



Developing a globally significant nickel project for a clean energy future

## JUNE 2021 QUARTERLY ACTIVITIES REPORT

Value-Add Scoping Study confirms outstanding economic returns from production of battery-grade nickel sulphate with strong margins and low capital intensity; Resource in-fill and extensional drilling continues to deliver outstanding results including a record intercept of 56.1m at 2.05% Ni incl. 17.6m at 4.86% Ni

#### 26 July 2021

## JAGUAR NICKEL SULPHIDE PROJECT

- Value-Add Scoping Study for the Jaguar Nickel Sulphide Project development highlights outstanding economic returns from the production of battery-grade nickel sulphate:
  - Production of +20,000tpa of recovered nickel in sulphate and +9,600tpa of a mixed sulphide precipitate (MSP) over an initial 13-year mine life
  - Post-tax NPV<sub>8</sub> of ~A\$1.11 billion (~US\$831 million) and post-tax IRR of ~52%
  - Post-tax capital payback of ~1.8 years from first nickel sulphate production
  - Net Revenue totalling ~A\$6.04 billion (~US\$4.53 billion)
  - EBITDA totalling ~A\$3.25 billion (~US\$2.44 billion)
  - Average Annual Free Operating Cash Flow (Pre-tax) of ~A\$252 million (~US\$189 million)
  - High LOM Cash Operating Margin of ~US\$4.27/lb of Ni
  - Pre-production CAPEX of ~US\$288 million (including contingency)
- Further outstanding results from resource in-fill, extensional and step-out drilling, including:
  - JAG-DD-21-151: 56.1m at 2.05% Ni from 206.0m, incl. 17.6m at 4.86% Ni from 208.0m and 6.7m at 2.09% Ni from 255.4m (Jaguar South)
  - JAG-DD-21-117: 12.9m at 2.95% Ni from 31.1m; incl. 4.0m at 4.70% Ni from 35.8m (Jaguar South)
  - JAG-DD-21-142: 64.9m at 1.07% Ni and 2.10% Zn from 216.5m (Jaguar Central)
  - JAG-DD-20-113: 32.5m at 1.45% Ni from 258.8m; incl. 6.3m at 1.87% Ni from 268.2m and 6.7m at 2.20% Ni from 278.8m (Jaguar Central)
- 25,000m regional drill program underway targeting new discoveries outside of the existing Resource areas, with an initial focus on the Leão, Tigre and Filhote prospects.
- Initial results from Filhote indicate potential for platinum group element (PGE) mineralisation, principally palladium (Pd), with initial shallow results including:
  - JAG-RC-20-005: 32.0m at 0.39g/t Pd, 0.05g/t Pt and 0.04% Ni from 41.0m; incl. 6.0m at 0.62g/t Pd, 0.08g/t Pt and 0.04% Ni from 61.0m
- Second Possession Agreement secured providing Centaurus with possession rights over approximately 1,500 hectares of the land at Jaguar, covering ~85% of the current Resource area.

## CORPORATE

Cash at 30 June 2021 of \$20.4 million.

Centaurus Metals Limited Centaurus Metals Limited Level 2, 1 Ord St West Perth WA 6005 AUSTRALIA Brazilian Office Centaurus Brasil Mineração Ltda Avenida Barão Homem de Melo, 4391 Salas 606 e 607 - Estoril CEP: 30.494.275, Belo Horizonte MG BRAZIL ASX: CTM ACN 009 468 099 office@centaurus.com.au

T: +61 8 6424 8420



## **JAGUAR NICKEL PROJECT**

The Jaguar Nickel Sulphide Project, located in the world-class Carajás Mineral Province of northern Brazil (Figure 1), was acquired from global mining giant, Vale S.A. ("Vale") in April 2020.

Since completing the acquisition, Centaurus has defined a total Mineral Resource Estimate (MRE) for the Jaguar Project of 58.9Mt @ 0.96% Ni for 562,600t of contained nickel, with 40 per cent of the MRE in the higher-confidence Indicated Resource category (20.1Mt grading 1.12% Ni for 225,800 tonnes of contained nickel).

The Company delivered a positive Base Case Scoping Study in March 2021 confirming strong technical and economic outcomes from the development of a 10-year open pit and underground mining operation using a conventional nickel flotation plant to produce 20,000 tonne of nickel per annum.

This was followed by the delivery of a Value-Added Scoping Study in May 2021 that confirmed the potential for outstanding financial returns from the production of nickel sulphate through the inclusion of a Pressure Oxidation circuit to further value-add the nickel concentrate produced in the flotation plant.

Following the robust and compelling economics seen in the Jaguar Value-Add Scoping Study, the Company has elected to move straight to a Definitive Feasibility Study (DFS) on the Project focused on the production of a nickel sulphate product. By its very nature, however, the DFS will require a study of the production of a nickel concentrate as the feed for the hydrometallurgical (nickel sulphate) circuit.

Centaurus is already well advanced on many of the key components of the proposed project development, positioning the Company to complete the DFS by Q4 2022.

