



## **Table of Contents**

Competent Person Declaration	25
Section 3 Estimation and Reporting of Mineral Resources	
Section 1 Sampling Techniques and Data Section 2 Reporting of Exploration Results	
JORC CODE, 2012 - Table 1 Section 1 Sampling Techniques and Data	
Mining and Metallurgy	9
Reportable Cut-off Grade	9
Classification	8
Estimation	7
Interpretation	7
Assaying	6
Sampling	6
Drilling	5
Geology	4
Project Overview	3
Summary Mineral Resources	3



#### **Summary Mineral Resources**

The total Pantera Mineral Resources as at 01 October 2022 have been estimated at 20Mt of copper mineralisation grading 1.2% Cu % and 0.2 g/t gold (Table 1). The Mineral Resource has been reported at a cut-off grade of 0.25% copper.

**Table 1: 01 October 2022¹ Mineral Resource Estimate reported at ≥0.25% Cu.** 

Category	Tonnes	Cu	Au	Cu	Au
	Mt	%	g/t	kt	koz
Measured	-	-	-	-	-
Indicated	13	1.3	0.2	170	74
Inferred	7.1	1.1	0.2	77	35
Total	20	1.2	0.2	250	110

The Mineral Resource estimate is reported and classified in accordance with the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code; 2012). The 0.25% Cu cut-off assumes and open pit operation and is based on a preliminary mining study. Mineral Resources are constrained within a 'reasonable prospects' pit shell based on metal prices that equate to a copper price of US\$9,100/tonne and US\$1,650/oz for gold. Further details can be found below and in the accompanying JORC Table 1.

#### **Project Overview**

The Pantera Project ("the Project") is a Cu-Au mineral deposit that is currently under the ownership of Avanco Resources Mineração Ltda ("ARM" or "Avanco"), a wholly owned Brazilian subsidiary of OZ Minerals. The option to acquire the Project from VALE METAIS BÁSICOS SA. ("Vale"), by ARM, was triggered in November 2019, with the balance of the option payment due in annual instalments commencing in early 2022. OZ Minerals has now chosen to continue with the project within its future growth portfolio for Brazil and is now obligated to complete payment of the Project based on an updated Measured and Indicated Resources in an independent Mineral Resource estimate to be provided by a third-party consultant selected by Vale, the original owners of the Pantera project in late 2023. An initial agreement between Vale and OZ Minerals allowed the undertaking of drilling for the purpose of Mineral Resources definition. A total of 5,803 meters of drilling from this program, completed by OZ Minerals in the first half of 2021, was included in this Mineral Resource together with historical drilling including that undertaken by Vale in 2013 and Avanco in 2018.

The Pantera IOCG (Iron-Oxide-Copper-Gold) deposit is hosted within the Carajás Mineral Province which represents one of the best endowed mineral districts in the world and contains the world's largest known concentration of iron oxide copper gold deposits.

The deposit is located in the south-eastern portion of the State of Pará in the municipality of Ourilândia do Norte, situated about 150 km south-west of the city of Parauapebas (Figure 1) and 110 km west of the 100% OZ Minerals-owned Pedra Branca mine. It is close to public infrastructure in the towns of Ourilândia do Norte

<sup>&</sup>lt;sup>1</sup> Table subject to rounding.



and Tucumã, which is approximately 20 km from Vale's operating Onça Puma nickel mine. The Pantera deposit is accessed from a sealed national highway immediately to the south of the project.

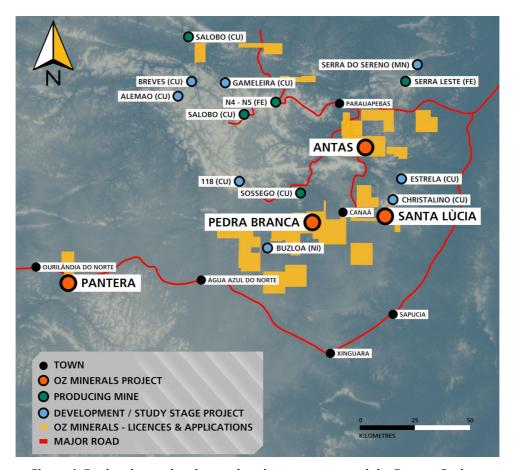


Figure 1: Regional map showing exploration tenements and the Pantera Project.

### Geology

The Carajás Province is located in the south-eastern part of the Amazon and the State of Pará within a large and well preserved Archean craton that can be divided in two tectonic blocks considered distinct, the Rio Maria domain located to the south, and the Carajás domain in the north of the province.

The Pantera deposit is located at the extreme north of the Rio Maria domain hosted in a shear zone in an intrusive body of granodioritic composition which is cut by a dioritic/diabase dyke (Figure 2). The mineralisation of the deposit has IOCG characteristics, generally associated with albite alteration. Mineralisation consists mainly of magnetite, pyrite and chalcopyrite displaying three distinct mineralisation styles: disseminated, veins and veinlets and hydrothermal breccia. The deposit displays a strong structural control with an ENE-WSW direction, correlated to the Canaã regional shear zone.



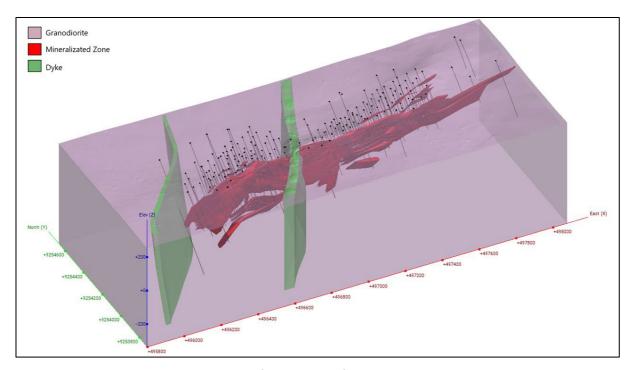


Figure 2: Simplified geology of the Pantera Project.

### **Drilling**

The data cut-off to inform the Mineral Resource was September 2022 and at that time a total of 36,885.7 meters of drilling was completed at the Pantera project. This consists of 19 drill holes for 4,251m completed by Vale, 44 drill holes for 8,506m completed by Avanco and 116 holes for 24,129m by OZ Minerals. Drilling of the Vale holes commenced in 2013 followed by Avanco in 2018. OZ Minerals commenced drilling in September 2020 and continued drilling through to the end of June 2022 (Figure 3). Drilling in mineralised zones is commonly NQ size with HQ diameter utilised through cover and oxidised rock at the beginning of drill holes. The drill spacing is generally on 50m sectional spacings, with several infill holes on 25m sections along strike. The average on-section spacing is 50m however is commonly less than this in several areas of the deposit.





Figure 3: Drilling by program year at the Pantera Project.

#### Sampling

Diamond drilling samples were taken predominately from NQ diamond drill core cut longitudinally using a core saw. Earlier drill holes completed by Vale were quarter core sampled and typically sampled along their entire length. Later Avanco and OZ Minerals holes were half core sampled and selectively sampled only in visually logged mineralised zones with a two-metre buffer of the surrounding un-mineralised material. OZ Minerals and Avanco samples are a typical 1m length and permitted to range from 0.5 m to 1.5 m in length and Vale core sampling was generally 1 m in length although could extend up to 2 m.

There was no core recovery data available for the Vale drilling dataset. Avanco / OZ Minerals monitored core recovery during drilling by measuring the length of each drilling run. Statistical analysis of this recovery data showed a mean recovery of 97.3% with less than 4% of recordings having a recovery less than 80%. There was no apparent relationship between sample recovery and grade.

#### **Assaying**

Sample preparation of Vale's core samples was completed at Vale's laboratory (N4 Carajás) in Para State, Brazil and then analysed at ALS. The standard procedures utilised at Vale's preparation laboratory include drying and crushing to less than 4mm before splitting and pulverising to 95 percent passing 106 microns (150 mesh). Avanco's core samples were prepared and analysed at the Intertek Laboratory in Parauapebas, Pará State. Samples were dried and crushed to less than 3.35 mm before riffle splitting to form an approximate 1kg sample. Samples were then pulverised to 95 percent passing 106 microns. Preparation of OZ Minerals core samples, until mid-2021, was completed at the ALS laboratory in Vespasiano, MG., before the activity was transferred to the ALS sample preparation laboratory in Parauapebas, PA. ALS sample chemical analysis for



OZ Minerals samples was completed at ALS in Lima, Peru. Samples were dried and crushed to less than 2 mm before pulverising to 95 percent passing 106 microns.

ALS analyses, for OZ Minerals copper assays, used four acid digestion and an AAS finish and for Vale utilised an ICP-OES/MS finish (AAS was utilised for overlimit samples). For Intertek the analytical procedure for copper was 2-acid digestion and an AAS finish. Assaying for gold used fire assay. No documentation is available for QAQC procedures and results for the Vale drilling. OZ Minerals and Avanco undertook a QAQC process that included certified reference material (CRM's), blanks, core field duplicates and in-laboratory crushed and pulp duplicates.

#### Interpretation

Grade shells were guided by logging of the shear zone and associated mineralisation however were based predominately on copper grades utilising a nominal cut-off grade of 0.2 g/t Cu. This cut-off was not strongly statistically evident however best defines a transition from non-mineralised to mineralised zones and displays continuity between sections. The orientation of the grade shells was supported by measured structural data undertaken on drill core. A total of 7 main mineralised sets and 35 minors' sets were constructed (Figure 2).

Minor inflections in the log probability plots can be observed at higher grades at approximately 8% Cu for the main domains. After observation of the spatial continuity of samples above this cut-off it was determined that grade shells would not be suitable as it would enforce a lack of geological context and would generally be quite "patchy". It was determined to manage the higher grades using estimation search restrictions where suitable. Gold mineralisation is also related to the shear zones and copper mineralisation and therefore no independent gold grade shells were constructed.

#### **Estimation**

Variography was carried out using Snowden Supervisor 8.14 software. Normal scores-transformed experimental variograms were produced from 1 m composites with variogram axis directions determined primarily using the large-scale modelled domain shape. All final variogram rotations used in the estimation were based on the dynamic anisotropy modelling that assigns rotation directions to each block based on the local orientation of the grade shells.

The block model was constructed using Maptek<sup>TM</sup> Vulcan software with parent block sizes of 25×5×10 metres, with sub-blocks down to 1.25×1.0×1.0 metres to honour domain boundaries. Parent block sizes were chosen based on the understanding of the grade variability in the major/semi-major and minor directions and guided by Quantitative Kriging Neighbourhood Analysis (QKNA). Drillhole and sample spacing was also considered to prevent parent block sizes from being significantly smaller than the variability that can be modelled/calculated from sample data.

Ordinary Kriging was utilised with three estimation passes undertaken starting with a radii of 35m×35m×25m, representing approximately 80% of the sill, in the major and semi-major directions. The search pass 2 radii was 120m×120m×50m and a larger third pass was utilised to estimate a very minor number of blocks. Kriging weights were multiplied by the composite length to provide final weightings for block grade estimation. Cu and Au were estimated using the same set of domains and all domain boundaries were treated as hard. All blocks in mineralised domains were estimated by one of the three passes.

Density, based on measured data, was estimated in mineralised domains using Ordinary Kriging utilising three passes. Minor un-estimated blocks and waste blocks were assigned default values.



#### Classification

The Mineral Resource was classified under the guiding principles of the JORC Code (2012). In particular, drill spacing, estimation search pass, and geological/grade continuity were taken into account in the generation of Mineral Resource classification wireframes for Indicated material.

Blocks within mineralised grade shells were flagged as Inferred as a first pass. Wireframes were extended approximately 25m past the limits of drilling along strike and approximately 50m past the last drill hole intersection down dip where there is currently no evidence to suggest mineralisation does not extend in this direction. Blocks falling outside of a generated pit shell for the purpose of honouring 'reasonable prospects for eventual economic extraction' were not reported as a Mineral Resource. It is considered that geological and grade continuity is sufficient to allow for the reported Inferred Resources and allows for drill spacing up to approximately 100m. Transitional and oxide zones were excluded from Mineral Resource classification due to a lack of understanding of metallurgical performance and more complex copper speciation and mineralisation.

Indicated Resources were defined by the construction of classification wireframes. Indicated Resources were defined in areas that had sufficient drilling to model the current understanding of grade continuity that is based on drilling to date. In general drill hole spacing was required to be approximately 50m or tighter with geological continuity being robust. At a range of 50m approximately 90% of the sill is reached, based on modelled variograms, and this is considered acceptable to define Indicated Resources. All Vale holes drilled in 2013 were not utilised in the grade estimations and excluded from the determination of Indicated Resources due to lack of information on sample quality.

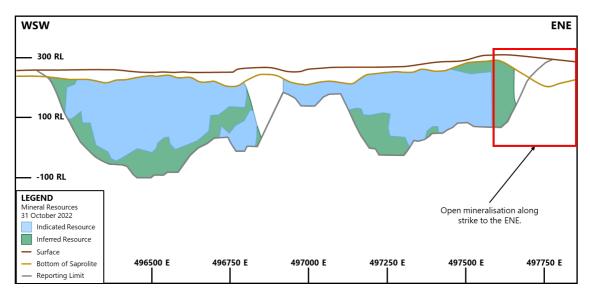


Figure 4: North Facing View showing Mineral Resource Classification of main lenses.



### Reportable Cut-off Grade

This Mineral Resource has been constrained within an Lersch-Grossman pit shell developed by SDPM Mining Consultants using optimisation parameters agreed by OZ Minerals in order to provide a basis of 'reasonable prospects for eventual economic extraction'.

The resultant metal prices utilised to generate the reporting pit shell were US\$9,100/tonne for copper and US\$1,650/oz for gold both of which are considered acceptable for the purpose of reasonable prospects. This copper price was also utilised to generate the 0.25% Cu reporting cut-off. Copper was chosen as the reporting metal as it includes a higher revenue potential, opposed to gold, and would be the main influencer of grade control and plant feed considerations. Recoveries utilised were 95% for Cu and 70% for Au (Au block value was included in the reportable pit shell construction) based on a preliminary metallurgical study undertaken taken in 2018. A mining cost of ~US\$3.30/tonne rock and processing costs of ~US\$15/tonne was utilised. Based on the above, 0.25% Cu was determined an appropriate threshold copper grade for reporting Mineral Resources

It is the Competent Person's opinion that these methods, including the reportable pit shell, and cut-off grades satisfy the requirements for reasonable prospects for eventual economic extraction. It is noted that a Lersch-Grossman shell was completed, to report the Mineral Resource contained within to demonstrate reasonable prospects for eventual economic extraction, and highlights that this pit does not constitute a completed scoping study or a detailed mining study.

#### Mining and Metallurgy

Locally in the Project area there are artisanal ("Garimpeiro") mining activities for copper. The depth extension of the shafts and drifts are highly uncertain as most of the activities are not well documented, however based on local information obtained by OZ Minerals, most of the abandoned mining activities were focused in the saprolitic/oxidised zone. There are currently a small number of operating shafts actively exploiting chalcopyrite mineralisation in fresh rock. In these areas the artisanal mining extends below surface to depths of 40-60m. Based on information from the active Garimpeiro's, mining voids were developed and used to exclude mineralisation for the purposes of Mineral Resource reporting. Also based on this information, the suggested mining rate, and subsequently estimated tonnes extracted are deemed to be immaterial, therefore the expected error associated with the excluded tonnage and grade is believed to be relatively low. This "small scale" depletion will have a minor effect on the Mineral Resource estimate on a local scale

It is assumed that copper and gold can be recovered based on test work conducted in 2018 and in 2021. The 2021 study with two composited samples highlights the necessity to continue the grinding and flotation tests to get a better understanding of recovery performance. It is considered that the metallurgical test work is preliminary, however does indicate that there is potential to obtain commercial concentrates.



### JORC CODE, 2012 - Table 1.

Section 1 Sampling Techniques and Data

Criteria Criteria	echniques and Data  Commentary
Criteria	Commentary
Sampling techniques	All samples are derived from Diamond Drilling ("DD") with samples taken from NQ and HQ diamond drill core cut longitudinally using a core saw. NQ drilling generally commences once fresh rock was intersected.
	All drill holes completed by Vale were quarter core sampled and typically sampled along their entire length. Later drill holes by Avanco (2018) and OZ Minerals ("OZ") (2020-2022) were half core sampled and selectively sampled only in visually logged mineralised zones.
	OZ Minerals and Avanco samples are a typical 1 metre length and permitted to range from 0.5 m to 1.5 metres in length. Mineralisation is visually identifiable in drill core, so where required, sample lengths were adjusted to avoid samples crossing changes in lithology, mineralisation, or alteration. Mineralised intervals were sampled from start to finish, plus a two-metre buffer of the surrounding un-mineralised material. Vale core sampling was generally 1m in length although could extend up to 2m.
Drilling techniques	Diamond Drilling was conducted using NQ and HQ diamond core barrels NQ drilling generally commences once fresh rock was intersected. OZ Minerals core was orientated using a REFLEX ACT II tool.
Drill sample recovery	There was no core recovery data available for the Vale drilling dataset. Avanco / OZ monitored core recovery during drilling by measuring the length of each drilling run. Statistical analysis of OZ Minerals recovery data showed a mean recovery of 97.3% with less than 4% of recordings having a recovery less than 80%. There was no apparent relationship between sample recovery and grade. It is inferred that a similar relationship would be apparent for the older Vale drilling dataset.
Logging	Drill core has been geologically logged for texture, lithology, weathering, structure and mineralisation, and geotechnically logged for core recovery and RQD, as well as orientated, where supported by the core condition.
	Logging is considered to have the appropriate detail to support Mineral Resource estimation, mining studies and metallurgical studies.
	Core was photographed both wet and dry. All drill holes were logged in full, from start to finish of the hole.
Sub-sampling	To ensure sampling representativity, drill core was rotated to maximise mineralisation anisotropy or structure relative to the core axis prior to being
techniques and sample	cut with a core saw. All core holes by Vale were quarter core sampled. Core from Avanco and OZ Minerals drilling was half core sampled. NQ core
preparation	size is appropriate for this style of mineralisation however the Vale quarter core samples would be less representative than later half core sampling. Sample Preparation for the 3 drilling campaigns is described below
	Vale drilling campaign



Criteria	Commentary
	<ul> <li>Preparation of Vale's core samples was completed at Vale's laboratory (N4 Carajás) in Para State, Brazil and then analysed at ALS Laboratory.</li> <li>The physical preparation of the samples at the Vale laboratory included the following steps:</li> <li>Drying,</li> <li>Crush to lower than 4 millimetres,</li> </ul>
	<ol> <li>Splitting and separating half of the initial mass (unknown, however based on NQ quarter core and an average sample length of 1 metre),</li> <li>The sub-sample was pulverised to 95 percent passing 106 microns (150 mesh).</li> </ol>
	• Samples were assayed for copper using inductively coupled plasma-mass spectrometry and atomic emission spectroscopy (ICP-MS and ICPAES), or multiacid digestion/atomic absorption spectroscopy (AAS) for overlimit samples. Samples were analysed for gold by fire assay with atomic absorption finish on a 30-gram aliquot.
	• Other than copper and gold Vale analysed a suite of multi-elements that includes sulphur, fluorine, silver, uranium, iron, nickel and other elements, using the ICP-MS method.  Avanco drilling campaign
	<ul> <li>Avanco's core samples were prepared and analysed at the Intertek Laboratory in the city of Parauapebas, Pará State, Brazil. Avanco used SGS Geosol laboratory as an umpire laboratory.</li> <li>The physical preparation included the following steps:</li> </ul>
	<ol> <li>Drying,</li> <li>Crush to lower than 3.35 millimetres,</li> <li>Split sample using a riffle quarter to get a 1,000g sub-sample,</li> </ol>
	<ul> <li>4. The sub-sample was pulverised to 95 percent passing 106 microns (150 mesh).</li> <li>Samples were assayed for copper using two acid digestion and atomic absorption spectroscopy (AAS - Intertek Code GA01_AAS). Samples were analysed for gold by fire assay with atomic absorption finish (Intertek Code FA50_AAS) on a 25-gram aliquot.</li> </ul>
	<ul> <li>Avanco analysed only copper, gold and nickel. However, OZ sent the pulp backup to the ALS Laboratory for reanalysis, aiming to complete the database with the multi-elementary assays. The multi-elements were assayed using four acid digestion and inductively coupled plasma – atomic emission/mass spectroscopy (ICP-MS and AES).</li> </ul>
	<ul> <li>OZ Minerals drilling campaign</li> <li>Preparation of OZ's core samples were completed at ALS laboratory in the city of Vespasiano, MG, Brazil and after mid-2021 use the new ALS facility in Parauapebas, PA, Brazil and then analysed at ALS in Lima, Peru. OZ used SGS Geosol laboratory as an umpire laboratory.</li> <li>The physical preparation of the samples at the ALS laboratory included the following steps:</li> </ul>
	<ol> <li>Drying,</li> <li>Crush to lower than 2 mm,</li> <li>Split sample using a riffle quarter to get a 1,000g sub-sample,</li> </ol>



Criteria	Commentary
	<ul> <li>4. The sub-sample was pulverised to 95 percent passing 106 microns (150 mesh).</li> <li>Samples were assayed for copper using four acid digestion and atomic absorption spectroscopy (AAS - ALS Code Cu-AA62). Samples were analysed for gold by fire assay with atomic absorption finish (ALS Code Au-AA24) on a 50-gram aliquot.</li> <li>OZ also analysed total sulphur (LECO), chlorine &amp; fluorine (KOH fusion and IC) and a suite of multi-elements that includes silver, uranium, iron, nickel and other elements. The multi-elements suite was assayed using four acid digestion and inductively coupled plasma – atomic emission / mass spectroscopy (ICP-MS and AES).</li> </ul>
Quality of assay data	Assaying for copper used either 4-acid digest (OZ and Vale), a 2-acid digest (Avanco) and an AAS finish (OZ Minerals and Avanco), or a ICP finish
and laboratory tests	(Vale which also used an AAS finish for samples with values greater 2,000 ppm).  OZ Minerals carried out a close to complete re-assay of all Avanco pulps. Comparison between the 2 phases showed a minor positive bias (+5%), starting above 2% Cu, for the Avanco analysis. Although this is considered reasonable and acceptable for estimation purposes it was determined to replace all Avanco Cu assays with those re-assayed by OZ Minerals at ALS for the purpose of Mineral Resource estimation in the interest of reducing any potential bias issues due to different analytical techniques. QQ-plot analysis has been undertaken to compare Vale copper results to OZ Minerals results (Including Avanco pulp re-assays). The plot displays a positive bias towards Vale samples commencing at about 1% Cu before reversing to a positive bias towards OZ Minerals samples above 4% Cu. Mean and Median grades were comparable. It is difficult to attain whether the biases are caused by sampling and analytical technique or a function of drilling locations or a combination of both. It was decided to exclude the Vale drilling in the estimation and due the uncertainty, areas defined by Vale drilling was assigned Inferred Resources only. The Vale samples were used to interpret grade shells.  Assaying for gold used fire assay (50 gram for OZ Minerals, 25-gram for Avanco and 30-gram for Vale) and an AAS finish. As with Cu, the Avanco pulps re-assayed by OZ for Au were compared. The positive bias toward Avanco samples was observed, as with Cu, however it was determined not to replace the re-assays and preserve the Avanco data for Au for estimation. This was due to a homogeneity concern and gravity separation concern in the pulp sample potentially not allowing for a representative analysis. QQ plot comparison for Au between Vale and OZ/Avanco showed similar biases as Cu and it was determined to use the Vale Au samples in the Mineral Resource estimation.  Geophysical tools and portable XRF data have not been used for Mineral Resource estimation.  No docum



Criteria	Commentary
	quality were submitted displaying acceptable results. OZ Minerals used a commercial blank not certified for copper and gold. The blanks were verified using 3 times the detection limit for copper and gold and the results indicated that there is no material contamination issues for copper and gold with 97% and 100% of analysed samples below 3 times detection limit respectively. Although the results do not indicate material contamination, it is recommended to use a certified blank for
	copper and gold.  Half core duplicates were submitted at a rate of approximately 5% and display reasonable scatter up to +/-30% for both copper and gold. This scatter is reasonably high, however acceptable for this style of mineralisation due to the course nature that can be displayed by chalcopyrite mineralisation and the nuggety nature of gold mineralisation. It is recommended to continue to monitor this scatter with further drilling. Both coarse rejects and pulp repeats displayed acceptable levels of scatter.
	Umpire checks have been undertaken for the OZ Minerals drilling where splits of pulverised samples, retrieved from ALS, were sent to SGS Geosol Laboratory. 395 samples were sent during February 2021 to June 2022 and results were acceptable with no biases noted and minor scatter for Cu. Au displayed greater scatter most likely due to homogeneity issues with the pulp samples.
	The QAQC results confirm that acceptable levels of accuracy and precision have been established for the Classifications applied, however as noted no QAQC data or procedures are available for the Vale drilling and as such this drilling informs Inferred Resources only.
Verification of sampling	Senior exploration geology staff have visually verified significant intersections and results. Core from all campaigns is stored at the OZ Minerals
and assaying	core storage facility. No dedicated twin holes have been drilled at Pantera.
	Historical datasets were supplied to OZ Minerals in a comma delimited text format. This data was validated and imported into a sequel database.
	New OZ Minerals data was collected on Microsoft Excel templates with detailed geological and structural logging recorded on paper. Information is
	transferred, validated, complied, and managed by the Company's in-house database professional in a sequel database storage accessed using the
	Datamine Geological Data Management System (Fusion GDMS).  Where assay results are below detection limit, a value of half the detection limit has been used. No other adjustments were made to assay data used
	in this estimate.
	The Competent Person is not aware of any other adjustments or calibrations to assay data.
Location of data points	Vale report information indicates that collar surveys were acquired with DGPS (Differential Global Positioning System), supported by a geodetic
	landmark. Avanco collar surveying (2018 drilling) was supported by total station. For OZ Minerals collar surveying the RTK system (Real Time
	Kinematic) was utilised.
	As part of the data validation process OZ Minerals performed a positioning check for historical drilling, of five drill holes. It was possible to find
	collars in good conditions and in their original position. No divergence was found by these measurements against database collars coordinates. A photographic record of the original identification tags from collar land markers was also collected.
	Drillhole collar data was compared to detailed topographic surface used in the 3D modelling and shows that the collar survey data is accurate. More than 89% of boreholes used in the resource estimation present a difference with the topographic surface less than 1 metre. Nine boreholes (9%)



Criteria	Commentary
	present a difference from one to two metres and two boreholes (2%) have a difference between 2 and 4 metres.  Downhole surveying was carried out employing the Reflex Maxibor I system for all 19 drill holes completed by Vale. This equipment recorded survey measurements every 3m, starting from the collar. Vale did not supply any down hole survey reports.  For the Avanco 2018 drilling campaign the down hole survey was performed by the drilling company using the Reflex Maxibor II device for 28 drill holes. DIPCORE complemented the down hole surveys for 16 drill holes by North Seeking Gyro as a quality check.  Downhole surveying was carried out for OZ Minerals in 100% of DD holes using the North Seeking Gyro. This equipment recorded survey measurements every 6m, starting from the collar when possible. For eleven drillholes the measurement started at 6 metres. The down hole surveys were performed by the independent company DIPCORE.  In March 2021, OZ commissioned a detailed topographic survey of the Pantera deposit area using Vant drone/GNSS/RTK/PPK drone and Genius LiDAR Mini UAV handling System. The survey was carried out by "AL3D Engenharia e Topografia", from Parauapebas, PA, Brazil and consisted of survey lines spaced 70 metres apart, and control lines spaced 100 metres apart. The topographic survey generated a digital terrain model with high resolution and no interference from local vegetation.  The grid system is Universal Transverse Mercator, SAD69 zone 22S. Elevations are relative to mean sea level. The quality of the topographic control is adequate for Mineral Resource estimation and preliminary mining studies.
Data spacing and distribution	The current drill spacing at Pantera is generally on 50 metre sectional spacings, with some minor 25 metre infill holes along strike The average on-section spacing is 50 metres however is commonly less than this (~25 metres) in several areas of the deposit.  The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation process and the Classification.  No physical compositing of samples has occurred. Compositing of data into 1 metre lengths has occurred for Mineral Resource estimation.
Orientation of data in relation to geological structure	Geology and mineralisation at Pantera mostly dips at moderate angles (~60 degrees) towards 340-350 degrees. Thus, the majority of drilling sections were orientated at a bearing of 160 degrees to achieve minimal sample bias and reasonable drill hole intersection angles with mineralisation. Holes were drilled approximately -60 degrees towards 160 degrees. The relationship between drilling orientation and mineralisation orientation is not considered to have introduced a sampling bias.
Sample security	For OZ Minerals core sample collection was supervised by OZ staff using protocols established by OZ. Samples were transported from drill site to the core shed by the drilling contractor. The core was logged and cut, and the remaining core is securely stored in the OZ core storage facility in Ourilândia do Norte, Pará State. The samples were bagged with appropriate identification tags affixed. Samples were shipped to ALS laboratory facility in Vespasiano, Minas Gerais State (2020-2021) for sample preparation and after mid-2021 the ALS Parauapebas (Pará State) Both ALS laboratory were responsible to send the prepared samples from Vespasiano or Parauapebas to ALS Lima, Peru for chemical analysis.  For Avanco, the core samples were logged and cut, and the remaining cores were stored in the Avanco's (now OZ) core storage facility in Ourilândia do Norte, Pará State. The samples were bagged with appropriate identification tags affixed. Samples were shipped to Intertek laboratory in the city



Criteria	Commentary
	of Parauapebas, Pará State, for sample preparation and chemical analysis.  For Vale's core samples, logging and cutting were carried out in Tucumã and Carajás core storage facilities, Pará state. The samples were properly identified and packaged. The sample batches were sent to Vale's laboratory (N4 Carajás) for sample preparation and then sent to ALS laboratory for chemical analysis.
Audits or reviews	No previous external audits have been performed on sampling techniques and assaying. Internal reviews on all available data and processes have been undertaken by OZ Minerals including re-assay of Avanco pulp samples.  As described in the sections above, the OZ Minerals review of the Vale drilling datasets found a lack of supporting documentation, and a statistical comparison between Vale and OZ Minerals assay data show some potential bias. From a global perspective the Vale data is believed by the Competent Person to be of an acceptable standard for use in the Mineral Resource estimation, however down grading, or limiting, of the Mineral Resource classification to Inferred where intersected/influenced by Vale drilling reflects the lower confidence in this dataset.  Additional quality checks and potentially replacement of some or all of Vale drilling data will be considered in future Mineral Resource drilling and estimation programs.



### Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Pantera Project ("the Project") is a Cu-Au mineral deposit that is currently under the ownership of Avanco Resources Mineração Ltda ("ARM" or "Avanco"), a wholly owned Brazilian subsidiary of OZ Minerals. The option to acquire the Project from VALE METAIS BÁSICOS SA. ("Vale"), by ARM, was triggered in November 2019, with the balance of the option payment due in annual instalments commencing in early 2022. OZ Minerals has now chosen to continue with the project within its future growth portfolio for Brazil and is now obligated to complete payment of the Project based on an updated Measured and Indicated Resources in an independent Mineral Resource estimate to be provided by a third-party consultant selected by Vale, the original owners of the Pantera project in late 2023. An initial agreement between Vale and OZ Minerals allowed the undertaking of drilling for the purpose of Mineral Resources definition. A total of 5,803 meters of drilling from this program, completed by OZ Minerals in the first half of 2021, was included in this Mineral Resource together with historical drilling including that undertaken by Vale in 2013 and Avanco in 2018.  A mine concession application was submitted by ARM on July 16th, 2020 on tenement ANM 850.777/1990. Prior to the application this tenement was an exploration concession. This tenement is currently held by ARM and is in good standing with no know impediments to future licensing requirements.  Locally in the Project area there are artisanal ("Garimpeiro") mining activities for copper. The depth extension of the shafts and drifts are highly uncertain as most of the activities are not well documented, however based on local information obtained by OZ Minerals, most of the abandoned mining activities were focused in the saprolitic/oxidised zone. There are currently a small number of operating shafts actively exploiting chalcopyrite mineralisation in fresh rock. In these areas the artisanal mining extends below surface to depths of 40-60 metres. Based on information from the a
Exploration done by other parties	Mineralisation was discovered at Pantera by a systematic program of exploration with the initial work carried out by soil testing with a focus on copper mineralisation, associated with extensive structural trends coincident with magnetic and radiometric anomalies.  Drill testing at Pantera was executed in two phases.  In 2013 initial drilling was conducted by Vale Metais Básicos S.A. (Vale). This consisted of a short drilling program of nineteen drill holes (4,251 metres). This initial program was aimed at investigation of strike and depth continuity of the main narrow mineralisation sets in the west and east of deposit.  In November 2018 Avanco Resources Mineração Ltda entered in to an "earn-in" agreement with Vale over the Pantera deposit. This agreement provided Avanco (subsequently OZ Minerals) with the option to purchase Vale's holding in the project subject to the completion of a number of contractual obligations including drilling. Drilling associated with the Avanco phase of drilling consisted of forty-four drill holes (8,506 metres).



Criteria	Commentary
	OZ Minerals Competent Persons have determined that the quality and integrity of historical work is adequate for inclusion and consideration for geological and grade interpretation in this Mineral Resource however only the Avanco data has been used for grade estimation due to assays quality concerns associated with the Vale data.  Oz Minerals has drilled 116 holes for 24,129 metres.
Geology	The deposit is hosted in an intrusive body of granodioritic composition, with preserved equigranular igneous textures. Locally it presents strong deformation and mylonitic to proto-mylonitic textures, with a vertical to sub-vertical orientation. In the deposit area cross-cutting quartz diorite, porphyritic, and diabase dykes are present, all of which are affected by variable intensities of hydrothermal alteration. These dykes generally have NNE-SSW orientation, dividing the deposit into two zones: West and East.  The mineralisation of the deposit has IOCG (Iron-Oxide-Copper-Gold) characteristics, generally associated with potassium alteration. The mineralisation consists mainly of magnetite, pyrite, and chalcopyrite. There are three distinct mineralisation styles: disseminated in mylonitic foliation, veins/veinlets and hydrothermal breccias.  The Pantera deposit shows strong structural control in the with ENE-WSW direction, correlated to the Canaã regional shear zone.
<b>Drill hole Information</b>	No Exploration Results have been reported in this release, therefore there is no drill hole information to report.
Data aggregation methods	No Exploration Results have been reported in this release, therefore there is no aggregated drill hole information to report.
Relationship between	No Exploration Results have been reported in this release.
mineralisation widths and intercept lengths	Generally, the orientation of drilling has targeted mineralisation orthogonal to the strike, with hole dips as steep as practical to the mineralised dip.
Diagrams	No Exploration Results have been reported in this release. Figure 3 in the Explanatory notes provides a plan view of drilling coverage for the Pantera deposit.
Balanced reporting	No Exploration Results have been reported in this release, therefore there are no results to report.
Other substantive exploration data	There are no other substantive exploration data of a meaningful or material nature to report.
Further work	Future work will focus on testing for mineralisation extensions that are interpreted to exist along strike to the East. The timing, scale and magnitude of this work has not been defined and will depend on competition for available project capital.



### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Recently acquired drilling data is uploaded to the OZ Minerals Sharepoint cloud storage. Data is captured in Excel templates by data type and converted to comma separated value file format (csv). The data is validated prior to upload into the GDMS by the Database Administrator. The validated data is imported to the GDMS Central database using the GDMS Client application. The Central database is maintained on the OZ Minerals Brazil main SQL server at the Antas North Mine (Para State, Brazil) which is backed up to a cloud storage weekly. To extract drill hole data, the GDMS Report Manager application is used to produce standard export format files in comma separated value file format.  Historical data was added to the database by csv format and cross-checks with original sample certificates for Avanco drilling was undertaken. