

2 September 2020

# 75,000 METRES OF DRILLING TO DRIVE JAGUAR TOWARDS PRODUCTION

Resource in-fill, step-out and extensional drilling plus regional exploration drilling ramping up significantly with five rigs to be on site from later this month

- > Three track-mounted diamond drill rigs on-site at the Jaguar Nickel Sulphide Project, Brazil and operating on double-shift.
- > Fourth diamond drill rig and Reverse Circulation rig planned to mobilise to site in second half of September.
- > 75,000 metres of drilling targeted over the next 15 months.
- Drilling planned to upgrade resource categories (in-fill) and grow (step-out and extensional) the maiden JORC 2012 Mineral Resource Estimate (MRE) of <u>48.0Mt at 1.08% Ni for 517,500 tonnes</u> of nickel metal, which includes a significant higher-grade component of <u>20.6Mt at 1.56% Ni for 321,400 tonnes</u> of contained nickel.
- > Strong news flow to continue through the second half of 2020 with:
  - > Ramp-up of in-fill, step-out and extensional drilling around the existing MRE;
  - Regional exploration team undertaking mapping, soil sampling and FLEM surveys on the regional prospects to work up new drill targets;
  - > Drill testing of a comprehensive pipeline of regional targets with arrival of the RC rig; and
  - > Project development updates, JORC Mineral Resource update and Scoping Study completion.
- > Drilling campaign and ongoing study work well supported by the Company's strong cash position of ~\$28M.

Centaurus Metals (ASX Code: **CTM**) is pleased to announce a substantial increase in drilling activity at its 100%owned **Jaguar Nickel Sulphide Project** in the Carajás Mineral Province of northern Brazil aimed at delivering further step-changes in the scale and quality of the Project's resource base in parallel with ongoing development activity.

Drilling capacity will increase to five rigs from later this month following the recent arrival of a third diamond rig on site and with a fourth diamond rig and reverse circulation rig scheduled to arrive on site in the second half of September. All rigs will operate on a double-shift basis.

Centaurus' Managing Director, Mr Darren Gordon, said the significant step-up in drilling activity would allow the Company to unlock the full value of the Jaguar Project, which was rapidly evolving as a globally significant nickel sulphide asset.

"Thanks to our strong financial position following the recent \$25.5 million capital raising, we are in the fortunate position of being able to accelerate drilling operations with the triple objective of upgrading Inferred Resources to Indicated to drive project development, stepping out from known deposits to grow the overall Resource and making entirely new discoveries to add to the ever-growing Jaguar Project."

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"Our in-country team has done a fantastic job at managing the site through the COVID-19 pandemic and is now in a strong position to ramp-up field activities to advance the Project rapidly up the value curve.

"The Company made the decision in April to temporarily scale back field activities, including drilling, in order to prioritise the health and safety of our workforce and their families. During the last four months we have successfully implemented several key safety protocols that have ensured that there is minimal impact on our day-to-day work and that we are well positioned to manage the forthcoming ramp-up in activities.

"The Company has also been actively assisting the local communities in managing COVID-19 through the donation of test kits and medical PPE (masks, coveralls and hand sanitiser) to the local health services of the municipalities of Tucumã and Sao Felix do Xingu.

"Thanks to the outstanding efforts of our entire workforce and all of our contractors, we are now in a position to ramp-up up the drilling in a safe and sustainable manner. It's great to have three rigs back on site working double shift with the aim of upgrading and extending the resource, and we are looking forward to the imminent arrival of a fourth diamond rig and an RC rig. The RC rig will be used primarily to test some of our highly prospective regional and step-out targets, while also being able to drill pre-collars that can speed up the overall drilling process.

"With drilling in full swing and the recently commenced Scoping Study making excellent progress, investors can look forward to regular updates and strong news-flow over the coming weeks and months."



Figure 1 – Servdrill diamond rigs drilling day and night shift at the Jaguar Central and Onca Rosa Deposits.

#### **Drilling – Mineral Resource Growth**

The maiden JORC MRE for the Jaguar Nickel Project is for 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.



