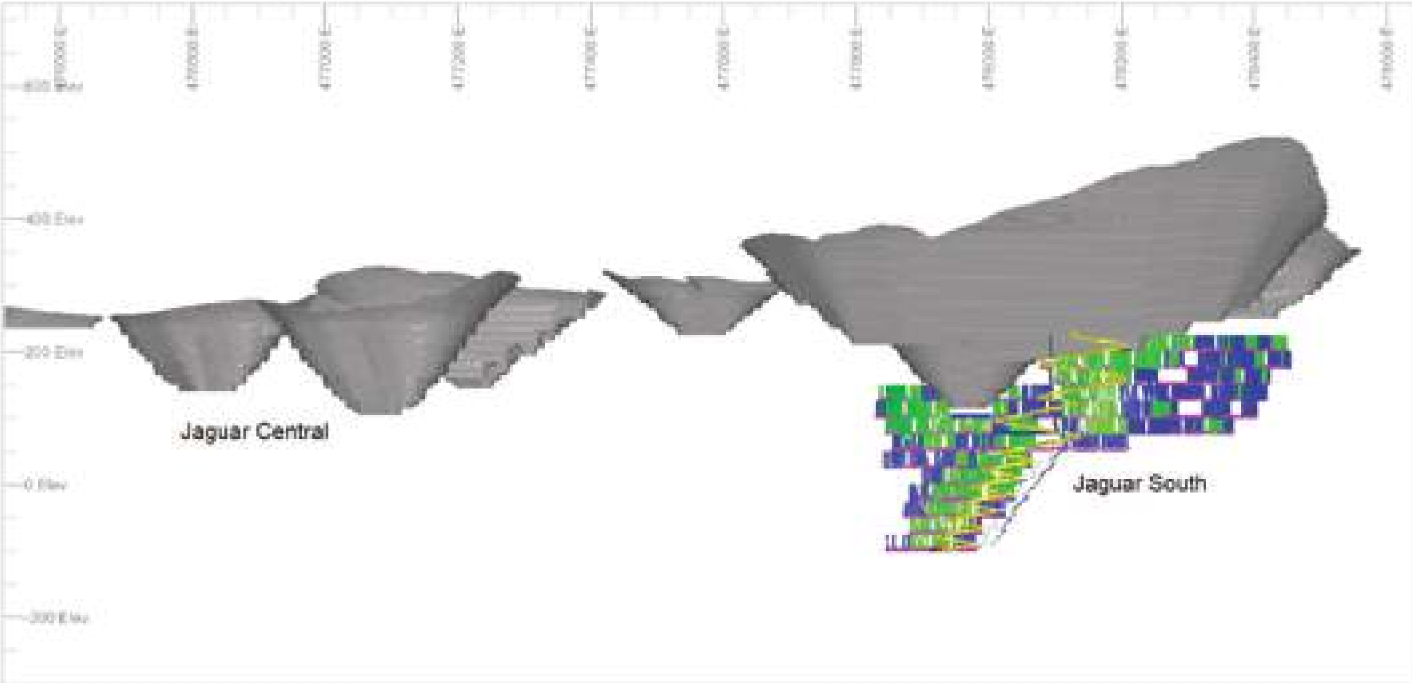

Figure 11 *- Section view looking North at the Jaguar Deposits*

(B) OPTIMISATION RESULTS – JAGUAR DEPOSITS

The Production Target was determined for Jaguar South using MSO optimisation in the same manner as Onça Preta. The resulting inventory was used as the basis of mine design and evaluation, see Figure 11 above.

Underground Mining Operations

The proposed mining method is top down longhole open stoping. Stopes are extracted in a longitude mining direction from the orebody with levels to be accessed from the hangingwall. To reduce capital development, portals have been designed close to the bottom of the pits.

Declines have been designed using a 1:7 gradient, on the hanging wall side of the orebody, having a 50m stand off from the orebody, and aiming for central access to the orebody for a more efficient mine. Operating lateral development represents ore drives which are driven along strike. Development design definitions are outlined in Table 6.

Development	Dimension	Profile
Decline	5.5 mW x 5.8 mH	Arched
Escapeway Drive	4.5 mW x 4.5 mH	Arched
Level Access	5.0 mW x 5.0 mH	Arched
Ore Drive	5.0 mW x 5.0 mH	Arched
Escapeway Rise	1.3 m Diameter	Circle
Return Air Rise	4.0 mW x 4.0 mH	Square

Table 6 *- Development Profiles and Dimensions*

The underground productivities were based on benchmark data for the proposed mining fleet and are sourced from the Entech database of similar equipment and mining methodology. Productivity rates are shown in Table 7 below.

Equipment Description	Max individual Task Rate	Maximum monthly rate
Twin Boom Jumbo	4 m/d	240m/month
50 t Truck	N/A	100,000tkm/month
21 t Loader	1,000 t/d	50,000t/month
Production Drill	200 m/d	5,000m/month
Air Leg Rise	3 m/d	90m/month
Charge-up Unit	N/A	N/A
Raisebore	3 m/d	90m/month

Table 7 *- Productivity Rates*

3.3 INTEGRATED MINE SEQUENCING

The conceptual mine production schedule is illustrated in Figure 12. It has been assumed that mobilisation of the mining fleet will begin in Q2 2023 which is 8 months ahead of first production. This will allow time for the mine contractor to carry out pre-strip and construction of the IWL. The integrated open pit and underground mine scheduling, as set out in Table 8, was carried out targeting the production of approximately 2.7Mt of ROM ore to the crusher per annum.

The high-grade material (>0.6% Ni) goes directly to the ROM stockpile whilst low-grade material (0.3-0.6% Ni) goes to the ore-sorter for sorting and stockpiling. High-grade material is fed to the crushed ore stockpile preferentially over the ore sorter product.

The underground mines commence once the associated open pit are near completion to allow portals near the pit base, however, no underground mining is scheduled within the first three years of open pit operations. A steady flow of ore is mined and fed to the mill assuming a throughput rate of 2.7Mtpa whilst maintaining ROM stocks of approximately two to four months of feed.

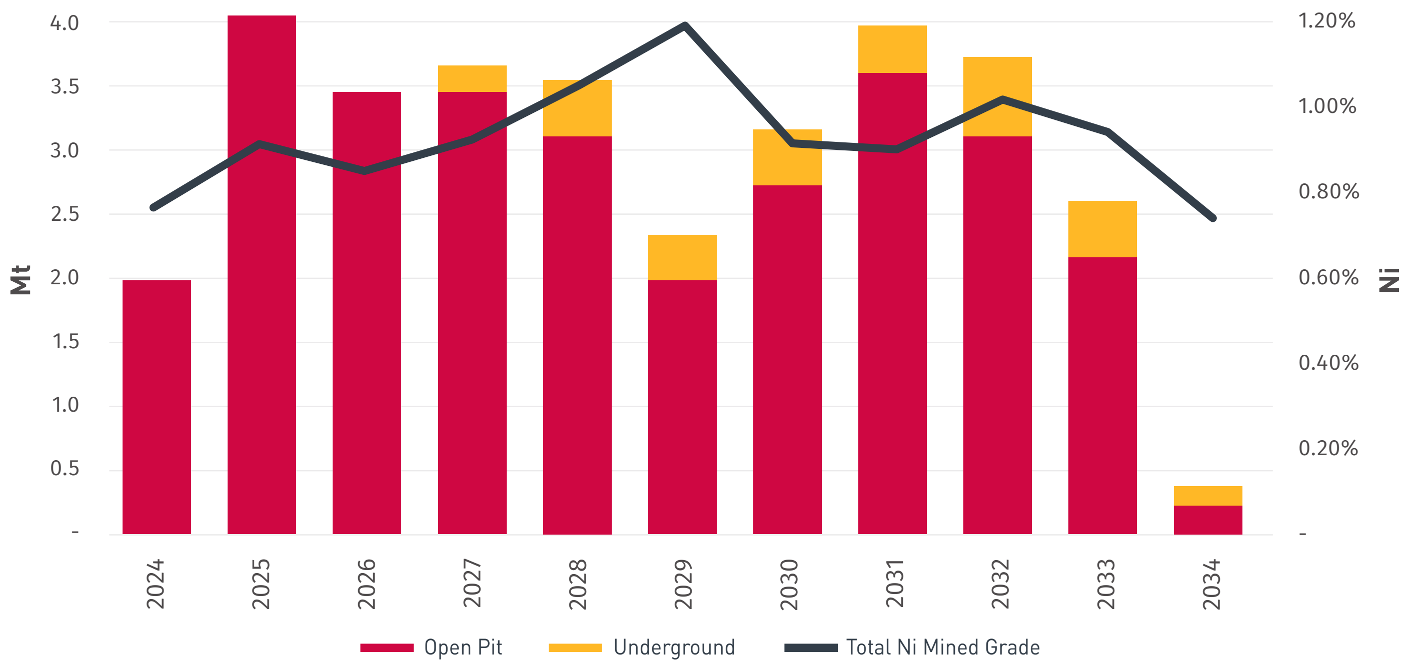

Figure 12 - Integrated Mine Production Schedule

Calendar Year	Units	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Open Pit													
Waste Moved	Mt	178.5	30.6	27.4	15.8	15.4	13.3	12.5	19.2	23.1	13.2	7.2	0.9
Ore Mined	Mt	29.6	2.0	4.1	3.4	3.5	3.1	1.8	2.7	3.6	3.1	2.2	0.2
Nickel Grade	%	0.78%	0.68%	0.82%	0.76%	0.78%	0.87%	0.80%	0.74%	0.74%	0.84%	0.75%	0.87%
Underground													
Ore Mined	Mt	3.2			0.4	0.2	0.4	0.5	0.5	0.4	0.4	0.4	0.1
Nickel Grade	%	1.36%			1.11%	1.34%	1.31%	1.70%	1.45%	1.14%	1.16%	1.34%	1.42%

Table 8 - Integrated Mine Production Schedule Annual Results

3.4 PRODUCTION TARGET & MILL FEED

The life of mine Production Target, based on the Jaguar and Onça open pits, is 29.6Mt at 0.78% Ni for a total of 231,800 tonne of contained nickel metal (see Table 9 below). The high-grade ROM (>0.6% Ni cut-off) material component is 17.1 Mt @ 1.05% Ni and the low-grade ore-sorter feed component (0.3-0.6% Ni cut-off) is 12.6 Mt @ 0.42% Ni. The total waste movement from the open pit mining operation is expected to be 178.5Mt at a strip ratio of 6.0:1 during the life of mine (including pre-strip waste material).

