

2 August 2021

JAGUAR NICKEL SULPHIDE PROJECT IN BRAZIL SET TO BE CLASS-LEADING IN TERMS OF CARBON FOOTPRINT

Independent ESG assessment confirms Jaguar's credentials as a world-leading, low emission nickel project

- Estimated E1 (Scope 1 + Scope 2 + downstream) Green House Gas (GHG) emissions for the Jaguar Nickel Sulphide Project are forecast to be class-leading at 4.69 tonnes of CO₂/tonne of nickel equivalent for the proposed production of nickel sulphate on site.
- Life-of-mine CO₂ footprint assessed to be lower than 97% of global nickel production, once in production.
- The Jaguar GHG E1 emission levels are 85% lower than the nickel industry average of 33 tonnes of CO₂/tonne of nickel equivalent.
- ESG assessment reaffirms Jaguar's credentials as one of the best undeveloped nickel sulphide projects in the world, with forecast production of 20,000 tonnes per annum of nickel in sulphate¹, low capital intensity and attractive economics and financial returns.

Centaurus Metals Ltd (ASX-CTM) is pleased to advise that its 100%-owned Jaguar Nickel Sulphide Project in Brazil has been independently assessed as having the potential to be one of the world's foremost nickel projects in terms of its carbon footprint, putting it in an excellent position to attract investment from leading ESG-focused investors and institutions.

The Company recently commissioned a study by specialist metals and mining ESG research company, Skarn Associates, to study the emission levels forecast to be generated from the production of nickel sulphate at Jaguar. The Skarn assessment has been based on the operating parameters set out in the Jaguar Nickel Project Value Add Scoping Study (released to the market on 31 May 2021).

The results of the study are compelling and demonstrate clearly that the Jaguar Project is expected to be class-leading in terms of its carbon footprint, reflecting its unique attributes as a high-grade nickel sulphide project powered largely by renewable energy from the local grid and producing a finished (value-add) nickel sulphate product on site which can be used directly in the production of lithium-ion batteries.

When in operation, the E1 emissions for the production of nickel sulphate on site at Jaguar are expected to be extremely low at 4.69 tonnes of CO₂/tonne of nickel equivalent, which is lower than 97% of existing global nickel production and demonstrates the investment quality of Jaguar from an emissions perspective as well a financial perspective.

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¹ Refer to the Value-Add Scoping Study released to the market on 31 May 2021 for full details of the Production Target and the material assumptions underlying the Study. All the material assumptions underpinning the Production Target, continue to apply and have not materially changed.



The graph in Figure 1 below shows where Jaguar ranks on a global basis on the Skarn Associates GHG Nickel Intensity Curve.

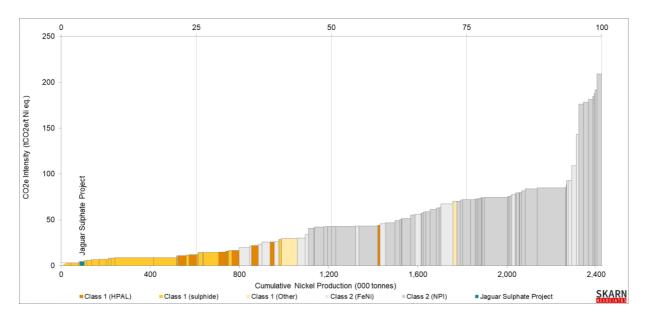


Figure 1 - Skarn Associates GHG Intensity Curve - Nickel (E1 GHG Emission Metrics®)

The low emission levels are a function of the relatively high-grade nickel coming from open pit mining sources and, importantly, the fact that 80% of grid power in Brazil stems from renewable sources. There is an expectation that, once in operation, Jaguar's power requirements will be met from 100% renewable sources. This has not yet been considered in the emission assessment by Skarn Associates.

Despite this, the assessed emission levels are already 85% lower than the industry average (production weighted) of 33 tonnes of CO₂/tonne of nickel equivalent. Figure 2 demonstrates where the Jaguar Sulphide Project sits from an emission perspective relative to other sources of Class-1 nickel as well as Class-2 nickel from various production processes.