Drilling will focus on the following target areas ahead of the next Resource upgrade:

- > Jaguar South
  - Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the highgrade mineralisation within the main zones;
  - Drilling is planned along strike to test an interpreted high-grade plunge to the east-northeast, targeting new DHEM conductors; and
  - In-fill drilling required to upgrade the category of the Resource with a focus on the near-surface resources which are likely to be extracted early in the mine life of a future operation.

#### > Jaguar Central

- Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the highgrade mineralisation;
- In-fill drilling required to upgrade the category of the resource with a focus on the near-surface resources which are likely to be extracted early in the mine life of a future operation; and
- Drilling is planned along strike to test new DHEM and FLEM conductors to the west and east where drilling on historical sections is wide spaced (over 100m between holes) and not yet adequately tested.

#### > Jaguar North

- Step-out drilling is planned to test the DHEM conductors and potential down-dip extensions of the highgrade mineralisation;
- Drilling is planned along strike to test new FLEM conductors coincident with large ground magnetic anomalies to the north-west, an area previously untested by historical drilling; and
- In-fill drilling required for to upgrade the category of the resource with a focus on the near-surface resources which are likely to be extracted early in the mine life of a future operation.

#### Onça Preta & Onça Rosa

 $\circ~$  Step-out drilling is planned to test DHEM conductors and potential down-dip extensions of the high-grade mineralisation.

#### Jaguar West & Jaguar Northeast

• Maiden in-fill and extensional drilling is planned to target historical high-grade zones and EM conductor plates.

#### **Drilling – Regional Exploration Upside**

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.

Detailed soil sampling and a campaign of FLEM surveys are well advanced and have identified new priority drill targets. The mobilisation of the RC rig, planned for the next couple of weeks will provide the Company with the opportunity to drill pre-collars for deeper step-out drilling and also for high-impact greenfields exploration drilling on key prospect areas (Figure 3) as a pipeline of new drill targets are defined by the regional field team.

-ENDS-

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#### **Competent Persons Statement**

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 new June 2020 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.



#### Jaguar Nickel Sulphide Project

The Jaguar Nickel Sulphide Project hosts multiple nickel sulphide deposits and exploration targets within a 30km<sup>2</sup> land package in the western portion of the world-class Carajás Mineral Province. The Carajás Mineral Province is Brazil's premier mining hub, containing one of the world's largest known concentrations of bulk tonnage IOCG deposits as well as hosting the world's largest high-grade iron ore mine at S11D (Figure 2).

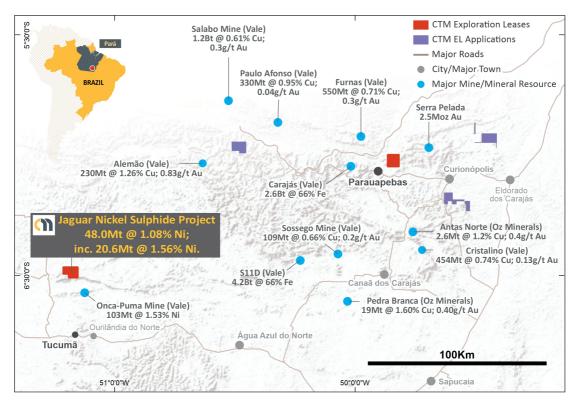


Figure 2 – The Jaguar Nickel Sulphide Project location in the Carajás Mineral Province, Brazil

The Jaguar Project is ideally located close to existing infrastructure, just 35km north of the regional centre of Tucumã (population +35,000) with access to hydroelectrical grid power with a 230kV sub-station only 15km southeast of the Project at Vale's huge Onça-Puma Ferronickel Mine and a 138kV sub-station only 35km south of the project in the town of Tucumã (Figure 2).

In July 2020 the Company with the announcement a maiden JORC 2012 Indicated and Inferred Mineral Resource Estimate (MRE) of 48.0Mt at 1.08% Ni for 517,500 tonnes (Table 1). Jaguar is unique in the nickel sulphide space 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.