Approximately 61% of the contained nickel metal in the Production Target is in the Indicated Resource Category. Importantly, 81% of the first three years of operations are in the Indicated Resource Category.

The low-grade ore-sorter feed will be processed by an ore-sorter at the ROM. The ore-sorter product, estimated at 3.8 Mt @ 0.98% Ni, will be fed to the crushed ore stockpile. The ore-sorter reject will be back-loaded to waste deposits.

The life of mine Production Target for the Jaguar South and Onça Preta underground operations is 3.2Mt at 1.36% Ni for a total of 43,700t of contained nickel metal.

The integrated open pit and underground mill feed for the JNP is 24.0Mt at 1.08% Ni (Table 9) for a total of 260.3kt of contained nickel metal, see Table 9 below.

Mining Method	Material Type	Resource Category	Ore Mt	Ni %	Ni Metal kt
Open Pit	High-grade	IND	11.5	1.11%	127.1
	> 0.6% Ni	INF	5.6	0.93%	52.0
		Mill Feed	**17.1**	**1.05%**	**179.1**
	Low-grade	IND	6.1	0.42%	25.5
	0.3-0.6% Ni	INF	6.5	0.42%	27.3
		Total	**12.6**	**0.42%**	**52.8**
		IND	17.5	0.87%	152.6
		INF	12.1	0.66%	79.2
Open Pit Production Target		**Total**	**29.6**	**0.78%**	**231.8**
Underground		IND	0.9	1.51%	14.2
		INF	2.3	1.30%	29.5
Underground Production Target		**Mill Feed**	**3.2**	**1.36%**	**43.7**
		IND	18.5	0.90%	166.8
		INF	14.3	0.76%	108.8
Total Production Target		**Total**	**32.8**	**0.84%**	**275.6**
Ore-sorter Product*		**Mill Feed**	**3.8**	**0.98%**	**36.9**
LOM Mill Feed		**Total**	**24.0**	**1.08%**	**260.3**

*Ore-sorter product has been processed pre-concentrator

***Table 9** - Production Target & Mill Feed Estimation*

4. Metallurgy

4.1 ORE CHARACTERISATION

The aim of the Scoping Study from a metallurgical perspective was to investigate and test the viability of producing a single bulk concentrate for sale into the current world nickel concentrate market.

To date 104 mineralogical composites have been selected (55 from Jaguar South, 7 from Onca Preta, 27 from Jaguar Central and 15 from Jaguar North) for testing. The composites are comprised of ¼ NQ drill core sourced from CTM's drilling campaigns with the samples selected packed and air freighted to Perth. These samples are the basis of the current mineralogical understanding of the JNP and each composite has been analysed with a combination of some or all of the following analytical techniques:

- Comprehensive assaying adopting the same assay protocol as the geological block model with water soluble nickel, non-sulphide nickel, fluorine, chlorine and silica added to the suite conducted by ALS;
- XRD quantitative mineralogy to determine the type and concentrations of minerals present. This was completed by McKnight Mineralogy;
- Microprobing of minerals for trace element determination by University of Tasmania;
- Optical Mineralogy by MODA to understand texture, grain size and mineral associations for metallurgical performance estimations; and
- Comminution testing by ALS (SMC, BWi and Ai) of composites to evaluate the energy requirement the ores will require to achieve optimal recoveries.

The principal ore characteristics and mineralogical findings of the individual deposits are outlined below:

Jaguar South

- Grain size of the nickel sulphides (2/3 millerite and 1/3 pentlandite) is coarse suggesting a modest 75μm grind should be targeted.
- The ore in this zone has the most challenging comminution properties and will dictate the sizing of the milling circuit.
- Biotite and chlorite levels are highest in this zone, higher non-sulphide minerals proportion.
- Pyrite is the lowest in this zone and is not significant.
- The majority of the nickel sulphides are millerite, indicating a saleable concentrate grade is achievable.

Jaguar Central

- Grain size of the nickel sulphides (mainly millerite) is very coarse suggesting a modest 75um grind should be targeted.
- The ore in this zone does not influencing comminution design.
- Biotite and chlorite are half that of Jaguar South, lower non-sulphide minerals proportion.
- Pyrite is double that of Jaguar South increasing the level of selectivity required to achieve concentrate grades.

Jaguar North

- Biotite and chlorite are half that of Jaguar South, lower non-sulphide minerals proportion.
- The ore in this zone does not influencing comminution design.
- Biotite and chlorite are half that of Jaguar South, lower non-sulphide minerals proportion.
- Pyrite is double that of Jaguar South increasing the level of selectivity required to achieve concentrate grades.

Onca Preta

- Grain size of the nickel sulphides (mainly pentlandite) is the finest analysed suggesting a modest 75μm grind should be targeted.
- The ore in this zone does not influencing comminution design.
- Biotite and chlorite are minor compared with deposits, minimal non-sulphide minerals proportion.
- Pyrite is double that of Jaguar South increasing the level of selectivity required to achieve concentrate grades.

More mineralogy is planned in further studies and will be conducted to build a data set and create an empirical model to estimate the minerals that influence recovery and concentrate marketability.

4.2 ORE SORTING TESTING

Ore sorting has been identified as a significant project value-add due to the nature of the Jaguar mineralisation. Within the Jaguar deposits the high-grade mineralised zones are part of a broader mineralised system which contains lenses of narrower equally high-grade mineralisation. When the minimum mining block size estimations are coupled with the mining recovery and dilution adopted for the resource this type of material is consequently diluted resulting in lower block grade values.

Ore sorting has been considered as it is a commercially validated process that can concentrate these lower grade mining blocks resulting in products with similar grades to the high-grade mineralisation. This has significant advantages; the milling capacity can be reduced, the tailings volume produced will be less, significantly less potentially acid forming waste will be created for surface disposal and most importantly, the impact of mining dilution on mill feed grade will be reduced.

Pilot testing of low-grade (0.47% Ni) samples was carried out at Steinert's ore sorting facility located in Perth, Western Australia. Testing included trialing of different sorting sensors (inductive and x-ray) and programming settings to allow mass recovery to metal recovery relationships to be developed. The results are tabulated below (Table 10).

	Mass (%)	Nickel Grade (%)	Nickel Recovery (%)	Sulphur Grade (%)	Sulphur Recovery (%)
Feed		0.47		3.55	
High Grade Test	25.1	1.23	65.2	10.4	73.5
High Recovery Test	68.3	0.66	95.3	5.1	99.0
High Recovery Tailings	31.7	0.07	4.7	0.11	1.0

Table 10 *- Ore Sorting Results*

Utilising the data generated, a mass recovery curve was developed. For this study Centaurus has selected a mass recovery of 30% for the low-grade mining blocks providing a total nickel recovery of 70% and a nickel sulphide recovery of 79% for inclusion in the production schedule. Likewise, cobalt recovery has been reviewed with a recovery of 71% applied to the product generated from the ore sorting process. More detailed testing in future studies is planned.

4.3 FLOTATION TESTING

Flotation test work has been completed on five composites from the main deposits (adopting a conventional grind and float flowsheet). At this stage of study, rougher testing only has been completed to determine the approximate nickel sulphide recovery. Recoveries are expected to improve with cleaner tests.

Figure 13 illustrates the sulphide nickel responses of the rougher tests of the various composites.

The results indicate that the nickel sulphides are fast floating and high initial grades can be expected, particularly with the Jaguar Central and North composites containing millerite as the dominate nickel sulphide.

The non-sulphide nickel content of the individual orebodies is variable across the deposits and has been estimated from the non-sulphide nickel assays collected in mineralogical work and is shown below in Figure 14. The estimated non-sulphide nickel component for each of the main deposits has been modelled and is used to determine the nickel recovery.

Table 11 summarises the sulphide nickel recoveries. Reviewing the data below it is clear that the reagent regime and the flowsheet achieves high sulphide recoveries in the rougher stage of flotation. For the purposes of this study a final sulphide recovery of 90% is considered, with average total nickel recovery of 77-80% depending on the non-sulphide grades for that particular deposit. A concentrate grade of 15.8% Ni has been assumed. These assumptions are considered conservative and will be validated in the future with further regrinding and cleaning test work.