Through the development of the Jaguar Project, Centaurus' goal is to become a new-generation nickel sulphide mining company in Brazil, capable of delivering more than 20,000 tonne per annum of Class-1 nickel sulphides to global markets over the long term, and to do so in a sustainable and responsible manner that ensures the Company meets the highest possible ESG (Environmental, Social and Governance) standards.



#### Figure 1: Jaguar Nickel Sulphide Project Location Map



### VALUE-ADD SCOPING STUDY

Centaurus completed an independent Value-Add Scoping Study for the development of the Jaguar Project during the June Quarter, with the results highlighting the outstanding financial and economic returns that would be generated by Centaurus becoming a **globally significant sustainable, long-term and low-cost producer of battery-grade nickel sulphate** for the growing electrification supply chain.

**The Value-Add Scoping Study** considered open pit and underground mining over an **initial 13-year mine life**, delivering nickel sulphide feed to a **2.7Mtpa conventional nickel sulphate plant** to produce +20,000 tonnes of recovered nickel in sulphate and +9,600 tonnes of a mixed sulphide precipitate (MSP) per year.

The Key Assumptions underpinning the Jaguar Value-Add Scoping Study economics (Table 1) and the key financial results from the study (Tables 2 and 3) are summarised below:

Table 1 – Value-Add Case Financial Model Assumptions and Production Target				
Assumptions	Units	Value-Add 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 Sulphate Premium	US\$/t	1,102		
Ni Price	US\$/lb	7.50		
Ni Sulphate Premium	US\$/lb	0.50		
Corporate tax rate, Year 1-10	%	15		
Corporate tax rate, Year 11 Onwards	%	34		
Discount Rate - Real	%	8		
Physicals				
Production Target	45.0Mt	: @ 0.80% Ni for 361,700t Contained Ni		
Mill Feed	Mt	33.7		
Contained Ni in Mill Feed	t	341,300		
Mill Feed Head Grade	% Ni	1.01%		
Recovered Ni to Concentrate	t	278,300		
Nickel Recovery to Concentrate	%	81.5%		
Recovered Ni in Sulphate	t	262,100		
Recovered Zn in MSP	t	80,500		
Recovered Co in MSP	t	7,300		
Recovered Ni in MSP	t	3,100		

#### Table 1 – Value-Add Case Financial Model Assumptions and Production Target

#### Table 2 – Value-Add Case Key Project Results – Capital and Operating Costs

Key Cost Information	Units	Value-Add Case
Capital Costs		
Pre-Production Development Capital	US\$M	288
Sustaining and Deferred Capital	US\$M	213
Operating Costs (100% payable basis)		
C1 Cash Costs	US\$/lb	3.29
Royalties	US\$/lb	0.28
Total Operating Costs	US\$/lb	3.57
Sustaining and Deferred Capital	US\$/lb	0.36
All-in Sustaining Costs (AISC)	US\$/lb	3.94
Pre-Production Development Capital	US\$/lb	0.49
All-in Costs	US\$/lb	4.43



Table 3 – Value-Add Case Key Project Results – Financial Outcomes			
Key Financial Outcomes	Units	Mid-point	
Total Net Revenue	US\$M	4,532	
EBITDA	US\$M	2,443	
Project Cashflow – pre-Tax	US\$M	1,942	
NPV <sub>8</sub> - pre-Tax	US\$M	1,030	
IRR – pre-Tax	%	60%	
Tax Paid	US\$M	376	
Project Cashflow – post Tax	US\$M	1,566	
NPV <sub>8</sub> – post Tax	US\$M	831	
Project Cashflow – post Tax	A\$M	2,088	
NPV <sub>8</sub> – post Tax	A\$M	1,108	
IRR – post Tax	%	52%	
Capital Payback Period – post Tax	Years	1.8	

Table 3 – Value-Add Case Key Project Results – Financial Outcomes			
Key Financial Outcomes	Units	Mid-point	
Total Net Revenue	USŚM	4 532	

The results of the Value-Add Scoping Study provide the Company with a high level of confidence that the production of a nickel sulphate product on site at Jaguar is a highly viable option and one that should be aggressively pursued. The results have also allowed the Centaurus Board to commit to proceeding directly to a Definitive Feasibility Study (DFS) for the production of +20,000 tonnes per annum of nickel sulphate at the Jaguar Project over an initial mine life of ~13 years. The DFS by its very nature will also incorporate the study of the production of nickel concentrate, as this will be the product feed to the hydrometallurgical (nickel sulphate) circuit.

Comparison of the Base Case Scoping Study (nickel concentrate product) and the Value-Add Scoping Study are summarised in Table 4. The investment in the downstream processing of an additional ~US\$110 million (including US\$18.2 million contingency) adds considerable value to the project via the recovery of additional nickel from Resource to Production Target and higher nickel sulphide recoveries to concentrate.

When combined, these higher recoveries raise the recovered nickel to product by approximately 30% to 262,000 tonnes of nickel. This additional contained nickel (in sulphate) then attracts a higher product payability, raising the total revenue by 87% to ~A\$6.04 billion (~US\$4.53 billion).