Table 1 – The Jaguar JORC Mineral	Resource Estimate (MRE)
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	Tonnes Grade					Contained Metal Tonnes		
Classification	Ore Type	Mt	Ni %	Cu %	Co ppm	Ni	Cu	Со
	Transition Sulphide	0.3	1.09	0.09	310	3,500	300	100
Indicated	Fresh Sulphide	11.2	1.29	0.09	392	145,000	9,800	4,400
	Total Indicated	11.5	1.29	0.09	390	148,500	10,100	4,500
	Transition Sulphide	0.8	0.99	0.08	287	8,200	700	200
Inferred	Fresh Sulphide	35.6	1.01	0.07	255	360,800	24,800	9,100
	Total Inferred	36.4	1.01	0.07	255	369,000	25,500	9,300
Total		48.0	1.08	0.07	288	517,500	35,600	13,800

\* Within 200m of surface cut-off grade 0.5% 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.



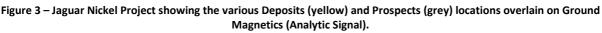
Within the Jaguar MRE there is a significant high-grade component of 20.6Mt grading 1.56% Ni for 321,400 tonnes of contained nickel metal (High-Grade MRE), which has been estimated using a 1.0% nickel cut-off grade across the total Mineral Resource with no depth constraints on cut-off (see Table 2). Within the High-Grade MRE, around 70% of the nickel metal sits less than 200m from surface, demonstrating the potential for any future open pit operation to run at a high-grade in the early years of mining and generate strong cash-flows to support early capital payback.

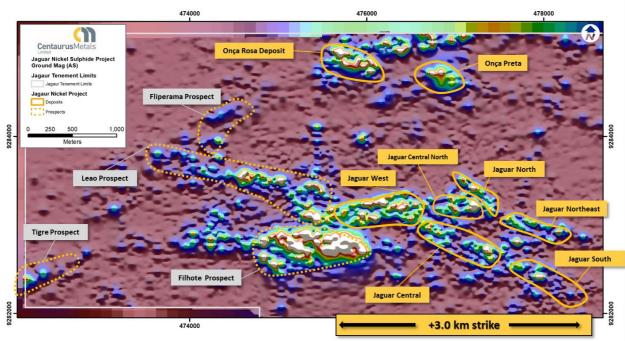
Ni% Cut-off	Grade	Tonnes		Grade		Cont	ained Metal To	nnes
Surface - 200m	+ 200m	Mt	Ni %	Cu %	Co ppm	Ni	Cu	Со
0.3	1.0	55.6	0.99	0.07	265	549,500	37,600	14,700
0.4	1.0	53.0	1.02	0.07	272	540,300	37,000	14,400
0.5	1.0	48.0	1.08	0.07	288	517,500	35,500	13,800
0.6	1.0	40.8	1.17	0.08	311	478,200	32,800	12,700
0.7	1.0	34.4	1.27	0.09	335	436,400	29,800	11,500
0.8	1.0	28.7	1.37	0.09	361	393,700	26,600	10,300
0.9	1.0	24.4	1.47	0.10	383	357,300	23,700	9,300
1.0	1.0	20.6	1.56	0.10	407	321,400	20,500	8,400
1.1	1.1	16.9	1.67	0.11	449	283,400	18,400	7,600
1.2	1.2	13.9	1.79	0.12	498	248,400	16,600	6,900
1.3	1.3	11.6	1.90	0.13	551	219,400	15,200	6,400

#### Table 2 – 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.

The Jaguar MRE covers the six Jaguar deposits and two Onça deposits, as shown in Figure 3 below. Since drilling started in November 2019, Centaurus has drilled and successfully intersected high-grade nickel sulphides at the Jaguar South, Jaguar Central and Jaguar North deposits, as well as at the Onça Preta and Onça Rosa deposits.