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

Table 11 *- Scoping Study Recovery Estimation Summary*

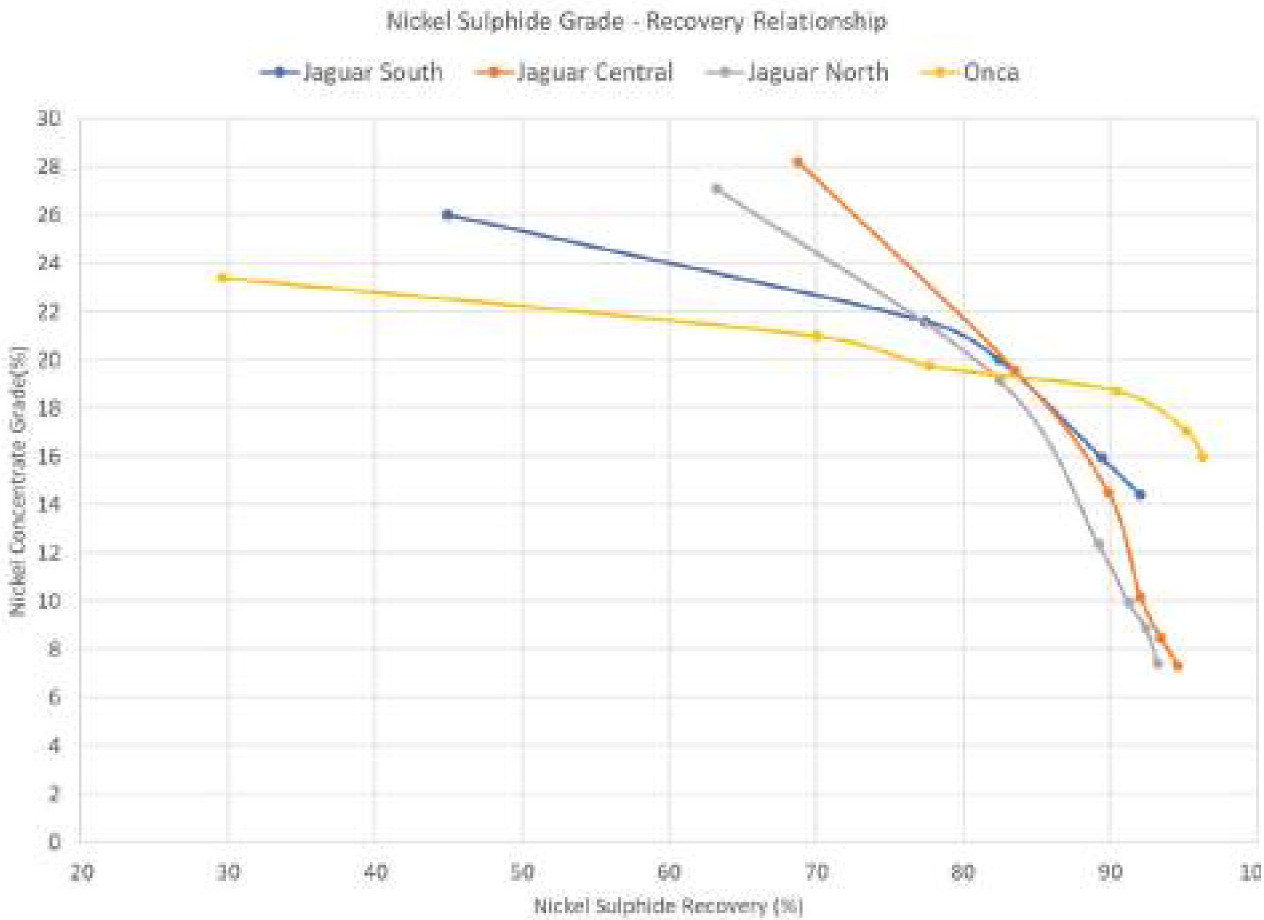

Figure 13 *- Rougher Floatation Results*

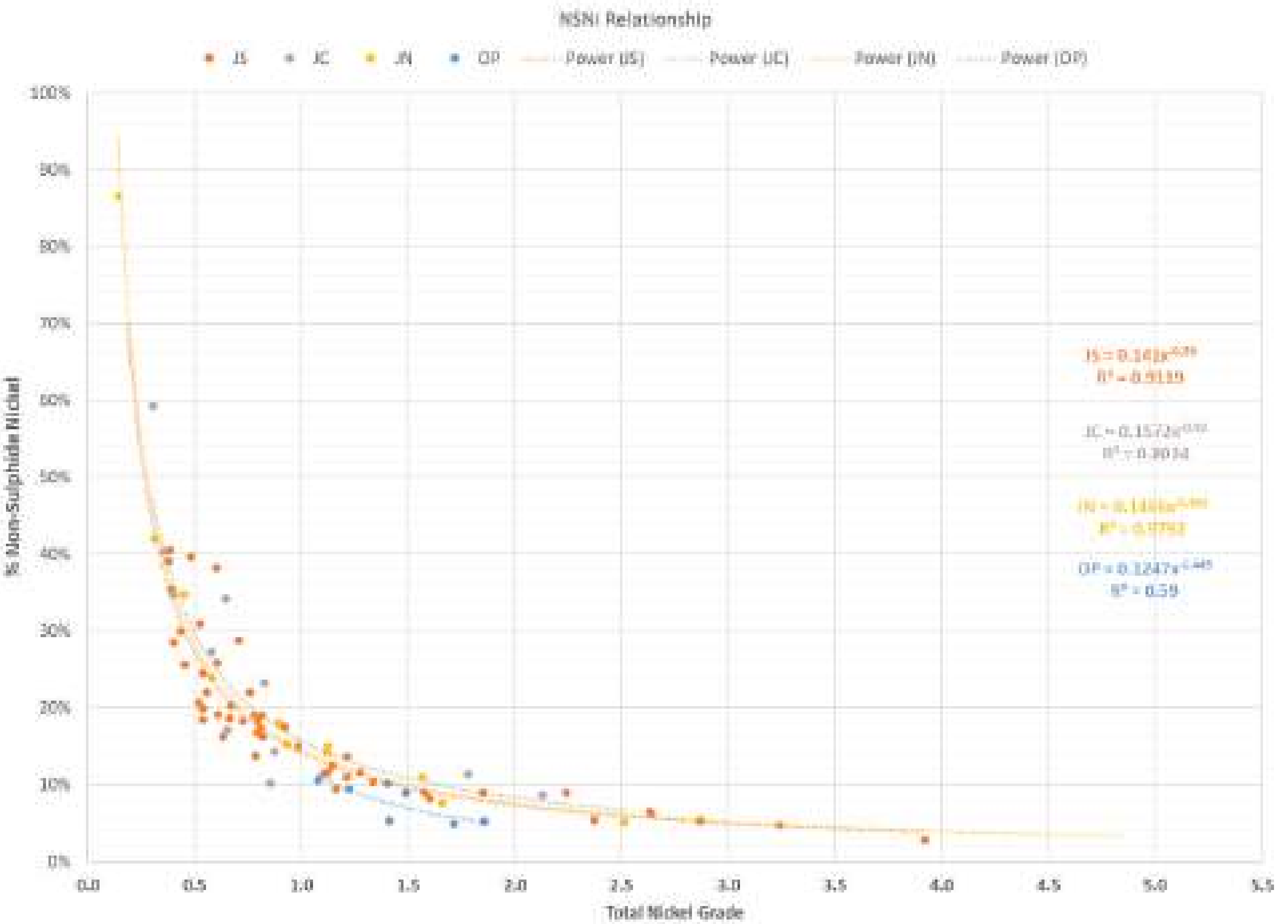

Figure 14 *- Non-Sulphide Nickel Estimation*

5. Process Plant

5.1 PLANT DESIGN

The JNP process plant design was based on the treatment of 2.7Mtpa of ore, to recover nickel, copper, cobalt and zinc sulphides. The pre-concentrate stage includes includes a jaw crusher to the crushed ore stockpile for the High-grade ROM; with the Low-grade ROM going to a jaw crusher ahead of the ore sorter. Sorted ore is stockpiled, with waste from the ore sorter being back loaded to waste domes.

The concentrate flowsheet incorporates feed from the crushed ore stockpile to the SAG and ball mill grinding circuit, recycle pebble crushing circuit, rougher and scavenger flotation, concentrate regrind circuit, cleaner flotation circuit, concentrate dewatering, concentrate load-out and tailings thickening facilities.

The concentrator is based on a conventional nickel sulphide flotation flowsheet using industry standard equipment. The concentrator operation will be monitored using a control system in a centrally located control room. Sampling and stream assay monitoring will be via an automated system linked to this control system.

A simplified flowsheet for the flotation concentrate is shown in Figure 15 and summary of design criteria in Table 12.