Key Physical Paralla				
Key Physical Results	Units	Base Case	Value-Add Case	
Production Target - Physicals				
Mining	Mt	32.8	45.0	
Grade	%	0.84	0.80	
Contained Nickel	t	275,600	361,700	
Milling	Mt	24.0	33.7	
Grade	%	1.08	1.01	
Contained Nickel	t	260,300	341,300	
Production				
Nickel Concentrate/Sulphate	t	1,285,000	1,175,500	
Grade	% Ni	15.8	22.3	
Contained Nickel	t	203,300	262,100	
Production of by-products		In Conc	In MSP	
Zinc	t	N/A	80,500	
Cobalt	t	2,800	7,300	
Nickel	t	N/A	3,100	
Project Life	Years	10.0	12.9	

#### Table 4: Comparison of Jaguar Base Case and Value-Add Scoping Studies



Key Capital and Operating Cost Results	Units	Base Case	Value-Add Case
Capital Costs			
Development Capital	US\$M	178	288
Sustaining and Deferred Capital	US\$M	138	213
<b>Operating Costs</b> (100% payable basis)			
C1 Cash Costs	US\$/Ib	2.41	3.29
Royalties	US\$/Ib	0.25	0.28
Total Operating Costs	US\$/lb	2.66	3.57
Sustaining and Deferred Capital	US\$/lb	0.31	0.36
All-in Sustaining Costs (AISC)	US\$/lb	2.97	3.94
Development Capital	US\$/lb	0.40	0.49
All-in Costs	US\$/lb	3.37	4.43
Cash Operating Margin	US\$/lb	2.74	4.27
Key Financial Outcomes	Units	Base Case	Value-Add
Total Revenue	US\$M	2,422	4,532
EBITDA	US\$M	1,230	2,443
Average Annual pre-tax Operating Cash Flow	US\$M	123	189
Project Cashflow - pre-Tax	US\$M	914	1,942
NPV <sub>8</sub> - pre-Tax	US\$M	543	1,030
IRR - pre-Tax	%	62%	60%
Tax Paid	US\$M	137	376
Project Cashflow - post Tax	US\$M	778	1,566
NPV <sub>8</sub> - post Tax	US\$M	452	831
Project Cashflow - post Tax	A\$M	1,036	2,088
NPV <sub>8</sub> - post Tax	A\$M	603	1,108
IRR - post Tax	%	54%	52%
Capital Payback Period – post Tax	Years	1.9	1.8

Trade-off studies of both options in the early stages of the DFS will allow the Company to complete the required analysis to enable a more informed decision as to how to maximise value for the Company at an acceptable risk level. Work conducted through the course of the DFS has the ability to further improve the already robust economics by optimising factors such as mine sequencing, fleet selection and process route selection.

Full details of the Value-Add Scoping Study were provided in the Company's ASX Announcement dated 31 May 2021, with details of the Base Case Scoping Study provided in the Company's ASX Announcement dated 29 March 2021.

### MINERAL RESOURCE GROWTH

Resource in-fill, extensional and step-out drilling continued at the Jaguar Project throughout the reporting period, with 65,000 metres of diamond and RC drilling underway aimed at delivering an updated MRE in Q4 this year.

#### **Jaguar South**

Jaguar South is currently the biggest deposit at the Jaguar Project, contributing **18.7Mt at 0.97% Ni** for more than **180kt of contained nickel**, including an Indicated component of **7.4Mt at 1.19% Ni** for **87kt of contained nickel**.

Recent Scoping Study outcomes from Jaguar have also demonstrated that the mineralisation below the current pit limits is technically and economically feasible for underground operations. As such, the Company has been active in advancing its step-out drill program at key deposits like Jaguar South, within the broader Jaguar Project.



In-fill drilling required to upgrade the in-pit resources to the Indicated category ahead of the planned maiden Ore Reserve Estimate that will underpin the DFS is ongoing. The shallow in-fill drilling is being complemented by extensional drilling, which is testing extensions of the mineralisation along strike beyond current pit limits as well as new zones within the current pit limits that have been identified to the north and south of the main mineralised zones.

Drill-hole JAG-DD-21-151, completed on section 478040mE at Jaguar South (LHS of Figure 2) as part of the resource development in-fill program, returned the **best interval from the project to date, intersecting 56.1m at 2.05% Ni including 17.6m at 4.86% Ni**. This intersection is located immediately below the current pit limits and the grade and thickness has outstanding potential to push the current open pit design even deeper.

Figure 2 – The Jaguar South Deposit: Cross-Sections 478040mE (left) 477885mE (right) showing significant drill intersections in yellow, DHEM conductor plates in grey and FLEM conductor plates in light blue.



Additional in-fill drilling on section 477885mE, located 155m to the west, has intersected more shallow, high-grade mineralisation including **7.2m at 2.36% Ni** from 133.5m and **12.6m at 1.25% Ni** from 173.4m in hole JAG-DD-21-143, demonstrating the consistent nature of the mineralisation at Jaguar South (RHS of Figure 2).

Section 477940mE (see Figure 3 below), demonstrates both the quality of results from the in-fill drilling that confirm the consistency of the mineralisation as well as the outstanding opportunity to find new resources within current pit limits.