### **APPENDIX A – Compliance Statements for the Jaguar Project**

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

### SECTION 1 - SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
Sampling techniques	• Historical soil sampling was completed by Vale. Samples were taken at 50m intervals along 200m spaced north-south grid lines.
	<ul> <li>Surface material was first removed, and sample holes were dug to roughly 20cm depth. A 5kg</li> </ul>
	sample was taken from the subsoil. The sample was placed in a plastic sample bag with a sample
	tag before being sent to the lab.
	• Surface rock chip/soil samples were collected from in situ outcrops and rolled boulders and submitted for chemical analysis.
	<ul> <li>The historical drilling is all diamond drilling. Drill sections are spaced 100m apart and generally there</li> </ul>
	is 50 to 100m spacing between drill holes on sections.
	• Core was cut and ¼ core sampled and sent to commercial laboratories for physical preparation and
	chemical assay.
	<ul> <li>At the laboratories, samples were dried (up to 105°C), crushed to 95% less than 4mm, homogenized, split and pulverized to 0.105mm. A pulverized aliquot was separated for analytical procedure.</li> </ul>
	• Sample length along core varies between 0.3 to 4.0m, with an average of 1.48m; sampling was done
	according to lithological contacts and generally by 1m intervals within the alteration zones and 2m intervals along waste rock.
	• Current drilling is being completed on spacing of 100m x 50m or 50m x 50m. Sample length along core varies between 0.5 to 1.5m
	<ul> <li>Core is cut and ¼ core sampled and sent to accredited independent laboratory (ALS).</li> </ul>
	• For metallurgical test work continuous downhole composites are selected to represent the metallurgical domain and ¼ core is sampled and sent to ALS Metallurgy, Balcatta, Perth.
Drilling techniques	• Historical drilling was carried out between 2006 to 2010 by multiple drilling companies (Rede and
	Geosol), using wire-line hydraulic diamond rigs, drilling NQ and HQ core.
	• Vale drilled 169 drill holes for a total of 56,592m of drilling in the resource area. All drill holes were
	drilled at 55°-60° towards either 180° or 360°. Centaurus has completed 49 drill holes for a total of
	9,786 m of drilling. All drill holes were drilled at 55°-75° towards either 180° or 360°.
Drill sample recovery	Current drilling is a combination of HQ and NQ core (Servdrill).
Drin sumple recovery	<ul> <li>Diamond Drilling recovery rates are being calculated at each drilling run.</li> <li>For all diamond drilling, core recoveries were logged and recorded in the database for all historical</li> </ul>
	and current diamond holes. To date overall recoveries are >98% and there are no core loss issues or
	significant sample recovery problems.
	<ul> <li>To ensure adequate sample recovery and representativity a Centaurus geologist or field technician</li> </ul>
	is present during drilling and monitors the sampling process.
	• No relationship between sample recovery and grade has been demonstrated. No bias to material
	size has been demonstrated.
Logging	• Historical outcrop and soil sample points were registered and logged in the Vale geological mapping point database.
	• All drill holes have been logged geologically and geotechnically by Vale or Centaurus geologists.
	• Drill samples are logged for lithology, weathering, structure, mineralisation and alteration among
	other features. Logging is carried out to industry standard and is audited by Centaurus CP.
	<ul> <li>Logging for drilling is qualitative and quantitative in nature.</li> </ul>
	All historical and new diamond core has been photographed.
Sub-sampling techniques and	• Diamond Core (HQ/NQ) was cut using a core saw, ¼ core was sampled. Sample length along core
sample preparation	varies between 0.3 to 4.0m, with an average of 1.48m; sampling was done according to lithological contacts and generally by 1m intervals within the alteration zones and 2m intervals along the waste rock.
	<ul> <li>There is no non-core sample within the historical drill database.</li> </ul>
	<ul> <li>QAQC: Standards (multiple standards are used on a rotating basis) are inserted every 20 samples.</li> </ul>
	Blanks have been inserted every 20 samples. Field duplicates are completed every 30 samples. Additionally, there are laboratory standards and duplicates that have been inserted.
	• Centaurus has adopted the same sampling QAQC procedures which are in line with industry
	standards and Centaurus's current operating procedures.
	• Sample sizes are appropriate for the nature of the mineralisation.