Composite		Units	
Ore Throughput		t/y	**2,700,000**
		dry t/h	337
Plant Availability		%	91.3
Average Feed Grade	**Nickel**	% Ni	1.08
	Copper	% Cu	0.08
	Cobalt	% Co	0.04
Concentrate Grade	**Nickel**	% Ni	15.8
	Copper	% Cu	0.91
	Cobalt	% Co	0.22
Concentrate Recovery	**Nickel**	% Ni	78.1
	Copper	% Cu	92.0
	Cobalt	% Co	40.0
	Sulphur	% S	50.0
Concentrate Production (average)		dry t/h	13.1

Table 12 *- Summary Design Criteria*

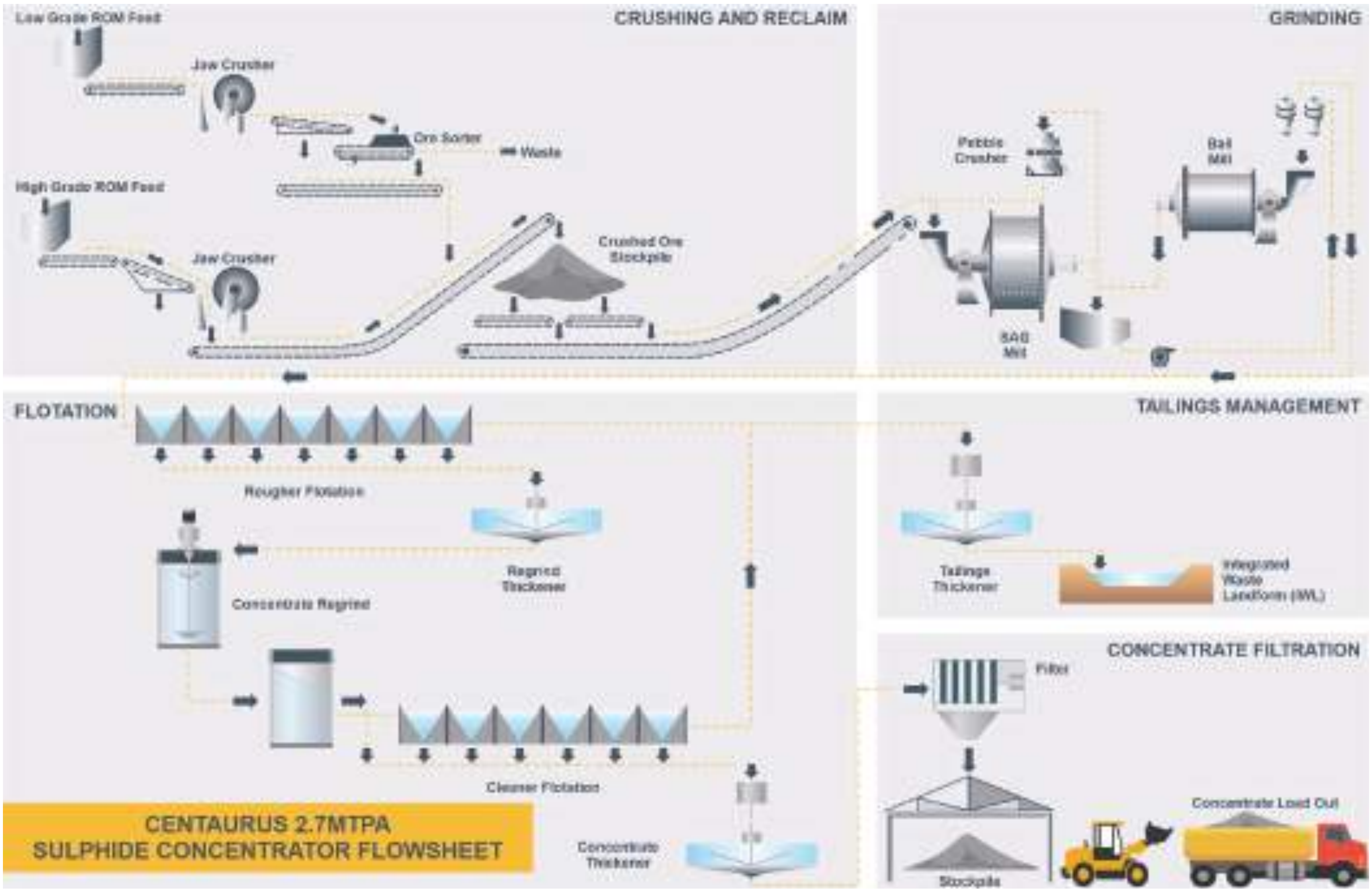

Figure 15 *- Base Case – Sulphide Concentrate Flowsheet*

5.2 PLANT PROCESSING PROFILES

The treatment profile for the Base Case was developed to process 2.7Mtpa ore, equivalent of 225,000t per month (Figure 16). High-grade ROM feed from open pit and underground operations represents 86% of the mill feed and is processed preferentially before ore-sorter feed. This option creates an operational schedule at a relatively constant feed grade over 10 years, as illustrated in Figure 16.

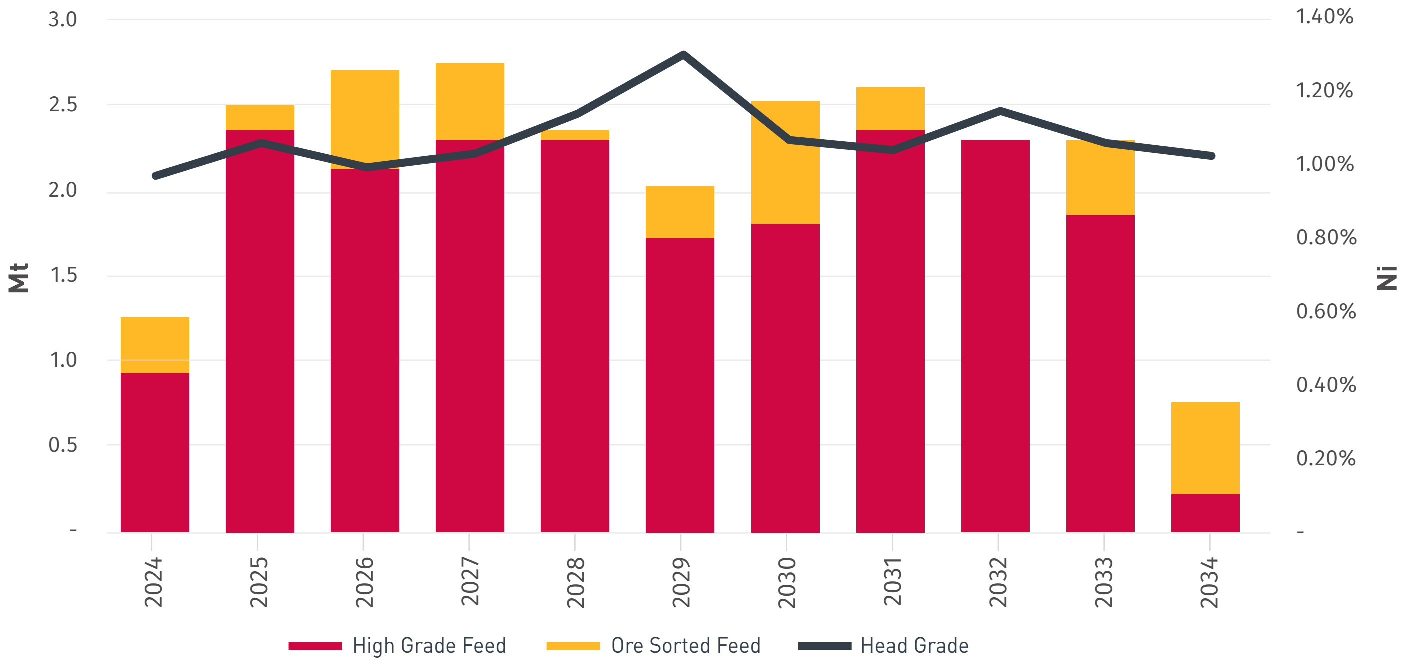

Figure 16 - *Mill Feed Treatment Profile*

6. Mine Site Infrastructure & Services

The JNP process plant location was selected by CTM based on the current pit layout with the aim of minimising earthworks and taking advantage of the local topography. The location of the Tailing Storage Facility (TSF) was selected by CTM to minimise the tailings pumping duty using a single stage of centrifugal pumping, and to ensure natural water flows in the area were not impeded.

6.1 TAILINGS STORAGE FACILITY

Tailings expert Chris Lane (L&MGSPL) supported the Company in the completion of the conceptual tailings management study. An Integrated Waste Landform (IWL) was chosen as it meets world best practice, targeting the highest safety factor against embankment failure as well as optimising use of mine waste.

- Up to 29.6 Mt of ore being mined from open-pit mining.
- Up to 3.6 Mt of ore being mined from underground mining.
- 90% of underground stope void will be backfilled with tailings.

Using these inputs and assumed settled density of 80% solids, the volume storage requirement is 8.5Mm3. Including a 30% design factor results in a tailings solids storage volume (design storage facility) of 11.1Mm3.

Lyndsay Dynan has completed a preliminary design of an Integrated Waste Landform (IWL) tailing's facility using conservative, Western Australian design principals:

- Upstream wall slope 2V:1H
- Downstream wall slope 3V:1H
- Top of wall 10m of compacted waste (plus a 5m internal clay liner).

