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CENTAURUS EMBARKS ON TRANSFORMATIONAL YEAR OF PROJECT DEVELOPMENT AND HIGH-IMPACT EXPLORATION AT THE HIGH-GRADE JAGUAR NICKEL SULPHIDE PROJECT, BRAZIL

Exploration & Resource Development:

- > Third diamond drill mobilised to site with all three rigs operating on double-shift.
- > Drilling currently focused on Jaguar South and Onça-Preta Deposits to extend known high-grade mineralisation and identify new high-grade zones.
- > Exploration drilling at other deposits and new prospects to start over the coming months.
- > Next batch of assay results due by the end of January.
- Down-Hole and Fixed Loop Electromagnetic (EM) equipment has landed in Brazil awaiting customs clearance, with a geophysicist from Southern Geoscience to visit site in at end of January to train a dedicated Centaurus EM survey team.

Metallurgy & Engineering:

- > A comprehensive review of historical metallurgical data indicates multiple value adding and project risk reduction opportunities exist within the processing and engineering disciplines.
- Metallurgical samples of Jaguar South and Onça-Preta ores have been selected and delivered to Australia for mineralogy assessment and metallurgical test work – to begin this month.
- > Preliminary water balance, waste storage requirements and project layout studies well advanced.

Project Environmental Licensing:

- > Terms of reference for the key Environmental Impact Assessment (EIA/RIMA) issued by the Pará Environmental Agency (SEMAS).
- > Wet season environmental data collection for the Jaguar Project EIA/RIMA already underway.

Funding:

Centaurus remains well-funded to undertake its 2020 work program with \$9.7M in cash reserves at the end of December 2019.

Centaurus Metals (ASX Code: **CTM**) is pleased to advise that it has taken another important step towards its objective of becoming a high-grade nickel sulphide producer with the commencement of exploration, resource definition and project development programs for 2020 at the **Jaguar Nickel Sulphide Project** in north-eastern Brazil.

Centaurus' Managing Director, Mr Darren Gordon, said the next 12 months were shaping up as a defining period in the Company's history as it embarked on a multi-pronged strategy aimed at delivering a maiden high-grade JORC Mineral Resource at Jaguar, making new massive sulphide nickel discoveries and putting in place the foundations for a rapid pathway to project development and licensing.

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"The acquisition of the Jaguar Nickel Project last year was a massive coup which has elevated the Company in a very short space of time into the rarefied realms of being a high-grade nickel sulphide explorer and project developer," Mr Gordon said.

"In the last quarter of 2019, we were able to quickly and efficiently lay the foundations that will underpin exploration and resource definition drilling as well as project development programs for 2020. We also raised A\$10 million that we are now using to fast-track these programs and advance the Project, with the short-term objective of delivering a maiden high-grade JORC Mineral Resource estimate by mid-2020.

"We're really happy with what we are seeing in the drilling to date and now, following a review of the metallurgical data, we have identified a number of additional value-adding processing opportunities that we believe will help deliver a project that will produce a high-quality nickel product at much higher recoveries than seen in the historical testwork.

"The process testwork programs undertaken historically followed similar testing parameters to the process testwork completed for a number of the copper-gold mines in the Carajás, with these parameters not considered optimal for nickel flotation.

"We believe that, with a lift in the average feed grade and changes in grind sizes and reagent selection used in the process flowsheet, we can significantly improve the nickel recoveries seen in the limited historical metallurgical work. Our new metallurgical testwork programs are already underway and we expect to have the first results in March.

"Environmentally, we already have a considerable amount of baseline data at hand for the Environmental Impact Assessment (EIA/RIMA) given the historical work completed by Vale, and this has given us a great head start on the environmental licensing process. While further wet and dry season data is still to be collected concurrently with the ongoing drilling work, the collection of wet season data is already underway. This means we can target completion and lodgement of the EIA/RIMA by the end of 2020.

"Jaguar hosts a quality bulk tonnage foreign resource of 40.4Mt at 0.78% Ni¹ for a total of 315,000 tonnes of nickel - a globally significant nickel inventory by any measure – but one where the high-grade zones have never previously been the focus of the exploration work. We see the development of Jaguar shaping up as a combination of multiple open pit and underground operations delivering a high-grade feed to a central conventional nickel flotation plant, similar to the Kambalda Nickel Operations in Western Australia.

"We look forward to demonstrating to our shareholders a steady stream of drill assays, resource estimates, process testwork results and project licensing updates during the course of 2020."

Diamond Drilling

A third diamond rig has arrived on site at Jaguar and all rigs are drilling on double-shift. The Company has improved site access conditions significantly since acquiring the Project, particularly over the last six weeks, to allow for drilling throughout the wet season, which continues from now through to the end of April.

¹ Centaurus cautions that the mineral resources for the Jaguar Project are not reported in accordance with the JORC Code. A Competent Person has not yet done sufficient work to classify the resources as mineral resources in accordance with the JORC code. It is uncertain that, following evaluation or further work, the foreign estimate will be able to be reported as Mineral Resources in accordance with the JORC Code. Refer to ASX Announcement 6 August 2019 for detail on the foreign resource.



Diamond drilling is ongoing at the Jaguar South and Onça-Preta Deposits (see Figure 1) focused on extending known mineralisation and identifying new high-grade zones, with the next batch of assay results due in the coming weeks.

Results to date² from the Company's maiden drill program have already demonstrated that the high-grade zones of semi-massive to massive nickel sulphide mineralisation intersected at both the Jaguar South and Onça-Preta Deposits correlate well with existing drill intersections as well as the DHEM and FLEM conductor plates.

Drilling on the other Jaguar Deposits as well as the Onça-Rosa Prospect (see Figure 2) will start this quarter once the drill accesses and pads have been prepared and in conjunction with the results coming from the Company's first Down-hole (DHEM) and Fixed Loop (FLEM) Electromagnetic (EM) survey work.

EM Surveys and New Ground Magnetics

Following the reprocessing of Vale DHEM and FLEM data, the Company has now identified over 50 EM conductor plates on the tenement package to date, with a number of the conductor plates being up to 500 metres long (see Figures 1 & 2). In most situations the historical high-grade drill intersections correlate very well with the conductor plates.

The Company sees EM survey work as a very powerful tool in identifying massive sulphides and high-grade nickel mineralisation at the Project. As a result, the Company is working with Southern Geoscience on the temporary import of ground Electromagnetic (EM) equipment, both Down-hole EM (DHEM) and Fixed Loop EM (FLEM) so that it can undertake its own survey work without relying on access to EM equipment from the only reliable service provider in Brazil. The equipment has arrived in Brazil and is now awaiting customs clearance which is expected by the end of January.

A Southern Geoscience geophysicist will be on site completing DHEM and FLEM surveys for the Company as well as attending to operator training of the equipment by the Centaurus EM survey team. Centaurus will have a dedicated EM survey team that will carry out DHEM surveys of new and historical drill holes as well as greenfields FLEM surveys.

An in-fill ground magnetics survey is also underway. The historical ground magnetics survey was completed on 200m lines spacing but, given the importance of iron oxides (magnetite) in the mineralisation assemblage, a tighter ground magnetic survey will greatly assist with drill hole planning. Around 120km of lines have been completed to date with the results of the survey work expected in February.

The survey is being completed by a local geophysical consultancy with Southern Geoscience completing QAQC of the survey data and undertaking all of the required processing work.

Metallurgy & Engineering

The Company's Principal Metallurgist has now completed a comprehensive review of historical metallurgical data and has identified several value-adding processing and project risk reduction opportunities that are now to be investigated.

Historically, the testwork was completed based on consideration of a bulk tonnage, low-grade project with the testwork starting with a coarse primary grind followed by a rougher concentrate fine regrind.

² Refer to ASX Announcement – "High-Grade Nickel Sulphides Intersected at Jaguar" on 3 December 2019 for maiden drill results.



This process is more like a copper-gold flotation circuit not a conventional nickel flotation circuit. Consequently, the Company now believes that there are a number of value-adding process optimisations opportunities immediately available to enhance nickel recoveries and reduce operating costs.

Process Mineralogy

Centaurus has commenced process mineralogy studies that amalgamate geological and metallurgical studies to create a "Geomet" understanding of how each respective ore type will treat and what is metallurgically significant in the ore that the geologists need to be aware of.

This work will be carried out by McArthur Ore Deposit Assessments Pty Ltd (MODA) in Tasmania. MODA is an industry leader and exceptionally experienced in base metal flotation performance. The Geomet studies are key to efficiently carrying out the metallurgical testwork.

Metallurgical Testwork

More than 75kg of sample has arrived in Perth and composites of the Jaguar South and Onça-Preta ore have been completed for the process mineralogy assessment and metallurgical testwork. Two master composites are being constructed – a "Jaguar Composite" and an "Onça Composite", which reflect the current knowledge of the mineralogical variation within the deposits.

Metallurgical testwork will be carried out at ALS Metallurgy in Perth, with testwork to start by the end of the month.

Project Engineering

Project engineering work considering a conventional nickel flotation processing plant project is already underway with the preliminary water balance, waste storage requirements and project layout studies well advanced.