Criteria	Commentary
Quality of assay data and laboratory tests	<ul> <li>All historical geological samples were received and prepared by SGS Geosol or ALS Laboratories as 0.5-5.0kg samples. They were dried at 105°C until the sample was completely dry (6-12hrs), crushed to 90% passing 4mm and reduced to 400g. The samples were pulverised to 95% passing 150µm and split further to 50g aliquots for chemical analysis.</li> <li>New samples are being sent to ALS Laboratories. The samples are dried, crushed and pulverised to 85% passing 75µm and split further to 250g aliquots for chemical analysis.</li> <li>During the preparation process grain size control was completed by the laboratories (1 per 20 samples).</li> <li>Metallurgical samples are crushed to 3.35mm and homogenised. Samples are then split to 1kg subsamples. Sub-samples are ground to specific sizes fractions (53-106µm) for flotation testwork.</li> <li>Chemical analysis for drill core and soil samples was completed by multi element using Inductively Coupled Plasma ICPAES (multi-acid digestion); ore grade analysis was completed with Atomic Absorption (multi-acid digestion); sulphur analysis was completed with Leco, and Au and PGEs completed via Fire Assay.</li> <li>New samples are being analysed for 48 elements by multi element using ME-MS61 (multi-acid digestion); sulphur analysis was completed with ICP-AES (multi-acid digestion); sulphur analyses of sample analyse of the mean grades for the main elements. Additionally, ALS perform repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). These compare very closely with the original analysis for all elements.</li> <li>Vale inserted standard samples every 20 samples (representing 5%). Mean grades of the standard samples are well within the specified 2 standard deviations.</li> <li>Vale inserted</li></ul>
Verification of sampling and assaying	<ul> <li>All metallurgical chemical analysis is completed by ALS laboratories</li> <li>All historical samples were collected by Vale field geologists. All assay results were verified by alternative Vale personnel. The Centaurus CP has verified the historical significant intersections.</li> <li>Centaurus Exploration Manager and Senior Geologist verify all new results and visually confirm significant intersections.</li> <li>No twin holes have been completed.</li> <li>All primary data is now stored in the Centaurus Exploration office in Brazil. All new data is collected on Excel Spreadsheet, validated and then sent to independent database administrator (MRG) for</li> </ul>
Location of data points	<ul> <li>storage (DataShed).</li> <li>No adjustments have been made to the assay data.</li> <li>All historical collars were picked up using DGPS or Total Station units. Centaurus has checked multiple collars in the field and has confirmed their location. All field sample and mapping points</li> </ul>
	<ul> <li>were collected using a Garmin handheld GPS.</li> <li>An aerial survey was completed by Esteio Topografia and has produced a detailed surface DTM at (1:1000 scale).</li> <li>The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements.</li> <li>New drill holes are sighted with handheld GPS and after completion picked-up by an independent survey consultant periodically. Downhole survey for all the historical drill holes and up to the recent hole JAG-DD-19-012 used Maxibor equipment. All new drill holes are being downhole surveyed using Reflex digital down-hole tool, with readings every metre.</li> </ul>
Data spacing and distribution	<ul> <li>Soil samples were collected on 40m spacing on section with distance between sections of 200m and 400m depending on location.</li> <li>Sample spacing was deemed appropriate for geochemical studies.</li> <li>The historical drilling is all diamond drilling. Drill sections are spaced 100m apart and generally there is 50 to 100m spacing between drill holes on sections. Centaurus plans to close the drill spacing to 100m x 50m or 50m x 50m.</li> <li>No sample compositing was applied to the drilling</li> <li>Metallurgical samples to date have been taken from Jaguar South and Onça Preta.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Historical drilling was oriented at 55°-60° to either 180° or 360°. This orientation is generally perpendicular to the main geological sequence along which broad scale mineralisation exists.</li> <li>Mineralisation is sub-vertical; the majority of the drilling is at low angle (55-60°) in order to achieve intersections at the most optimal angle.</li> </ul>



Criteria	Commentary
Sample security	<ul> <li>All historical and current samples are placed in pre-numbered plastic sample bags and then a sample ticket was placed within the bag as a check. Bags are sealed and then transported by courier to the ALS laboratories in Vespasiano, MG.</li> <li>All remnant Vale diamond core has now been relocated to the Company's own core storage facility in Tucumã, PA.</li> </ul>
Audits or reviews	• The Company is not aware of any audit or review that has been conducted on the project to date.