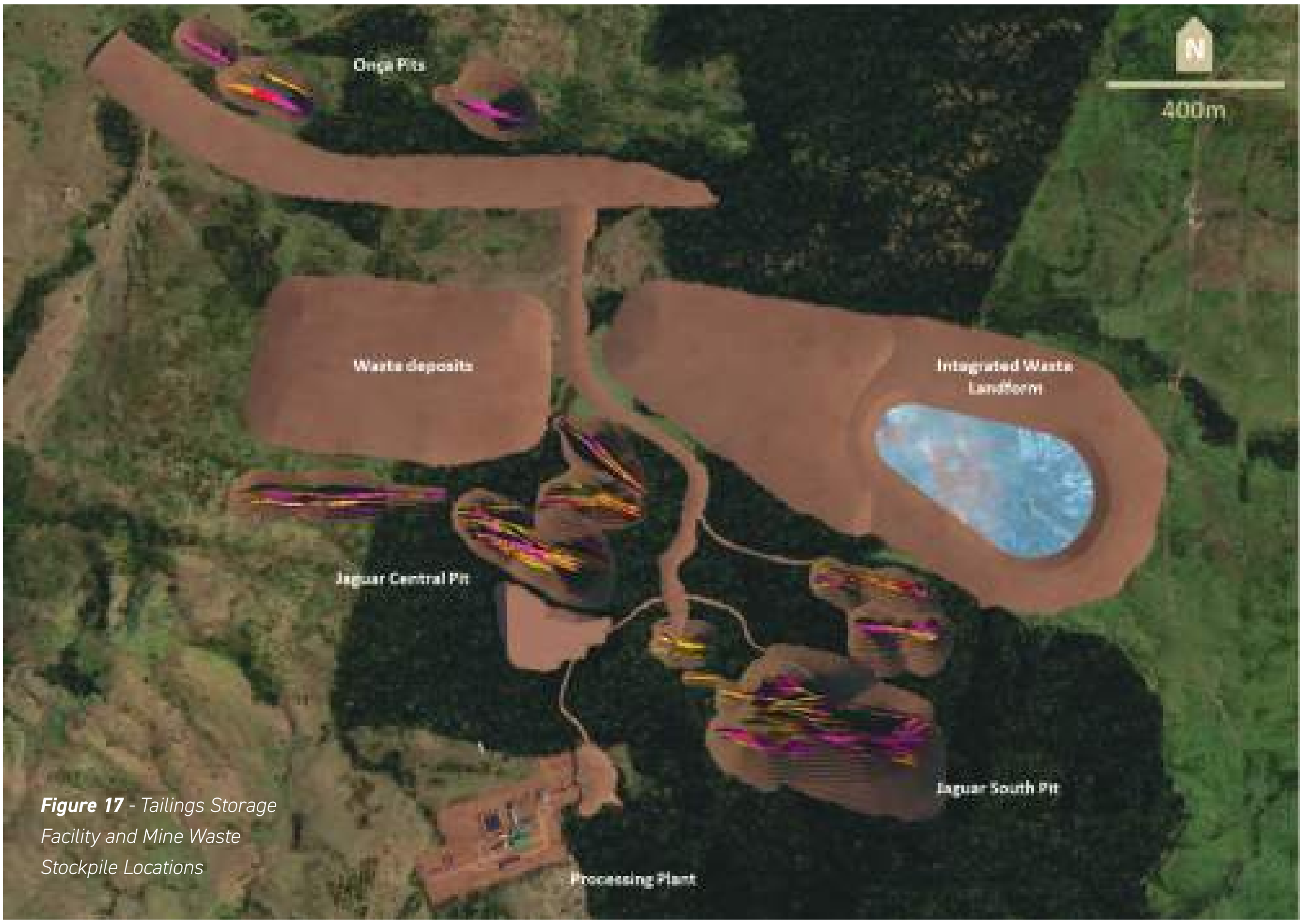

Figure 17 *- Tailings Storage Facility and Mine Waste Stockpile Locations*

6.2 ACCESS ROAD

The 40km access road between Tucumã and the project site needs to be upgraded. The site access road scope will be a combination of upgrading existing municipal roads and a section of new road into the JNP infrastructure area.

These upgrades will improve the road surface and drainage to facilitate reliable transport of consumables, equipment, and personnel to site.

6.3 POWER

Power will be supplied to site by a 138kV transmission line from the national energy grid at Tucumã (see Figure 18) to the JNP. The total length of the transmission line route is circa 39km. 138kV power will be reduced to 13.8KV and reticulated to the high voltage sub-station, which in turn reticulates this power directly to high voltage loads (i.e. SAG and Ball Mills) or various medium and low voltage transformers/substations distributed around the JNP. Power will be distributed to the process plant substations and non-process infrastructure via 13.8kV cables, either above ground aerials or direct buried.

6.4 NON-PROCESSING INFRASTRUCTURE

Allowance for the following non-processing infrastructure has been included within the study:

- Gatehouse/security facilities;
- Administration building;
- Training buildings;
- Laundry, change house and ablution facilities;
- Control room and communication infrastructure;
- Crib/meal and restaurant facilities;
- Emergency services (firefighting and medical) buildings and equipment;
- Workshops and Warehouse;
- Laboratory;
- Reagent stores; and
- Mining magazines and emulsion plant.

Other allowances include:

- Temporary facilities specific to implementation activities;
- Mobile plant required to support the process plant operations (excluding mining vehicles and earthmoving equipment);
- Water supply for construction and operations. These have been designed to source water from the local river and distribute to all processes and infrastructure areas within the project;
- Solid waste temporary storage; and
- Potable and waste water treatment plants

Figure 18 *- 138kV National Grid connection at Tucumã*

7. Project Implementation

A preliminary construction schedule was developed for the project based on an Engineering, Procurement, Construction, and Management (EPCM) basis for all aspects of the project.

The schedule indicates an overall duration of 22 months from notice of award for the EPCM contract to the project close-out. Lead times for critical long-lead items were confirmed from equipment suppliers. Other equipment package lead times were based on similar previous projects.

The following is to be assumed for the remaining studies required prior to implementation:

→ Nine months for the completion of a PFS;

→ Twelve months for the DFS including a 'DFS level' metallurgical test work program and finance approval;

→ Nine months for early front-end engineering design (FEED) work, incorporated into the EPCM contract tender phase;

→ The duration to complete the design and construction of the physical works is estimated at twenty-two calendar months, inclusive of project preliminaries, commissioning (plant ready for introduction of ore)

To deliver the project in the shortest possible timeframe it is critical that early FEED works are completed (including ordering of major equipment with extended lead times as required). Metso/Outotec has completed scoping level budgetary and lead time estimates for the required project equipment based on their recent in-country experience. Equipment delivery times range from twenty-six to forty-eight weeks. The SAG and ball mills have the longest lead times.

8. Operations & Human Resources

Once in operation, the Jaguar mine will require a total of 190 direct staff. Most of these staff have been assumed to be relocated to the local towns of Tucumã or Ourilândia do Norte or recruited from them. Training of the unskilled work force will occur during the construction and project implementation phase.

The mine operations will be run by the mining contractor and work from Monday to Sundays (inclusive) in three shifts of 8 hours with 4 operational teams. The mine contractor work force is expected to vary between 300-500 people.

The processing department, the largest direct employer of personnel, will work the industry standard 8 hours shift with 4 operational teams, with a workforce of 110 people. The administrative and technical services workforce is estimated to be 80 people and will work 44 hours per week, according to Brazilian labour laws.

9. Environmental & Mining Approvals

The key approvals for the JNP are the Mining Lease Grant from ANM (National Mining Agency) and the Environmental Approvals that are a three (3) stage approval process from the State Environmental Agency (SEMAS). The process to source these licences and approvals is set out below:

9.1 MINING LICENCE (PAE – PLAN OF ECONOMIC ASSESSMENT)

The JNP comprises one Exploration Lease (EL), 856.392/1996, that covers an area of 30km2 which has a valid Mining Lease Application (PAE - Plan of Economic Feasibility). The license is 100% owned by Aliança, a wholly owned Brazilian subsidiary of CTM.

The current PAE, which envisaged a large bulk-tonnage open pit mine and processing plant, was lodged with the Brazilian Mines Department (ANM) in March 2013 and is currently pending approval. The Company will lodge an updated PAE in Q2 2021 based on the findings of the Scoping Study. The ANM can grant the Mining Lease only after the Company has received the Installation Licence (LI) from the State Environmental Agency (SEMAS).

9.2 ENVIRONMENTAL LICENCES

PRELIMINARY LICENCE (LP) APPROVAL

The Preliminary Licence is the key environmental approval required for the Project and takes the most time to secure. The application for the LP comes from the lodgement of an Environmental Impact Assessment (EIA/RIMA).

The lodgement of the EIA/RIMA is planned for Q2 2021. All wet and dry season environmental studies (water, flora, fauna, air quality, noise, archaeology, malaria etc) are completed with lodgement awaiting technical information from this Scoping Study.

Approval of the LP demonstrates that the Pará State considers the overall project definition to be socially and environmentally sound and can go ahead. The LP is also the main license required by project financiers. It is expected that SEMAS will take ~12 months to approve the EIA/RIMA from the time it is lodged and this approval will grant the Company the LP.

INSTALLATION LICENCE (LI) APPROVAL

In order to make application for the Installation Licence (LI), the Company is required to lodge an Environmental Control Plan ("RCA/PCA") document with SEMAS and this will be done as soon as the LP is approved. The RCA/PCA report also has more detail of the environmental programs that flow from the plant layout, particularly in relation to emissions and pollution control and also covers how flora/fauna will be managed during the operations phase.

The approval of the RCA/PCA and LI grant allows project construction to commence. It is expected that SEMAS will take ~9 months to approve the RCA/PCA and grant the LI. The LI is therefore expected to be approved by the end of Q1 2023 at which point construction can begin. All pre-strip, mine preparation activities and plant commissioning can also commence under the LI approval.

OPERATING LICENCE (LO) APPROVAL

Once the project is built, an inspection of the project by SEMAS officers is required to ensure the plant was built in accordance with the specifications advised to SEMAS during the LI Process. It is the final approval to start commercial production. Approval will grant the Company its Operational Licence (LO). Construction is expected to take 12 months from approval of the LI (Q1 2023) and therefore the LO is expected to be approved by the end of Q3 2024. Once the LO is issued commercial production from the plant can occur (expected Q3 2024), as per Figure 19.

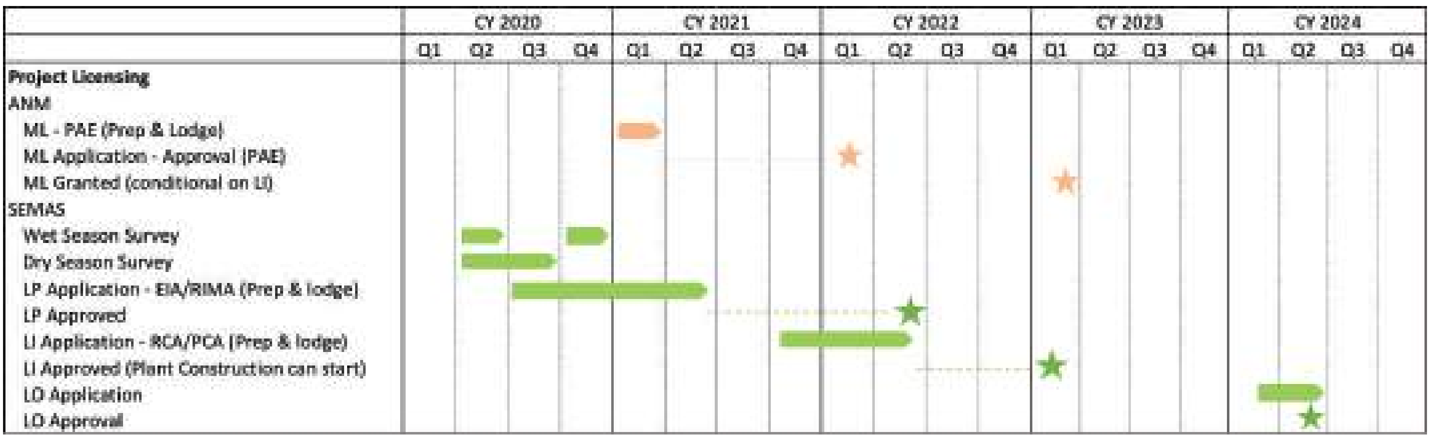

Figure 19 *- JNP Project ANM and SEMAS Approvals Schedule*

10. Social Responsibility & Sustainability

Centaurus has operated in Brazil for more than 13 years and understands the importance of social responsibility. The Company is integrating all the social issues (which have been defined by the industry as Environmental, Social and Governance issues), into an overall risk management strategy across all operations.

10.1 LOCAL EMPLOYMENT

The Jaguar Project is located 40km from 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 project will have a positive social impact by providing additional job opportunities and training in mining skills.

The JNP will create an estimate 1,000 jobs during construction and then maintain a workforce in excess of 190 company employees and up to 500 mining contractor employees during the initial 10-year project life. This will not only provide direct employment, but will also stimulate the local economies creating a number of indirect employment and business opportunities. The project will also generate royalty and tax income for municipal and state governments.

More than 90% of the workforce currently working on the project, including employees and outsourced labour, are from the south eastern region of the State of Pará.

10.2 COMMUNITY INITIATIVES

Centaurus has a partnership with the two villages closest to the project site in order to improve their sanitation systems, including waste disposal, water supply and sewage treatment. Furthermore, the Company has carried out the construction of bridges, installation of culverts and the upgrade of the road between Tucumã and the site. The upgrade is planned to continue during the next dry season (May – Nov 2021).

10.3 CENTAURUS' COVID RESPONSE

Centaurus has taken a number of important steps to safeguard the health and safety of the Company's workers, their families and the wider community while at the same time maintaining business continuity during the COVID-19 pandemic.

These include the introduction of a number of new protocols, revised working arrangements and social distancing practices as well as making a significant contribution to the local municipal health services of Tucumã and São Félix do Xingu through the purchase of masks, gowns, hand sanitiser and COVID-19 test kits to better equip them for the delivery of health services into their respective communities whilst COVID-19 remains active.

A nurse dedicated to the management of the Company's COVID-19 activities test employees routinely and any personnel who are feeling unwell or showing COVID-19 like symptoms. A dedicated site camp for field employees to stay during the course of the working week has been established, enhancing social distancing measures by limiting employee contact with the broader community during the working week.

To date, COVID-19 has had relatively minimal impact on the Company's operations and the tight protocols adopted by the Company have been highly effective in managing the risk of transmission.

11. Concentrate Logistics

Based on the estimated production volumes of nickel bulk concentrate, the logistic alternatives between the JNP and ports have been reviewed. For local haulage transportation there are two port load-out possibilities:

- Vila do Conde; located 903km from the Project site. This port is a well-organized industrial port, with ample area which can be leased directly from the port authority or from other third parties. Concentrate would have to be trucked the whole distance.
- Itaqui Port (São Luís); this would require access to Vale's rail infrastructure (Parauapebas, ~250km via road).

For the Scoping Study the Company proposes to transport concentrate from JNP to the Vila do Conde port and unload into the export vessels using a containerised solution that is applicable for use in either port in the future. Access to Vale's rail infrastructure will be explored in future studies.

12. Market & Nickel Pricing Assumptions

12.1 NICKEL MARKET

Nickel is mainly used in the production of stainless steel and other alloys and can be found in food preparation equipment, mobile phones, medical equipment, transport, buildings, power generation and increasingly in battery usage. The current size of the nickel market size is approximately 2.5Mtpa with overall nickel use growing at an annual rate of 4% over the last decade.

Nickel demand for batteries has grown fourfold in the 6-year period from 2012 to 2018, with the growth occurring from a low base of approximately 33,000tpa or 2% of the market. Scenarios for the increased rate of adoption of electric vehicles (EVs) conservatively forecast required additional nickel volumes of between 750,000 tonnes and 2 million tonnes per annum.

Nickel demand from EV use will far exceed nickel production from existing operations in any scenario of EV adoption.

EV nickel demand requires Class-1 nickel principally provided by sulphide and laterite projects using HPAL, rather than NPI which targets nickel for stainless steel production.

Importantly, sulphide projects have carbon footprints significantly lower than HPAL and NPI Projects which will drive end users to seek out sulphide nickel where it is available.

The forecast rapid increase in adoption of electric vehicles and the growing importance of battery technology will logically drive increased demand for higher purity nickel. Stated government policy in relation to renewable energy and EVs and strategic targets for EV production set by global automotive manufacturers all support this paradigm.

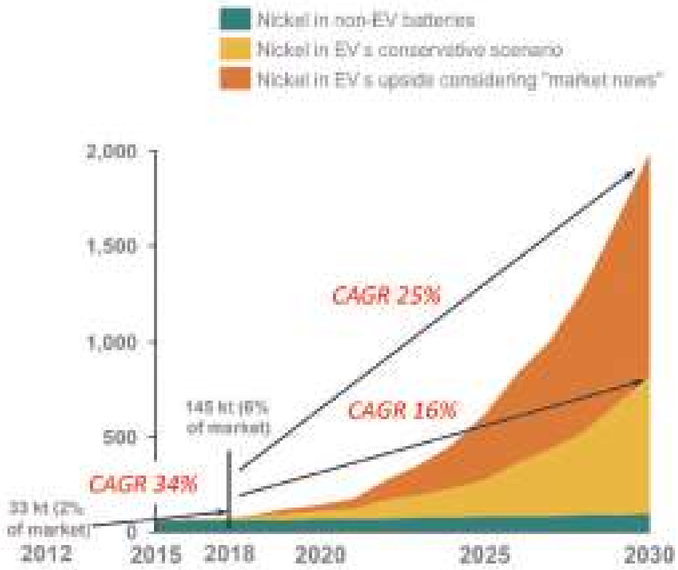

Figure 20 *- EV Nickel Demand Scenarios*

12.2 NICKEL PRICE ASSUMPTION

Figure 21 shows the historical LME nickel price for the 10-year period from 2010 to 2020. The nickel price closed the 2020 year at US$16,540/tonne and continued to rise during January and February 2021 with the LME settlement price increasing to US$19,690/tonne on 22 February 2021 before pulling back to a price of US$16,300/tonne at the time of this Base Case Scoping Study.

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 the view of a positive outlook for Class 1 nickel.

The JNP Base Case Scoping Study assumes a nickel price of US$16,530/tonne as this is considered a conservative estimate of the nickel price at the time of planned first production from Jaguar in the second half of 2024, especially when referenced against a number of major investment bank nickel price forecasts for the middle of the decade.

12.3 JAGUAR PRODUCTION

CONCENTRATE TERMS

The Jaguar project is forecast to produce 128dktpa of nickel concentrate over the 10-year operational life of the project for a total of 203.3kt of nickel in concentrate at an average annual production rate of just over 20,000t of nickel in concentrate per annum, see Figure 22.