Drill hole JAG-DD-20-108 intersected **18.4m at 1.05% Ni** from 81.0m depth confirming the up-dip extension of the mineralisation in drill hole JAGU-DH000112 that returned **22.0m at 1.29% Ni** from 157.0m.

These drill holes are on the same section as hole JAGU-DH00065, which returned **34.0m at 3.31% Ni** from just 56.0m, an outstanding near-surface intersection and potential source of early high-grade mineralisation during the project pack-back period.



Further, in a nice sweetener for the early stages of mining in the proposed Jaguar South open pit, drill hole JAG-DD-20-117 on this same section (477940mE), intersected **12.9m at 2.95% Ni** from 31.1m down-hole, including **4.0m at 4.70% Ni** from 35.8m at the southern limit of the pit. This is a new zone of semi-massive nickel sulphide mineralisation that is outside of the March 2021 MRE in a zone that was previously modelled to be waste and low-grade. Additional drilling is planned to extend this new high-grade zone.

Furthermore, initial shallow drilling along strike outside of the western limits of the Scoping Study pit outline has identified new shallow high-grade mineralisation. Drill hole JAG-DD-20-097, located on section 477635mE, intersected **3.4m at 3.45% Ni** from 75.0m depth. Additional drilling has been planned to test the strike continuity outside of the current open pit limits.

# Figure 3 – The Jaguar South Deposit: Cross-Sections 477940mE showing significant drill intersections (in yellow) with DHEM conductor plates in blue.



Step-out drilling at Jaguar South is ongoing and has consistently intersected mineralisation below the current pit and stope limits. This is expected to increase the resource confidence of these zones and potentially add new resource tonnes.

Hosted in a Sub-Volcanic Porphyritic Dacite, the Jaguar South Deposit extends over a strike length of more than 650m and comprises continuous sub-vertical veins and semi-massive to massive breccia zones that can be up to 20m wide and extend from surface to more than 300m depth with the mineralisation remaining open at depth and along strike in both directions.

Drill-hole JAG-DD-21-164 (on section 478210mE (Figure 4), located 170m to the east of JAG-DD-21-151), has delivered a further impressive visual result, demonstrating that the strong mineralisation continues both along strike and at depth.



JAG-DD-21-164 is the deepest drill hole Centaurus has completed to date (544m) and intersected 12.7m of semimassive and massive sulphides within a broader +40m zone located more than 60m below the Company's previous deepest hole on that section, JAG-DD-20-112, which intersected **10.5m at 1.75% Ni** from 346.5m, including **6.0m at 2.16% Ni** from 347.3m down-hole.



# Figure 4 – The Jaguar South Deposit: Cross-Sections 478210mE (right) showing significant drill intersections in yellow and FLEM conductor plates in light blue.

Step-out drilling at Jaguar South has consistently intersected the mineralised domains in line with the EM conductor plates, current geological model interpretations and the developing structural model. This bodes well for deeper drilling that is planned both to identify additional Resource tonnes as well as upgrade existing underground Resources into the higher-confidence Resource categories required for future Ore Reserve Estimation and DFS work.

Full details of the assay results reported for Jaguar South during the Quarter were provided in the Company's ASX Announcements dated 20 April, 10 June, 24 June and 5 July 2021.

### **Jaguar Central**

The Jaguar Central Deposit is the second biggest deposit at Jaguar, with a current Resource of **10.2Mt at 1.00% Ni** for more than **100kt of contained nickel**, including an Indicated component of **8.4Mt at 0.99% Ni** for **83kt of contained nickel**. Consistent positive results from step-out drilling indicate strong potential to grow this Resource.

The Central Deposit is hosted in a sub-volcanic porphyritic dacite and features a high-grade ore shoot that starts at surface at the western end of the deposit and plunges sub-horizontally to the east across 10 drill sections and now has more than 550m of continuous strike after the recent successful strike extension drilling.



Nickel grades within the high-grade shoot are consistently over 1.0% nickel<sup>1</sup> with outstanding continuous downhole intersections such as **30.8m at 3.30% Ni** (JAG-DD-20-104 – see LHS of Figure 5), **33.7m at 2.23% Ni** (JAG-DD-20-056), **31.4m at 2.47% Ni** (PKS-JAGU-DH00030) and JAG-DD-21-142 on section 477180mE, which intersected **64.9m at 1.07% Ni** from 216.5m, just 30m below the current pit limits.

Importantly, recent hole JAG-DD-21-148, located on section 477290mE, intersected multiple mineralised zones including **10.0m at 0.99% Ni** from 267.0m (RHS of Figure 5). This section is a resource extension section, 60m east of the previously easternmost section of the Jaguar Central Deposit, **adding 60m of along-strike extension to the Jaguar Central Deposit.** 



Figure 5 – The Jaguar Central Deposit: Cross-Section 477080mE (left) and 477290mE (right).

It is interpreted that JAG-DD-21-148 intersected the top portion of the high-grade shoot and, importantly, recently completed drill hole, JAG-DD-21-152, has intersected the shoot again a further 40m down-dip from JAG-DD-21-148 (Figure 5), demonstrating the continuity of the shoot. Additional down-dip drilling is planned as well as further drilling down-plunge and along strike to the east, where the shoot remains open.

Importantly, the recently completed Value-Add Scoping Study demonstrated that underground operations are viable at the Jaguar Central Deposit. These new step-out drilling results from the easterly plunge of the high-grade shoot are not included in the March 2021 MRE and have consistently intersected thick zones of high-grade mineralisation with the potential to either extend the planned open pit at depth and/or establish additional Resources for the future underground operations.

<sup>&</sup>lt;sup>1</sup> Refer to ASX Announcements 21 December 2020, 12 October 2020, 11 June 2020, 6 August 2020, 20 April 2021 for CTM drill intersections results and 6 August 2019 for historical drill intersections results.



The mineralisation remains open at depth, along the entire strike of the deposit and down-plunge to the east, where additional drilling is planned to further extend the strike beyond current resource limits.

#### Jaguar West & Jaguar Central North Deposits

Currently the Jaguar West and Jaguar Central North Deposits host Inferred Resources only, as historical drilling was broadly spaced and often shallow. The Company's first drilling campaign at both deposits has been very successful in confirming the current geological model, as well as identifying additional higher-grade zones within the broader mineralised envelope.

New structural and geophysical targets have been identified at both deposits along strike and down-dip, where the deposits remain open. A rig remains dedicated to each of the Jaguar West and Jaguar Central North Deposits. Most of the in-fill drilling for the open pits is now complete and step-out drilling has commenced to expand the Resources.

Highlights from in-fill drilling at the Jaguar West and Jaguar Central North deposits were provided in the Company's ASX Announcement dated 5 July 2021, with the results to form part of the next planned JORC MRE upgrade, which is expected to be delivered in Q4 2021.

#### **GREENFIELDS EXPLORATION**

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

During the Quarter, the Company commenced a 25,000m high-impact Reverse Circulation (RC) drilling program targeting new discoveries outside the known resources at Jaguar. The drilling program is being undertaken by Brazil's leading RC drilling contractor, Geosedna, who are operating on double-shift.

The program will test 10 high-priority greenfields nickel sulphide and Platinum Group Element (PGE) exploration targets identified from airborne electromagnetic surveys (GeoTEM), detailed ground magnetics and soil geochemistry. The first three of these to be tested are (Figure 6):

- The Leão Prospect +2.5km strike length hosting multiple GeoTEM and ground magnetic anomalies coincident with Ni-Cu-Cr-V-Au soil anomalism. Only three holes have ever been drilled at this Prospect with one hole returning 3.0m at 1.06% Ni and 0.21% Cu;
- 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; and
- The Filhote Prospect A 200m 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 0.03 g/t Pt from 95.0m, including intervals of up to 1.1 g/t Pd.





Figure 6: The Jaguar Nickel Project – Soils Geochemistry (Ni/Cr) over Ground Magnetics (Analytic Signal)

#### **Filhote Prospect**

Encouraging results were received during the Quarter from Platinum Group Element (PGE) focused drilling conducted in late 2020 at the Filhote Prospect.

The Filhote Prospect mineralisation is interpreted to be related to a late-stage structurally-controlled alteration event associated with a mafic intrusive emplaced along (or cut by) the ENE-trending McCandless Fault (see Figure 7 below). This opens up the potential for blind sulphide mineralisation, similar to that seen at the Company's high-grade Onça Preta and Onça Rosa Deposits (on the same Jaguar tenement to the north-east), where mineralisation is hosted on the contacts of mafic dykes (dolerite) intruding the granite host.



Figure 7 – The Filhote Prospect, Soil Geochemistry (Pd) over Ground Magnetics (Analytic Signal)



A 1.1km long palladium-in-soil geochem anomaly runs east-west along the southern edge of a strong magnetic anomaly that is associated with mafic intrusive and altered felsic volcanic rocks (Figure 7). Airborne GeoTEM latetime conductor plates and a strong FLEM conductor plate have been identified, with the top part of the FLEM plate matching the shallow mineralised intervals from recent drilling (see Figure 8).

The drill holes completed the by previous RC contractor were not able to advance to the deeper primary target (see Figure 8 below). For this reason, the previous drill contractor was demobilised after only five drill holes. The new drill contractor, Geosedna, has the capacity to drill to depths of up to 250m and will be able to reach the deeper targets that remains to be tested.





Highlights of the assay results from Filhote included (ASX Announcement dated 6 May 2021 for complete results):

Hole JAG-RC-20-001

11.0m at 0.19g/t Pd, 0.01g/t Pt and 0.16% Ni from 62.0m;

Hole JAG-RC-20-002

- 5.0m at 0.19g/t Pd, 0.02g/t Pt and 0.17% Ni from 89.0m;
- 7.0m at 0.26 g/t Pd, 0.04% Pt and 0.07% Ni from 109.0m;

#### Hole JAG-RC-20-003

6.0m at 0.14g/t Pd, 0.04g/t Pt and 0.03% Ni from 49.0m;

### Hole JAG-RC-20-005

- 32.0m at 0.39g/t Pd, 0.05g/t Pt and 0.04% Ni from 41.0m; including
  - 6.0m at 0.62g/t Pd, 0.08g/t Pt and 0.04% Ni from 61.0m;
- 14.0m at 0.20g/t Pd, 0.02g/t Pt and 0.12% Ni from 81.0m

These intervals correspond with disseminated and stringer sulphide mineralisation, generally within a mafic dyke. Interestingly, the mineralisation hosts palladium in much greater proportions to platinum, which is important from an economic perspective given the recent rise in palladium price to over US\$2,800/ounce.

These results, which include maximum interval grades of 1.3g/t Pd, 0.34g/t Pt and 0.48% Ni, are excellent pathfinders and require additional follow-up drilling in order to identify increased concentrations of sulphides. Before any further drilling is undertaken, FLEM and DHEM surveys will be carried out at Filhote to improve the chance of intersecting semi-massive and massive sulphide mineralisation.



On the northern limits of the Jaguar tenement, the source of the Onça Preta and Onça Rosa mineralisation is understood to be related to the Puma Layered Mafic-Ultramafic Complex. Although little is known about the Puma mineralogy, it is known that the Onça Layered Mafic-Ultramafic Complex, located 9km to the south of the Filhote Prospect, hosts stratiform PGE mineralisation occurring at the contact between mafic and ultra-mafic zones.

It may be that the Filhote mafic intrusive represents a feeder from the Onça or Puma Layered Mafic-Ultramafic Complexes.

The Geosedna RC rig is planned to return to Filhote after drilling is completed at the high priority Leão and Tigre Prospects.

#### INFRASTRUCTURE AND PROJECT DEVELOPMENT INITIATIVES

During the Quarter, the following activities were undertaken and advanced in respect to Project Development initiatives that focused on approvals and future infrastructure access.

#### **Property Possession Agreement**

Centaurus secured possession of a further key piece of land that covers the Jaguar Project following the completion of a second Possession Agreement. The latest agreement covers an area of approximately 550 hectares and provides further security of land possession for the long-term benefit of the Project.

Following the land possession agreement previously announced on 25 March 2021, the Company now has possession rights and access to 1,550 hectares, representing approximately 85% of the area where Mineral Resources are presently defined at the project.

Securing full possession rights to the property further de-risks the Company's development pathway at Jaguar. The possession rights under the latest agreement were secured for total consideration of R\$9.5 million (~A\$2.2 million), with the consideration to be paid in instalments over the next year. An upfront consideration of R\$5.0 million (~A\$1.2 million) was paid during the quarter. The land payments have been budgeted for as part of planned activities to be undertaken in 2021.

#### **Environmental Approval Process**

Following the delivery of the Value-Add Scoping Study outlined above, Centaurus is now working to finalise the Environmental Impact Assessment (EIA/RIMA) for the Jaguar Project and expects to lodge this document with the Para State Environmental Agency (SEMAS) in the coming weeks. With the layout of the pits, Integrated Waste Landform (IWL), waste dumps and process plant facility now determined in the Scoping Study, the detail can be picked up and included in the EIA/RIMA along with other key details of the base line data collected in the wet and dry season environmental surveys.

Once lodged, the EIA/RIMA should take approximately 12 months to be approved with a Preliminary Licence (LP) to be issued on approval of the EIA/RIMA. This is the key milestone in the Environmental Approval Process.

Once the LP is issued the Company can make application for the Installation Licence (LI), the approval of which allows for the construction of the processing plant to proceed.

### **Other Approvals**

The Company will also shortly lodge a revised PAE (*Plano de Aproveitamento Económico*) with Brazil's National Mining Agency (ANM). The revised PAE, once approved, will underpin the future grant of the Jaguar Mining Lease, which is presently under application with the ANM.



#### Public Private Partnership with São Félix do Xingu Municipality

The Company is very pleased to have entered into a Public Private Partnership during the quarter with the Sao Felix Do Xingu municipality for the upgrade of the municipal roads from the project site to where the road joins the Tucumã municipality to the south.

Under the partnership the São Félix municipality have supplied most of the heavy earthmoving equipment necessary to upgrade the road whilst Centaurus will provide the borrowed material, culverts, fuel, labour for surface activities and water/fuel truck to complete the road upgrade work.

The upgrade work commenced in May 2021 and is expected to continue through the current dry season. Centaurus' contribution to the road upgrade works this year will be in the order of R\$2 million (A\$500k) and will be incurred over the current dry season (May- Nov 2021).

The upgraded road will have major benefits for the local community and the Centaurus team by creating a much easier and safer drive (particularly during the wet season) to access supplies in the nearby city of Tucumã. The current road upgrade works this year will also provide ongoing long-term benefits and reduce the amount of upgrade work that may need to be undertaken in future years as the project progresses through the development path.

The public private partnership was recognised by the São Félix Municipality in a recent distribution to their stakeholders. Pictures of work are set out Figure 9 below.



#### Figure 9 – Roadwork being undertaken under public private partnership with São Félix do Xingu Municipality



In addition to the road upgrade work, Centaurus has donated a 10,000L water tank to the village of Minerasul (village closest to the project site), in order to improve the quality of the water supply in the village. Figure 10 shows the recently installed water tank at Minerasul (~10km to the west of the Project area).