### SECTION 2 - REPORTING OF EXPLORATION RESULTS

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

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>The Jaguar project includes one exploration licence (856392/1996) for a total of circa 30km<sup>2</sup>. A Mining Lease Application has been lodged that allows for ongoing exploration and project development ahead of project implementation.</li> <li>The tenement is part of a Sale &amp; Purchase Agreement (SPA) with Vale SA. Two deferred consideration payments totalling US\$6.75M (US\$1.75 million on commencement of BFS or 3 years and US\$5 million on commencement of commercial production) and a production royalty of 0.75% are to follow. Centaurus has taken on the original obligation of Vale to BNDES for 1.8% Net Operating Revenue royalty.</li> <li>Mining projects in Brazil are subject to a CFEM royalty, a government royalty of 2% on base metal revenue.</li> <li>Landowner royalty is 50% of the CFEM royalty.</li> <li>The project is covered by a mix of cleared farm land and natural vegetation.</li> <li>The project is not located within any environmental protection zones and exploration and mining is permitted with appropriate environmental licences.</li> </ul>
Exploration done by other parties	Historically the Jaguar Project was explored for nickel sulphides by Vale from 2005 to 2010.
Geology	<ul> <li>Jaguar Nickel Sulphide is a hydrothermal nickel sulphide deposit located near Tucumã in the Carajás Mineral Province of Brazil.</li> <li>Jaguar is located at the intersection of the WSW-trending Canaã Fault and the ENE-trending McCandless Fault, immediately south of the NeoArchean Puma Layered Mafic-Ultramafic Complex.</li> <li>Iron rich fluids were drawn up the mylonite zone causing alteration of the host felsic volcanic and granite units and generating hydrothermal mineral assemblage. Late stage brittle-ductile conditions triggered renewed hydrothermal fluid ingress and resulted in local formation of high-grade nickel sulphide zones within the mylonite and as tabular bodies within the granite.</li> </ul>
Drill hole Information	<ul> <li>Refer to Figure 1</li> <li>Refer to previous ASX Announcements for significant intersections from Centaurus drilling.</li> <li>Refer to ASX Announcement 6 August 2019 for all significant intersections from historical drilling.</li> </ul>
Data aggregation methods	<ul> <li>Continuous sample intervals are calculated via weighted average using a 0.3 % Ni cut-off grade with 3m minimum intercept width.</li> <li>There are no metal equivalents reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>Mineralisation is sub-vertical; the majority of the drilling is at low angle (55-60°) in order to achieve intersections at the most optimal angle.</li> <li>The results in ASX Announcement 6 August 2019 reflect individual down hole sample intervals and no mineralised widths were assumed or stated.</li> </ul>
Diagrams	Refer to Figures 1 to 3.
Balanced reporting	• All exploration results received by the Company to date are included in this or previous releases to the ASX.
Other substantive exploration data	• The Company has received geophysical data from Vale that is being processed by an independent consultant Southern Geoscience. Refer to ASX Announcements for geophysical information.
Further work	<ul> <li>Electro-magnetic (EM) geophysical surveys (DHEM and FLEM) are ongoing.</li> <li>In-fill and extensional drilling within the known deposits to test the continuity of high-grade zones is ongoing. Resource samples are being sent in batches of 150-300 samples and will be reported once the batches are completed.</li> </ul>



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

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

Criteria	Commentary
Database integrity	<ul> <li>The drilling database was originally held by Vale and received from them as csv exports.</li> <li>The drilling data have been imported into a relational SQL server database using Datashed<sup>™</sup> (Industry standard drill hole database management software) by Mitchell River Group.</li> <li>All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac<sup>™</sup> and Leapfrog<sup>™</sup>), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.</li> <li>Data validation checks were completed on import to the SQL database.</li> <li>Data validation has been carried out by visually checking the positions and orientations of drill holes.</li> </ul>
Site visits	<ul> <li>The Competent Person responsible for Sampling Techniques and Data and Exploration Results, Mr Roger Fitzhardinge, has visited the site multiple times and overseen exploration activity and assumes responsibility for the sampling and data management procedures.</li> <li>No visits to the Jaguar site have been undertaken by the Competent Person responsible for the Mineral Resource Estimate (MRE), Mr Lauritz Barnes, due to travel restrictions (COVID-19).</li> </ul>
Geological interpretation	<ul> <li>Sufficient drilling has been conducted to reasonably interpret the geology and the mineralisation. The mineralisation is traceable between multiple drill holes and drill sections.</li> <li>Interpretation of the deposit was based on the current understanding of the deposit geology. Centaurus field geologist supplied an interpretation that was validated and revised by the independent resource geologist.</li> <li>Drill hole data, including assays, geological logging, structural logging, lithochemistry, core photos and geophysics have been used to guide the geological interpretation.</li> <li>Extrapolation of mineralisation beyond the deepest drilling has been assumed up to a maximum of 100m where the mineralisation is open.</li> <li>Alternative interpretations could materially impact on the Mineral Resource estimate on a local, but not global basis. No alternative interpretations were adopted at this stage of the project.</li> <li>Geological logging in conjunction with assays has been used to interpret the mineralisation. The interpretation honoured modelled fault planes and interpretation of the main geological structures.</li> <li>Mineralization at Jaguar occurs as veins and breccia bodies set in extensively altered and sheared host rocks. Continuity of the alteration and sulphide mineralisation zones is good, continuity of local zones of semi-massive to massive sulphide is not always apparent.</li> <li>Mineralization at the Onça Preta and Onça Rosa deposits predominantly forms tabular semicontinuous to continuous bodies both along strike and down dip.</li> <li>Post-mineralisation faulting may offset mineralisation at a smaller scale than that which can be reliably modelled using the current drill hole data.</li> </ul>
Dimensions	<ul> <li>Jaguar South (primary mineralisation) has a strike length of 600m by up to 20m wide by 300m deep trending ESE-WNW.</li> <li>Jaguar Central (primary mineralisation) has a strike length of 400m by up to 30m wide by 300m deep trending ESE-WNW.</li> <li>Jaguar North (primary mineralisation) has a strike length of 400m by up to 25m wide by 200m deep trending SE-NW</li> <li>Jaguar Central North (primary mineralisation) has a strike length of 200m by up to 20m wide by 200m deep trending E-W</li> <li>Jaguar Northeast (primary mineralisation) has a strike length of 800m by up to 10m wide by 200m deep trending ESE-WNW</li> <li>Jaguar Northeast (primary mineralisation) has a strike length of 800m by up to 10m wide by 200m deep trending ESE-WNW</li> <li>Jaguar Central North (primary mineralisation) has a strike length of 200m by up to 20m wide by 200m deep trending ESE-WNW</li> <li>Jaguar Central North (primary mineralisation) has a strike length of 200m by up to 20m wide by 200m deep trending ESE-WNW</li> <li>Jaguar Central North (primary mineralisation) has a strike length of 200m by up to 20m wide by 200m deep trending E-W</li> <li>Jaguar West (primary mineralisation) has a strike length of 500m by up to 10m wide by 200m deep trending E-W</li> <li>Onça Preta (primary mineralisation) has a strike length of 250m by up to 15m wide by 300m deep trending E-W</li> <li>Onça Rosa (primary mineralisation) has a strike length of 500m by up to 10m wide by 300m deep trending E-W</li> </ul>
Estimation and modelling	<ul> <li>trending ESE-WNW</li> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac<sup>™</sup> software for</li> </ul>