Concentrate Grade	
Nickel	15.8%
Copper	0.9%
Cobalt	0.2%
Fe:MgO Ratio	9:1

Table 13 *- Jaguar Average LOM Concentrate Specification*

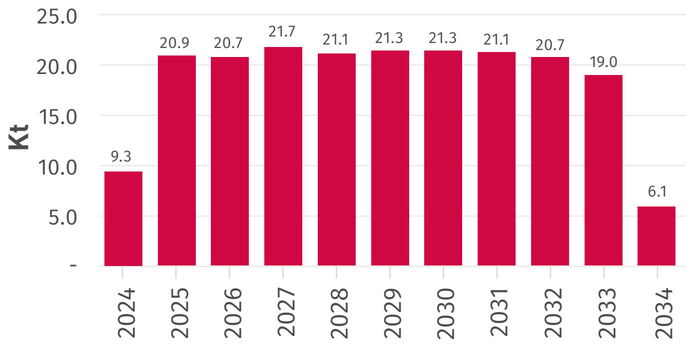

Figure 22 *- Nickel in concentrate*

The indicative concentrate specifications of Jaguar nickel concentrate are summarised in Table 13. Fe:MgO ratio in the concentrate is approximately 9.0 with impurities below the penalty levels currently assumed. The model treats by-product credits from payable cobalt as an offset against operating costs. Cobalt by-product credits only were considered for the study.

Nickel concentrate revenues have been modelled for typical Asian and Atlantic offtake terms. The study results presented in this report are based on Asian terms where nickel payability is based on an LME price scale. Average payability for the life of mine of the project is estimated at 75%.

Concentrate terms are assumed to be basis CIF delivery with the seller meeting the costs of transport and discharge to the buyers' port and insurance. An allowance of US$70/tonne of concentrate has been provided for these costs.

OFFTAKE

Under the terms of the Jaguar Sale and Purchase Agreement (SPA), Vale have a first right to 100% of offtake from the Jaguar project priced on an arm's length basis. This feature of the SPA provides some measure of offtake risk mitigation. Notwithstanding this, the indicative specifications of the Jaguar concentrate indicate that it will be a product that will have strong marketability.

Figure 21 *- Historical Nickel Price*

13 Capital Cost Estimate

13.1 PRE-PRODUCTION CAPITAL

The pre-production capital cost estimate developed for the JNP includes costs associated with the procurement, construction and commissioning required to establish the project facilities prior to achieving commercial production.

The capital cost estimate has been completed by Entech (Mining operations) and DRA (Process plant and infrastructure) with CTM input where necessary. Formal enquiries to several process plant suppliers based on technical and commercial scope of works support the estimate. Table 14 summarises the total project capital costs including direct costs, indirect costs and contingency required prior to the commencement of commercial production.

Pre-strip, TSF, Waste Dump & Mine Access

No capital has been included for mining fleet as the operation is proposed to be undertaken by a mining contractor. Costs for pre-strip waste removal and development of the TSF are included. The initial lift of the TSF requires 3.58M bcm of waste which will be taken from the pit area pre-strip at a total cost of US$32.7M. The mining contractor will also establish the pits, waste dumps and site haul roads.

The same mining contractor would be responsible for the pre-operation's infrastructure earthworks including the preparation for the contractor facilities, plant and weighbridge sites.

Processing and Non-Process Infrastructure

The processing and non-processing capital cost estimate is presented in fourth quarter 2020 United States dollars (US$) to an accuracy of ±40%. The estimated capital cost for the Jaguar Nickel process plant and process plant infrastructure has been produced using a priced mechanical equipment list as the basis. Earthworks, electrical and instrumentation costs have been developed from material take-offs and validated database rates.

Access Road & Power Line

Approximately 40km of road between Tucumã and the project site will be upgraded as part of the project. This will be undertaken by a local civil contractor and is presently estimated to cost US$6.2M.

Power will be supplied to site by a 138kV line connected from site to the national energy grid at Tucumã. The total length of the transmission line route is 39km with an estimated total cost of US$8.6M, sourced from a local power company proposal.

13.2 SUSTAINING AND DEFERRED CAPITAL

Total sustaining and deferred capital costs for the project are US$138.5M.

The principal deferred capital costs are associated with open pit and underground mining as follows:

- → US$59.3M associated with overburden removal and cut-backs; and
- → US$51.3M for decline development, mine infrastructure and ventilation.

The IWL requires future dam raisings which are estimated to be US$7.7M. This does not include the costs of delivering and spreading waste material at the TSF site which is included in mine waste movement operating costs. The estimated cost of the paste plant is USD$9.8M, to be incurred in year 5. The JNP tenement is part of a Sale & Purchase Agreement with Vale, which includes a deferred payment of US$5.0M million on commencement of commercial production.

The Scoping Study assumes that the salvage value of the plant will offset the mine closure costs estimated to be incurred for environmental rehabilitation, plant removal and disposal and labour retrenchment costs at the completion of mining and processing activities.

Pro Production Capital Cost	Units	Base Case
Mining (IWL & Pre-Strip)	US$M	32.7
Flotation Circuit Equipment	US$M	44.5
Electrical	US$M	12.9
In-Plant Piping	US$M	5.3
General Site - Earthworks	US$M	1.8
Contractor Mobilisation Allowance	US$M	1.2
Engineering Design/Draft Labour	US$M	7.1
Project & Construction Management	US$M	7.2
Commissioning	US$M	0.9
Project Support Infrastructure	US$M	30.7
Owners Costs	US$M	9.2
Sub total	**US$M**	**153.5**
Contingency	US$M	24.1
TOTAL	**US$M**	**177.6**

Table 14 *- Pre-Production Capital*

14. Operational Cost Estimate

Operating costs would vary over the life of the mine as the strip ratio changes. The operating cost estimate has been determined from the mining contractor proposals, supplier quotations and complementary data from recent studies of similar operations and database information.

The larger components of operating costs comprise contract mining, diesel fuel, reagents and grinding media, labour and power. The operating cost estimate is presented in fourth quarter 2020 United States Dollars (USD) to an accuracy of ±40%. The project operating costs are outlined in Table 15 below. Figure 23 provides a further breakdown of costs for each case.

Operating Cost	US$/t ore	US$/t metal	US$/lb
Mining	29.05	3,434	1.56
Processing	11.33	1,340	0.61
Logistics	3.55	420	0.19
General & Administration	2.13	251	0.11
By-product Credit	(1.07)	(127)	(0.06)
Total C1 Costs	**44.99**	**5,318**	**2.41**

Table 15 *- Base Case Operating Costs*

General & Administration costs include a provision for ongoing rehabilitation expenditure estimated at US$10.5M over the life of the project.

14.1 MINING

The mining contractor will be responsible for all open pit and underground mining and auxiliary operations, the mine operation costs are outlined in Table 16 and 17 below.

Open Pit Mining Operating Cost	LOM US$M	US$/t ore mined
Waste Mining	387.6	13.09
Ore Mining	84.7	2.86
Dayworks	10.6	0.36
Grade Control	29.4	0.99
Overheads	23.6	0.80
Total	**535.8**	**18.09**

Table 16 *- Open Pit Operating Costs*

Underground Mining Operating Cost	LOM US$M	US$/t ore mined
Ore Drive	23.6	7.35
Stope	89.0	27.71
Op Access	1.3	0.42
Dayworks	2.6	0.81
Grade Control	3.2	1.00
Mine Services	4.6	1.43
Mine Overheads	38.0	11.83
Total	**162.4**	**50.54**

Table 17 *- Underground Operating Costs*

Minor additional mining costs are primarily related to technical staffing and grade control costs. The average mining cost for the complete operation was estimated to be US$29.05/t of ore mined.

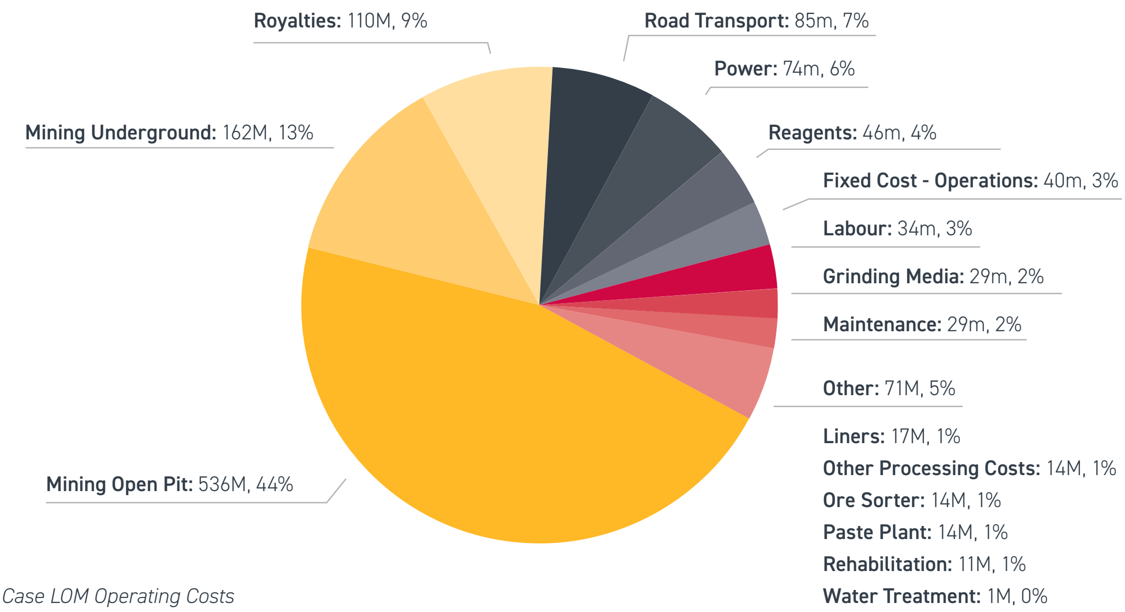

Figure 23 *- Base Case LOM Operating Costs*

14.2 PROCESS

The estimates have been divided into key cost categories, summarising the average annual operating costs for processing ore at 2.7Mtpa for the designed sulphide concentrator. The key cost categories are summarised in Table 18.

Operating Cost	LOM US$M	US$/t ore
Labour	33.9	1.41
Power	74.4	3.09
Maintenance	29.0	1.21
Reagents and Consumables	93.2	3.88
Paste Plant	13.6	0.57
Miscellaneous	28.3	1.18
Total	**272.5**	**11.33**

Table 18 *- Processing Operating Costs*

14.3 LOGISTICS

The Jaguar concentrate is proposed to be transported 903km from site via the existing road network to the Villa de Conde Port near Belem. Based on benchmarking of similar operations in Brazil the costs of concentrate logistics which include storage at Port and stevedoring are estimated at US$61.0/tonne of concentrate. Sea freight is estimated to be US$70/tonne of concentrate to the Asian market.

14.4 GENERAL & ADMINISTRATION (G&A)

The cost of direct G&A activities consists of the site G&A team (including HSEC personnel and contractors) and the services provided by them. G&A costs are estimated to be US$4.0M per year.

15. Financial Analysis

15.1 KEY ASSUMPTIONS

A comprehensive financial model for the JNP has been created as a key part of the Base Case Scoping Study activities. The financial model incorporates physical, timing, cost and financial assumptions. The timing and financial assumptions are presented below with physical and cost assumptions detailed in the preceding sections of this report.

Commodity Prices

The key revenue assumption is the Nickel price which is assumed at US$16,530/tonne. The current spot price is approximately US$16,300/tonne. Refer to Section 12.2 above for further comment on nickel price assumption.

Royalties

The government royalty (CFEM) rate for base metals is 2% on the value of concentrate sales revenue, less certain allowable deductions for taxes charged in Brazil. It is assumed for the purpose of the study that there are no landowner royalties.

The tenement on which the JNP is located was acquired under a Sale & Purchase Agreement (SPA) with Vale. The terms of the SPA include a Net Operating Royalty (Gross) of 0.75% payable to Vale. Aliança also assumes the original obligation of Vale to BNDES for a 1.8% Net Operating Revenue royalty.

Foreign Exchange Rates

The foreign exchange assumptions used in the study are set out in Table 19 below:

	Assumption for SS	Current March 2021
USD/BRL	5.00	5.75
AUD/BRL	3.75	4.38
EUR/BRL	5.80	6.79
AUD/USD	0.75	0.76
USD/CAD	1.33	1.26
EUR/USD	1.16	1.18

Table 19 *- Foreign Exchange Rates*

Whilst these rates represent conservative assumptions compared to current rates, management considers that these rates are more appropriate long-term assumptions given the significant recent volatility on financial markets.

Income Tax

The JNP is located in the Amazon region and is expected to be eligible for a 75% taxation concession which would be applied to the 25% corporate income tax rate. The Social Contribution Tax on Profits (CSLL) of 9% results in a total notional tax rate of 15.25%.

15.2 FINANCIAL OUTCOMES

Table 20 summarises the key financial results of the Base Case Scoping Study based on the assumptions detailed in this section and throughout this document. Cashflows are discounted using a rate of 8% real with NPVs presented from FID.

Project life cashflows are illustrated in Figure 24 below.

15.3 SENSITIVITY ANALYSIS

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 25 below.

Key Results	Units	Base Case
Pre-Production Capex	US$M	178
Sustaining & Deferred Capex	US$M	138
Nominal Production Rate	Mtpa	2.7
Nickel Production	t	203,300
Gross Revenue	US$M	2,422
LOM Opex (net of by-product credits)	US$M	1,192
EBITDA	US$M	1,230
NPV8 – Pre-Tax	US$M	543
NPV8 – Post-Tax	US$M	453
NPV8 – Post-Tax	A$M	604
Internal Rate of Return – Pre-Tax	%	62%
Internal Rate of Return – Post-Tax	%	54%
Payback - Pre-Tax	years	1.7
Payback – Post-Tax	years	1.9

Table 20 *- Key Financial Results*

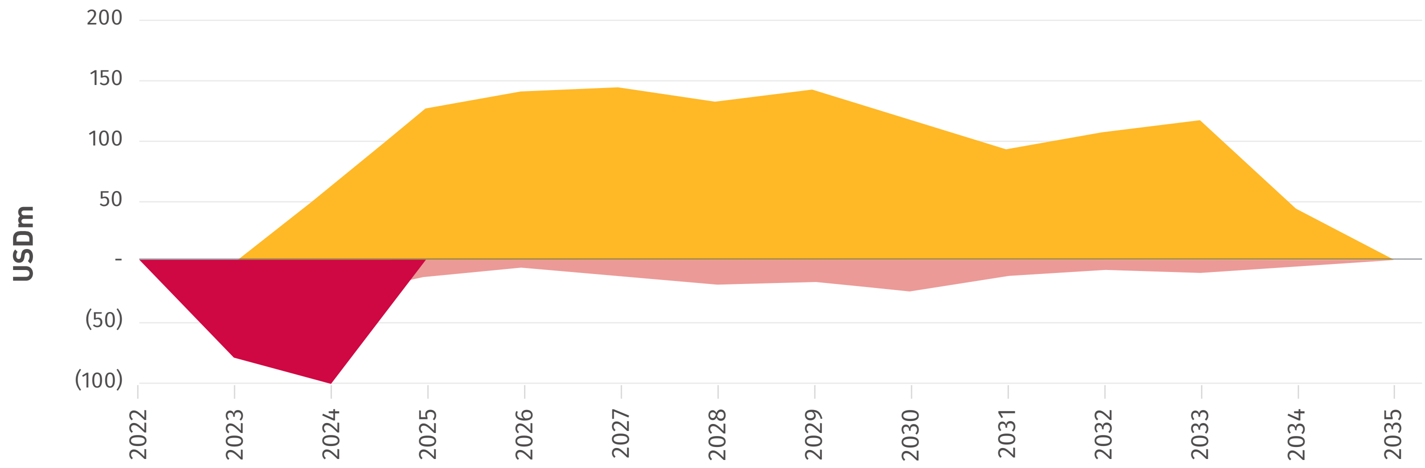

Figure 24 *- Project Cashflow Base Case*

Variable	Base Case	Sensitivity	NPV_8 after Tax US$453 M	
Ni Price	US$16,530/t	+/- 10%	279	626
Ni Recovery	78%	+/- 10%	333	571
Operating Costs	LOM US $1,192M	+/- 10%	418	488
Exchange Rates	EUR/USD 1.16 EUR/BRL 5.80 USD/BRL 5.00	+/- 10%	436	466
Capital Cost (Development)	US$178M	+/- 10%	438	468

250.0 300.0 350.0 400.0 450.0 500.0 550.0 600.0

Figure 25 *- Sensitivity Chart - Base Case*

16. Conclusion & Recommendations

The Base Case Scoping Study confirms that the development of a 2.7Mtpa open pit mine and flotation concentrator at the JNP is technically and commercially feasible. The Company intends to proceed to Pre-Feasibility Study phase, with the objective to study the Base Case option. The Value-Add Scoping Study is expected to be completed in the next 3-4 weeks.

The study of both Options in the PFS stage will allow the Company to complete the required trade-off analysis to a level that will allow an informed decision on how the project should move forward in the Definitive Feasibility stage. Although there will be additional costs involved this should not affect project delivery time and will allow for the maximum project value to be evaluated.

There are a number of work fronts that can bring **opportunities and growth** to the JNP, the primary being resource growth and process development.

The March 2021 JORC Indicated and Inferred MRE of 58.9Mt at 0.96% Ni for 562,600 tonnes of contained nickel metal underpins the Production Target of 32.8Mt at 0.84% Ni for a total of 275,600 tonnes of contained nickel metal, representing a conversation of roughly 50% of resources to Production Target. The Production Target in turn supports a Mill Feed of 24Mt at 1.08% Ni for 260,300 tonnes of contained nickel.

Pit optimisation work demonstrated that the cut-off grade can be lowered under the same technical parameters and cost scenarios that would result in larger conceptual open pits, longer mine life and additional metal tonnes. Further cut-off grade analysis will be carried out in the PFS.

The JNP hosts multiple prospects and targets that have yet to be drill-tested, characterized by magnetic and/or electromagnetic (EM) anomalies coincident with significant soil geochemical support.

The Company will continue with an aggressive drilling plan focusing on resource development (infill) drilling as well as resource extension drilling at the six Jaguar deposits and two Onça deposits. There is significant potential to expand both the shallow and deeper high-grade Resources within these deposits. This will be complemented with greenfields RC drilling to identify new discoveries.

Process development testwork focusing on process flow sheet optimisation will be ongoing, designed to optimise recovery and achieve a high-quality nickel concentrate. Additional ore sorting testwork will be undertaken which may increase the volume of economic nickel as well as further reducing the amount of potentially acid forming (PAF) waste reporting to the mine waste stockpiles thereby reducing environmental risks. These studies will be part of the PFS which will assist in determining the Project's optimal throughput size and economics.

CentaurusMetals
Limited

AUSTRALIA

Level 2, 1 Ord Street
West Perth, WA 6005
PO Box 975, West Perth, WA 6872
T: +61 8 6424 8420

BRAZIL

Centaurus Brasil Mineração Ltda
Avenida Barão Homem de Melo, 4391
Salas 606 e 607 - Estoril - CEP:30.494.275
Belo Horizonte MG
T: +55 31 3194 7750

www.centaurus.com.au
ACN 009 468 099