Figure 10 – Water tank donated by Centaurus to Minerasul village

## JAMBREIRO IRON ORE PROJECT

The Company's 100%-owned Jambreiro Project, located in south-east Brazil (Figure 10), represents a strategic asset in the Brazilian domestic iron ore and steel sector, particularly with the premium pricing that exists in the market for high-grade ore (+65% Fe) such as that which could be produced at Jambreiro.







Centaurus completed the Pre-Feasibility Study (PFS) in July 2019, with the key financial and technical outcomes announced to the market on 5 July 2019. The 1Mtpa start-up project PFS outlined a A\$59.8 million development, life-of-mine revenues of A\$1.05 billion and EBITDA of A\$533 million over its initial 18-year life to deliver a A\$114.9 million post-tax NPV<sub>8</sub> and IRR of 32%.

The PFS was based on the JORC 2012 Proven and Probable Ore Reserves estimate of 43.3Mt grading 29.1% Fe, which was also released to the market on 5 July 2019. The Ore Reserve delivers 17.9Mt of high-grade (65% Fe), low-impurity (4.3%  $SiO_2$ , 0.8%  $Al_2O_3$  & 0.01% P) sinter product to support the initial 18-year mine life once operations commence.

The Jambreiro Project's potential economics have continued to improve since the July 2019 PFS was completed. Revised PFS project economics were released to the market in the June 2020 Quarterly on 29 July 2020 using domestic iron ore pricing based on a 62% Fe CFR China Price of only US\$75/tonne, updated capital costs for the modularised plant from CDE Global and prevailing foreign exchange rates. This work delivered a post-tax NPV<sub>8</sub> of A\$147.2 million and an IRR of 37% over an 18-year mine life.

Since this time, potential project economics have continued to significantly improve with the increase in global iron ore prices remaining above US\$175/tonne for a 62% Fe CFR China Price over the last 3-4 months, and the ongoing weakness in the Brazilian Real exchange rate to the US dollar since the PFS was first delivered.

Indicatively, given there has been no material changes in the conservative modifying factors used to estimate the Jambreiro Ore Reserve and that the capital or operating costs remain in line with the May 2020 Revised PFS, the post-tax NPV<sub>8</sub> of the Project would lift to ~A\$650 million with an IRR over 166% using a 62% Fe CFR China iron ore price of US\$175/tonne and current exchange rates.

Jambreiro retains significant value for Centaurus and the Company is working to realise that value, through offtake, financing and development or joint venture development of the Project through innovative non-dilutive funding and/or partnering options.

Preliminary discussions with interested third-parties in this regard have prompted the Company to refresh all environmental licenses and as such the Company has applied for the renewal of the original Jambreiro Installation Licence (LI). The Agency has agreed to issue a joint LP/LI for the project and Centaurus has updated and lodged the EIA/RIMA (required for the LP) and the PCA (required for the LI) post quarter end in July 2021.

The main changes to the project design that was originally approved in 2012 are:

- Elimination of tailings dam, by inclusion of centrifuges at the back end of the process flowsheet to dewater the tailings and stockpile them on the waste dumps,
- Transforming the original tailings dam into a water storage dam, with a much smaller footprint,
- Inclusion of 2 small pits that are feasible due to current iron ore prices, and
- Reducing the overall project footprint by ~50% via the removal of the tailings dam.

The Company is preparing the documentation to re-lodge applications for all water permits necessary to operate the project. All water permits and environmental licences to build the Project were previously granted and should be granted again after the applications have been dually considered by the relevant agencies.



## CORPORATE

#### **Cash Position**

At 30 June 2021, the Company held cash reserves of A\$20.4 million.

#### **General Meeting**

The Annual General Meeting of the Company's shareholders was held on 28 May 2021, with all resolutions passed unanimously by a poll.

#### **COVID-19** Response

Centaurus continues to maintain stringent health and safety protocols to protect its workers, their families and the wider community while at the same time maintaining business continuity.

These protocols include retaining a dedicated nurse to conduct regular COVID-19 testing, revised working arrangements, supply of suitable PPE and social distancing practices. Furthermore, the Company has made a strong 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 in these communities.

An upgrade to the site camp was completed during the March Quarter, and this will assist in protecting workers and their families from the impacts of COVID-19. Having employees stay on site during the week and limiting contact with the broader local communities is proving to be effective in protecting workers from the virus.

#### **Shareholder Information**

The Company's capital structure as at 30 June 2021 is as follows:

#### **Quoted Securities**

Capital Structure	Number
Fully paid ordinary shares (CTM)	358,291,616
Top 20 Shareholders	61.1%
Directors and Management Shareholding of Listed Securities	4.5%

#### Unquoted Options

The following table shows a summary of the unquoted options on issue at Quarter end.

Expiry Date	Exercise Price	Vested	Unvested
31/05/22	\$0.180	116,667	-
31/05/22	\$0.225	2,233,335	-
31/05/22	\$0.378	1,400,000	-
31/05/23	\$0.180	116,667	-
31/05/23	\$0.392	-	1,400,000
31/12/23	-	-	3,952,402
31/05/24	\$0.180	-	233,334
31/05/24	\$0.405	-	1,400,000
31/12/24	-	-	1,134,372
		3,866,669	8,120,108



#### Listing Rule 5.3 Information

- 1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was \$2.394 million. Details of the exploration activities to which this expenditure relates are set out above.
- 2. ASX Listing Rule 5.3.2: There were no mining production and development activities during the Quarter.
- 3. ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter totalled \$210,000. These payments relate to non-executive directors' fees, executive directors' salaries and entitlements and payments to MPH Lawyers, a director related entity, for the provision of legal services.