Criteria	Commentary
	<ul> <li>Drill hole samples were flagged with wire framed domain codes. Sample data were composited to 1m using a using fixed length option and a low percentage inclusion threshold to include all samples. Most samples (80%) are around 1m intervals in the raw assay data.</li> <li>Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are low to moderate (around 15-25%) and structure ranges up to 200 in the primary zones. Variograms for domains with lesser numbers of samples were poorly formed and hence variography was applied from the higher sampled domains.</li> <li>Block model was constructed with parent blocks for 10m (E) by 2m (N) by 10m (RL). All estimation was completed to the parent cell size.</li> <li>Three estimation passes were used. The first pass had a limit of 75m, the second pass 150m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li> <li>Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison by easting and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.</li> </ul>
Moisture	<ul> <li>The tonnages were estimated on an in-situ dry bulk density basis which includes natural moisture. Moisture content was not estimated but is assumed to be low as the core is not visibly porous.</li> </ul>
Cut-off parameters	• Potential mining methods include a combination of open pit and underground. As such a 0.5% 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.
Mining factors or assumptions	<ul> <li>It is assumed that the Jaguar deposits will be mined by a combination of open pit and underground mining methods.</li> <li>Conceptual pit optimisation studies have been completed by Entech to ensure that there are reasonable prospects for the eventual economic extraction of the mineralisation by these methods.</li> <li>Input parameters were benchmarked from similar base-metal operations in Brazil and Australia.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>Metallurgical test work has been undertaken on multiple composite samples sourced from the Jaguar South and Onça Preta deposits. Material selection for test work was focused on providing a good spatial representation of mineralisation for the deposits.</li> <li>Bench scale test work to date has demonstrated that a conventional crushing, grinding and flotation circuit will produce good concentrate grades and metal recoveries, see ASX Announcements of 18 February 2020 and 31 March 2020 for more detail.</li> </ul>
Environmental factors or assumptions	<ul> <li>Tailings analysis and acid drainages tests have been completed which underpin the preliminary tailing storage facility design (TSF), which is in progress.</li> <li>Waste rock will be stockpiled into waste dumps adjacent to the mining operation.</li> <li>The TSF and waste dumps will include containment requirements for the management of contaminated waters and sediment generation in line with Brazilian environmental regulations.</li> </ul>
Bulk density	<ul> <li>On the new drilling, bulk densities were determined on 15 to 30 cm drill core pieces every 1m in ore and every 10m in waste. On the historical drilling the bulk densities were determined on drill core at each sample submitted for chemical analysis.</li> <li>Bulk density determinations adopted the weight in air /weight in water method using a suspended or hanging scale.</li> <li>The mineralized material is not significantly porous, nor is the waste rock.</li> <li>A total of 34,411 bulk density measurements have been completed.</li> <li>Of these, 4,040 are within the defined mineralised domains – and 4,031 are from fresh or transitional material leaving only 9 measurements from saprolite or oxide material.</li> <li>More measurements are required from saprolite and oxide material, and assumed values were assigned to this material in the model. Oxide and saprolite material are excluded from the reported resource.</li> <li>Fresh and transitional measurements from surface and compared to Ni, Fe and S. A reasonable correlation was defined against Fe due to the magnetite in the system.</li> </ul>



Criteria	Commentary
	<ul> <li>The bulk density values assigned the mineralised domains by oxidation were as follows:</li> <li>Oxide: 2.0</li> <li>Saprolite: 2.3</li> <li>Transition: 2.6</li> <li>Fresh: by regression against estimated Fe using: BD = (fe_ok*(0.0323)) + 2.6276</li> </ul>
Classification	<ul> <li>The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralised zones, drilling density, confidence in the underlying database, a combination of search volume and number of data used for the estimation plus availability of bulk density information.</li> <li>Indicated Mineral Resources are defined nominally on 50mE x 40mN spaced drilling and Inferred Mineral Resources nominally 100mE x 100mN with consideration given for the confidence of the continuity of geology and mineralisation.</li> <li>Oxide and saprolite material are excluded from the Mineral Resource.</li> <li>The Jaguar Mineral Resource in part has been classified as Indicated with the remainder as Inferred according to JORC 2012.</li> </ul>
Audits or reviews	• This is the maiden Jaguar Mineral Resource estimate. The current model has not been audited by an independent third party but has been subject to Trepanier and Centaurus's internal peer review processes.
Discussion of relative accuracy/ confidence	<ul> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>