Particular attention is being paid to the Project's Tailings Storage Facilities (TSF) given the importance of this piece in the project licensing. Centaurus has considerable experience with TSF's in Brazil, where it successfully licensed the Company's Jambreiro Iron Ore Project, which included a TSF that is considerably bigger than what is expected at Jaguar. The Company will also investigate dry-stacking and using tails as paste-fill to minimise TSF requirements.

A preliminary project layout has been completed that formed the basis of the Environmental Impact Assessment (EIA) terms of reference application.

Project Licensing

The terms of reference for the Environmental Impact Assessment (EIA/RIMA), which is the main study required to apply for the key project environmental licence (Preliminary Licence or LP), has been issued by the Pará Environmental Agency (SEMAS). The scope issued by SEMAS is in line with the Company's expectations for the Jaguar Project.

A considerable amount of baseline data is already at hand for use in the EIA/RIMA given the historical work completed by Vale, and this has given the Company a strong head-start on the licensing process. While further wet and dry season data is required, the collection of wet season data is already well underway. Dry season data will need to be collected from June 2020.



The Company is confident that it can lodge the Jaguar Project Environmental Impact Assessment (EIA/RIMA) before the end of 2020.

-ENDS-

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Competent Persons Statement

The information in this report that relates to new Exploration Results is based on information compiled by Roger Fitzhardinge who is a Member of the Australasia Institute of Mining and Metallurgy. Mr Roger Fitzhardinge confirms that the historical information in this market announcement that relates to the Exploration Results and Mineral Resource provided under ASX Listing Rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies supplied to Centaurus as a foreign estimate.

Roger Fitzhardinge is a permanent employee of Centaurus Metals Limited. Roger 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'. Roger Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



Figure 1 – The Jaguar Nickel Sulphide Project: showing the Jaguar and Onça-Preta Deposits and Onça-Rosa Prospect with DHEM (red) and FLEM Plates (blue) overlaid on the GeoTEM Survey (CH16); DHEM survey hole collars are shown as black triangles.



Figure 2 – The Jaguar Nickel Sulphide Project: showing all the Deposits and Prospects with DHEM (red) and FLEM Plates (blue) overlaid on the GeoTEM Survey (CH16); and the Ni/Cr Geochem (Nickel Sulphide indicator)





Figure 3 – Site photos, clockwise from top left: Centaurus' Jaguar Nickel Sulphide Project core-shed and office in Tucumã; more than 55,000m of historical core stored on site; project access improvements for operations during the wet season; drilling underway in 2020.





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 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. Surface material was first removed, and sample holes were dug to roughly 20cm depth. A 5kg sample was taken from the subsoil. The sample was placed in a plastic sample bag with a sample tag before being sent to the lab. Surface rock chip/soil samples were collected from in situ outcrops and rolled boulders and submitted for chemical analysis. The historical drilling is all diamond drilling. Drill sections are spaced 100m apart and generally there is 50 to 100m spacing between drill holes on sections. Core was cut and ¼ core sampled and sent to commercial laboratories for physical preparation and chemical assay. 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. 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
Drilling techniques	 Core is cut and ¼ core sampled and sent to accredited independent laboratory (ALS). 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 173 drill holes for a total of 58,024m of drilling on the project. All drill holes were drilled at 55°-60° towards either 180° or 360°.
Drill sample recovery	 Current drilling is a combination of HQ and NQ core (Servdrill). Diamond Drilling recovery rates are being calculated at each drilling run. For all diamond drilling, core recoveries were logged and recorded in the database for all historical and current diamond holes. To date overall recoveries are >98% and there are no core loss issues or significant sample recovery problems. To ensure adequate sample recovery and representivity a Centaurus geologist or field technician 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. Logging for drilling is qualitative and quantitative in nature. All historical and new diamond core has been photographed.
Sub-sampling techniques and sample preparation	 Diamond Core (HQ/NQ) was cut using a core saw, ¼ core was sampled. Sample length along core varies between 0.3 to 4.0m, with an average of 1.48m; sampling was done according to lithological contacts and generally by 1m intervals within the alteration zones and 2m intervals along the waste rock. There is no non-core sample within the historical drill database. QAQC: Standards (multiple standards are used on a rotating basis) are inserted every 20 samples. Blanks have been inserted every 20 samples. Field duplicates are completed every 30 samples. Additionally, there are laboratory standards and duplicates that have been inserted. 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. 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



Criteria	Commentary
	 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. 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. During the preparation process grain size control was completed by the laboratories (1 per 20 samples).
Quality of assay data and laboratory tests	 samples). 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. New samples are being analysed for 33 elements by multi element using ICP-AES (multi-acid digestion) at ALS Laboratories; ore grade analysis was completed with ICP-AES (multi-acid digestion); sulphur analysis was completed with Leco, and Au and PGEs completed via Fire Assay. ALS Laboratories insert their own standards at set frequencies and monitor the precision of the analysis. The results reported are well within the specified standard deviations of the mean grades for the main elements. Additionally, ALS perform repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). These compare very closely with the original analysis for all elements. Vale inserted standard samples every 20 samples (representing 5%). Mean grades of the standard samples are well within the specified 2 standard deviations. All laboratory procedures are in line with industry standards. Analysis of field duplicates and lab
	 All laboratory procedures are in line with industry standards. Analysis of neid duplicates and lab pulp duplicates have returned an average correlation coefficient of over 0.98 confirming that the precision of the samples is within acceptable limits.
Verification of sampling and assaying	 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. Centaurus Exploration Manager and Senior Geologist verify all new results and visually confirm significant intersections. No twin holes have been completed. 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 storage (DataShed).
Location of data points	 No adjustments have been made to the assay data. All historical collars were picked up using DGPS units. Centaurus has checked multiple collars in the field and has confirmed their location. All field sample and mapping points were collected using a Garmin handheld GPS. An aerial survey was completed by Esteio Topografia and has produced a detailed surface DTM at
	 (1:1000 scale). The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements. New drill holes are sighted with handheld GPS and will be picked-up by an independent survey consultant periodically. Downhole survey is being completed using Maxibore digital down-hole tool,
Data spacing and distribution	 with readings every 3m. Soil samples were collected on 50m spacing on section with distance between sections of 200m and 400m depending on location. Sample spacing was deemed appropriate for geochemical studies. 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 and 50m x 50m. No sample compositing was applied to the drilling
Orientation of data in relation to geological structure	 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. 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.
Sample security	 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 Parauapebas, PA. All remnant Vale diamond core has now been relocated to the Company's own core storage facility in Tucumã, PA.
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	 The Jaguar project includes one exploration licence (856392/1996) for a total of circa 30km². A Mining Lease Application has been lodged that allows for ongoing exploration and project development ahead of project implementation. The tenement is part of a purchase agreement with Vale SA. Centaurus has committed to an upfront cash payment of US\$250,000, the transfer of the Salobo West tenements to Vale, two deferred consideration payments totalling US\$6.75M and a production royalty of 0.75%. Completion of the acquisition remains subject to approval by the Brazilian National Bank for Economic and Social Development (BNDES) for the assignment of BNDES' royalty interest in the Project. Mining projects in Brazil are subject to a CFEM royalty, a government royalty of 2% on base metal revenue. Landowner royalty is 50% of the CFEM royalty. The project is covered by a mix of cleared farm land and natural vegetation. The project is not located within any environmental protection zones and exploration and mining is permitted with appropriate environmental licences.
Exploration done by other parties	Historically the Jaguar Project was explored for nickel sulphides by Vale from 2005 to 2010.
Geology	 Jaguar Nickel Sulphide is a hydrothermal nickel sulphide deposit located near Tucumã in the Carajás Mineral Province of Brazil. The deposit setting is interpreted as an extensional fault with the Itacaiúnas Supergroup down thrust southwards over the Xingu basement resulting in the development of a ductile mylonite zone along the Canãa Fault. Iron rich fluids were drawn up the mylonite zone causing alteration of the host felsic volcanic and granite units and generating hydrothermal ironstones. 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.
Drill hole Information	 Refer to Figures 1 to 3. Refer to ASX Announcement 3 December 2019 for all significant intersections from current drilling. Refer to ASX Announcement 6 August 2019 for all significant intersections from historical drilling.
Data aggregation methods	 Continuous sample intervals are calculated via weighted average using a 0.5 % Ni cut-off grade with 3m minimum intercept width. There are no metal equivalents reported.
Relationship between mineralisation widths and intercept lengths Diagrams	 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. The results in ASX Announcement 6 August 2019 reflect individual down hole sample intervals and no mineralised widths were assumed or stated. Refer to Figures 1-3
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 has been processed by an independent consultant Southern Geoscience. Results were released to the market on 29 August 2019, 2 October 2019 and 19 December 2019.
Further work	 A Ground Magnetic survey is currently underway and the Company's own Electro-magnetic (EM) geophysical surveys are planned to start in February. In-fill and extensional drilling within the known deposits to test the continuity of high-grade zones is ongoing. There are currently three drill rigs at the Project working double shifts. Resource samples are being sent in batches of 150-300 sample and will be reported once the batches are completed.