#### Additional Information Required by Listing Rule 5.3.3

#### **Brazilian Tenements**

Tenement	Project Name	Location	Interest	
831.638/2004	Canavial	Minas Gerais	100%	
831.639/2004	Canavial	Minas Gerais	100%	
831.649/2004	Jambreiro (Mining Lease)	Minas Gerais	100%	
833.409/2007	Jambreiro (Mining Lease)	Minas Gerais	100%	
834.106/2010	Jambreiro (Mining Lease)	Minas Gerais	100%	
831.645/2006	Passabém	Minas Gerais	100%	
830.588/2008	Passabém	Minas Gerais	100%	
833.410/2007	Regional Guanhães	Minas Gerais	100%	
856.392/1996	Jaguar (Mining Lease Application)	Pará	100%	
850.130/2013	Pebas	Pará	100%	
850.475/2016	Itapitanga	Pará	100%	

#### Australian Tenements

Tenement	Project Name	Location	Interest
EPM14233	Mt Isa	Queensland	10%(1)

1. Subject to a Farm-Out and Joint Venture Exploration Agreement with Summit Resources (Aust) Pty Ltd. Summit has earned a 90% interest in the Project. Aeon Metals Limited has acquired 80% of Summit's Interest giving them a total interest of 72% of the tenement.

This Quarterly Activities Report is authorised for release by the Managing Director, Mr Darren Gordon.

DARREN GORDON MANAGING DIRECTOR



#### **Competent Person's Statements**

The information in this report that relates to Exploration Results is based on information compiled by Mr Roger Fitzhardinge who is a Member of the Australasia Institute of Mining and Metallurgy. Mr Fitzhardinge is a permanent employee and shareholder of Centaurus Metals Limited. Mr Fitzhardinge has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the March 2021 Jaguar Mineral Resources is based on information compiled by Mr Lauritz Barnes (consultant with Trepanier Pty Ltd) and Mr Roger Fitzhardinge (a permanent employee and shareholder of Centaurus Metals Limited). Mr Barnes and Mr Fitzhardinge are both members of the Australasian Institute of Mining and Metallurgy. Mr Barnes and Mr Fitzhardinge have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Fitzhardinge is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus completed the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Barnes and Mr Fitzhardinge consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The information in this report that relates to Jambreiro Mineral Resources is based on information compiled by Roger Fitzhardinge who is a Member of the Australasian Institute of Mining and Metallurgy and Volodymyr Myadzel who is a Member of Australian Institute of Geoscientists. Roger Fitzhardinge is a permanent employee of Centaurus Metals Limited and Volodymyr Myadzel was the Senior Resource Geologist of BNA Mining Solutions, independent resource consultants engaged by Centaurus Metals, at the time when the Mineral Resource estimate was first completed. Roger Fitzhardinge and Volodymyr Myadzel have sufficient experience which is 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 Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Roger Fitzhardinge and Volodymyr Myadzel consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled by Beck Nader who is a professional Mining Engineer and a Member of the Australian Institute of Geoscientists. Beck Nader is the Managing Director of BNA Mining Solutions and is a consultant to Centaurus. Beck Nader 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'. Beck Nader consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Appendix 5B

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity
Centaurus Metals Limited

40 009 468 099

Quarter ended ("current quarter")

30 June 2021

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(2,394)	(4,821)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(576)	(1,408)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	58	99
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(2,912)	(6,130)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	(500)	(500)
	(c) property, plant and equipment	(1,626)	(2,911)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(2,126)	(3,411)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	4,810	5,463
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(1)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	4,810	5,462

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	19,679	24,089
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,912)	(6,130)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,126)	(3,411)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	4,810	5,462

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	917	358
4.6	Cash and cash equivalents at end of period	20,368	20,368

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	117	13
5.2	Call deposits	20,251	19,666
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	20,368	19,679

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	210
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includ ation for, such payments.	le a description of, and an
Remun	eration paid to Executive Directors	\$170,000
Non-Ex	ecutive Directors' Fees paid	\$39,000
Legal F	ees paid to MPH Lawyers a director related entity	\$1,000

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	larter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		itional financing

8.	Estim	nated cash available for future operating activities	\$A'000
8.1	Net ca	ash from / (used in) operating activities (item 1.9)	(2,912)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))		-
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(2,912)
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	20,368
8.5	Unuse	ed finance facilities available at quarter end (item 7.5)	-
8.6	Total a	available funding (item 8.4 + item 8.5)	20,368
8.7	8.7 Estimated quarters of funding available (item 8.6 div item 8.3)		7
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?		
	Answer:		
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?		
	Answe	Answer:	

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 26 July 2021

Authorised by: Darren Gordon – Managing Director (Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.