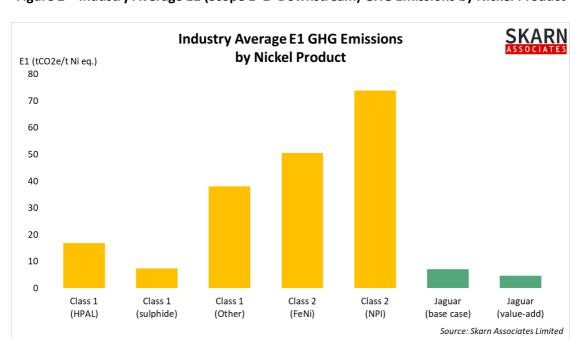


Figure 2 - Industry Average E1 (Scope 1+2+Downstream) GHG Emissions by Nickel Product



As can be seen in Figure 2, there are positive environmental benefits from producing a nickel sulphate product on site at Jaguar using the renewable power sources in Brazil rather than shipping and selling a concentrate to smelters in other locations.

Skarn Associates' proprietary E1 GHG Emission Metrics® relate to all emissions to produce LME nickel metal or first saleable product and includes Scope 1 and 2 mine site emissions from the mining and processing of ore plus any downstream processing required to get to first saleable product (refer Figure 3).

Emission intensities are stated on a recovered nickel-equivalent basis, calculated using average 2020 metal prices. Emissions are pro-rated across all commodities produced by the mine, based on contribution to gross revenue.

There is very little difference between Jaguar's EO (Scope 1 and 2) GHG Emissions and E1 (EO plus Scope 3) GHG Emissions, given the nickel sulphate planned to be produced on site at Jaguar is a final product ready to be used in the electrification of industry.

Centaurus' Managing Director, Mr Darren Gordon said: "Jaguar is one of the best undeveloped nickel sulphide projects globally. The resource base is large and the Value-Add (Nickel Sulphate) Scoping Study demonstrates that Jaguar is set to produce over 20,000 tonnes per annum of nickel-in-sulphate over an initial mine life of 13 years. Further drilling is expected to allow the Company to expand the Resource, which could pave the way for the annual production profile to be lifted or mine life to be extended.

"The capital intensity of the proposed development at Jaguar is low with very strong economics, especially considered against the backdrop of the current rising nickel price environment. The Scoping Study demonstrated that, at a conservative nickel price of US\$7.50/lb and a sulphate premium of only US\$0.50/lb, annual average cash flows are \sim A\$252 million, the NPV8 of the Project is \sim A\$1.1 billion with an IRR of \sim 52% and a payback of \sim 1.8 years.

"At a nickel price of US\$9/lb (which is nearly the current spot price), annual average cash-flows rise to over A335$ million with the post-tax NPV $_{8}$ of the Project lifting to A1.6$ billion with an IRR of 7 0%.

"We expected that the Jaguar Project would have a low carbon footprint given the relatively high-grade nature of the planned mill feed and the fact that 80% of the power in Brazil is generated from renewable sources (principally hydro and solar). Pleasingly, the study work undertaken by Skarn Associates has now confirmed this. At 4.69 tonnes of CO_2 /tonne of nickel equivalent, the Jaguar Project will be one of the lowest carbon emission projects in the nickel industry.

"To be able to produce a nickel sulphate product on site for ready use into the electrification of industry and have emissions assessed at these extremely low levels is a class-leading result and we look forward to the opportunity to develop such a high-quality project against the backdrop of a very low carbon footprint."

About Skarn Associates

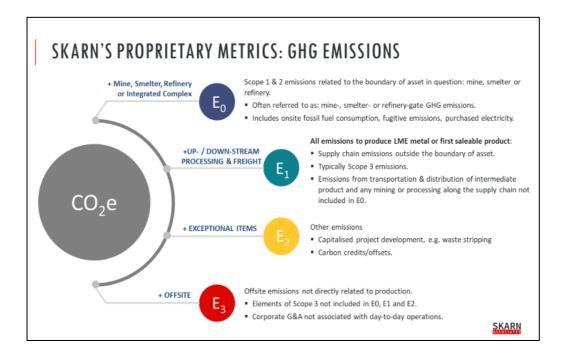
Skarn Associates is based in London and their mission is to bridge the research gap between mine economics and ESG. Founded in 2016, since early 2020 Skarn has focused on creating high quality, independent, forward-looking mining sector ESG analysis, especially energy use and carbon emissions from mining, smelting and refining operations.

Commodities covered include nickel, gold, aluminium, zinc, iron ore, metallurgical coal and copper. Skarn has become a leader in mining sector greenhouse gas benchmarking, having developed unique methodologies and datasets, including its proprietary E0 and $E1^{TM}$ emissions metrics.

For more information visit www.skarnassociates.com.



Figure 3 – Skarn Associates Proprietary Metrics for GHG Emissions



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



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

	ly 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 Core is cut and ¼ core sampled and sent to accredited independent laboratory (ALS).
	• 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°. The resource considers 49 drill holes completed by Centaurus for a total of 17,941m of drilling. All drill holes were drilled at 55°-75° towards either 180° or 360°. Current drilling is a combination of HQ and NQ core (Servdrill).
Drill sample recovery	 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 representativity 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.



Criteria	Commentary
	 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 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). 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.
Quality of assay data and laboratory tests	 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 48 elements by multi element using ME-MS61 (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 pulp duplicates have returned an average correlation coefficient of over 0.98 confirming that the precision of the samples is within acceptable limits. Vale QAQC procedures and results are to industry standard and are of acceptable quality.
Varification of compline and	All metallurgical chemical analysis is completed by ALS laboratories
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). No adjustments have been made to the assay data.
Location of data points	 All historical collars were picked up using DGPS or Total Station units. Centaurus has checked multiple collars in the field and has confirmed their location. All field sample and mapping points were collected using a Garmin handheld GPS. 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 after completion picked-up by an independent survey consultant periodically. Downhole survey for all the historical drill holes and Centaurus hole up to 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.
Data spacing and distribution	 Soil samples were collected on 40m 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 is in the process of closing the drill spacing to 100m x 50m or 50m x 50m. No sample compositing was applied to the drilling. Metallurgical samples to date have been taken from Jaguar South, Jaguar Central, Jaguar North and Onça Preta.



Criteria	Commentary
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 Vespasiano, MG. 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 Sale & 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. 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. Centaurus has secured possession rights to two properties over the Jaguar Project with other
Exploration done by other	 agreements currently being negotiated. This first agreements remove exposure to the landowner royalty over the properties secured. The project is covered by a mix of cleared farmland and natural vegetation. The project is not located within any environmental protection zones and exploration and mining is permitted with appropriate environmental licences. Historically the Jaguar Project was explored for nickel sulphides by Vale from 2005 to 2010.
parties	
Geology	 Jaguar Nickel Sulphide is a hydrothermal nickel sulphide deposit located near Tucumã in the Carajás Mineral Province of Brazil. 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. 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.
Drill hole Information	 Refer to previous ASX Announcements for significant intersections from Centaurus drilling. Refer to ASX Announcement of 6 August 2019 for all significant intersections from historical drilling.
Data aggregation methods	 Continuous sample intervals are calculated via weighted average using a 0.3 % Ni cut-off grade with 3m minimum intercept width. There are no metal equivalents reported.
Relationship between mineralisation widths and intercept lengths	 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 historical drilling results in ASX Announcement 6 August 2019 reflect individual down hole sample intervals and no mineralised widths were assumed or stated.
Diagrams	Refer to previous ASX Announcements for maps and sections from Centaurus drilling included in the resource estimate.
Balanced reporting	 All exploration results received by the Company to date are included in this or previous releases to the ASX. For the current resource, a revised 0.3% Ni cut-off grade has been applied to material less than 200m vertical depth from surface in the estimation of the Global MRE with this being consistent with mineralisation domain modelling and reported significant intersection cut-off grades.



Criteria	Commentary
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	 Electro-magnetic (EM) geophysical surveys (DHEM and FLEM) are ongoing. In-fill and extensional drilling within the known deposits to test the continuity of high-grade zones is ongoing. Resource samples are continuously being sent in batches of 150-300 samples and will be reported once the batches are completed. Metallurgical testwork is ongoing. Geotechnical and hydrological studies for the proposed tailings facility and waste deposits have started.

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	 The drilling database was originally held by Vale and received from them as csv exports. The drilling data have been imported into a relational SQL server database using Datashed™ (Industry standard drill hole database management software) by Mitchell River Group. All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All 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. Data validation checks were completed on import to the SQL database. Data validation has been carried out by visually checking the positions and orientations of drill holes.
Site visits	 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. 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).
Geological interpretation	 Sufficient drilling has been conducted to reasonably interpret the geology and the mineralisation. The mineralisation is traceable between multiple drill holes and drill sections. 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. Drill hole data, including assays, geological logging, structural logging, lithochemistry, core photos and geophysics have been used to guide the geological interpretation. Extrapolation of mineralisation beyond the deepest drilling has been assumed up to a maximum of 100m where the mineralisation is open. 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. 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. Mineralisation at Jaguar occurs as veins and breccia bodies set in extensively altered and sheared host rocks. Continuity of the alteration and sulphide mineralisation zones is good, continuity of local zones of semi-massive to massive sulphide is not always apparent. Mineralisation at the Onça Preta and Onça Rosa deposits predominantly forms tabular semi-continuous to continuous bodies both along strike and down dip. Post-mineralisation faulting may offset mineralisation at a smaller scale than that which can be reliably modelled using the current drill hole data.
Dimensions	 Jaguar South (primary mineralisation) covers an area of 1,200m strike length by 400m wide by 500m deep in strike length trending ESE-WNW. Individual domains dip sub-vertically with widths up to 20-30m. Jaguar Central (primary mineralisation) covers an area of 800m strike length by 250m wide by 420m deep trending ESE-WNW. Individual domains dip sub-vertically with widths up to 20-30m.



Criteria	Commentary
	 Jaguar North (primary mineralisation) has a strike length of 600m by up to 25m wide by 300m deep, trending SE-NW. Jaguar Central North (primary mineralisation) covers an area of 700m strike length by 100m wide by 500m deep, trending E-W. Individual domains dip sub-vertically with widths up to 20-30m. Jaguar Northeast (primary mineralisation) covers an area of 1,000m strike length by 300m wide by 420m deep, trending ESE-WNW. Individual domains dip sub-vertically with widths up to 10-15m. Jaguar West (primary mineralisation) has a strike length of 1,000m by up to 80m wide by 350m deep, trending E-W. Individual domains dip sub-vertically with widths up to 10m. Onça Preta (primary mineralisation) has a strike length of 400m by up to 15m wide by 375m deep, trending E-W. Onça Rosa (primary mineralisation) has a strike length of 500m by up to 10m wide by 250m deep, trending ESE-WNW
Estimation and modelling techniques	 Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Ni, Cu, Co, Fe, Mg, Zn and As. 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. 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. 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. 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. 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. 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. 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 of block model grades to the declustered input composite grades plus swath plot comparison by easting and elevation. Visual comparisons of input composite grades vs. block model grades were also comple
Moisture	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.
Cut-off parameters	Potential mining methods include a combination of open pit and underground. A revised 0.3% Ni cut-off grade has been applied to material less than 200m vertical depth from surface in the estimation of the Global MRE with this being consistent with mineralisation domain modelling and reported significant intersection cut-off grades. A Ni cut-off grade of 1.0% Ni was maintained below 200m from surface to reflect higher cut-offs expected with potential underground mining.
Mining factors or assumptions	 It is assumed that the Jaguar deposits will be mined by a combination of open pit and underground mining methods. 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. Input parameters were benchmarked from similar base-metal operations in Brazil and Australia.
Metallurgical factors or assumptions	 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. 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.
Environmental factors or assumptions	 Tailings analysis and acid drainages tests have been completed which underpin the preliminary tailing storage facility design (TSF), which is in progress. Waste rock will be stockpiled into waste dumps adjacent to the mining operation. The TSF and waste dumps will include containment requirements for the management of contaminated waters and sediment generation in line with Brazilian environmental regulations.



Criteria	Commentary
Bulk density	 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. Bulk density determinations adopted the weight in air /weight in water method using a suspended or hanging scale. The mineralized material is not significantly porous, nor is the waste rock. A total of 39,313 bulk density measurements have been completed. Of these, 4,040 were included in the analysis and are within the defined mineralised domains – and 4,031 are from fresh or transitional material leaving only 9 measurements from saprolite or oxide material. Oxide and saprolite material are excluded from the reported resource. Fresh and transitional measurements from within the mineralised domains we analysed statistically by domain and depth from surface and compared to Ni, Fe and S. A reasonable correlation was defined against Fe due to the magnetite in the system. The bulk density values assigned the mineralised domains by oxidation were as follows: Oxide: 2.0 Saprolite: 2.3 Transition: 2.6 Fresh: by regression against estimated Fe using: BD = (fe_ok*(0.0323)) + 2.6276
Classification	 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. 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. Oxide and saprolite material are excluded from the Mineral Resource. The Jaguar Mineral Resource in part has been classified as Indicated with the remainder as Inferred according to JORC 2012.
Audits or reviews	This is the second Mineral Resource estimate completed by the Company. The current model was reviewed by Entech as part of their independent mining study.
Discussion of relative accuracy/ confidence	 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. The statement relates to global estimates of tonnes and grade.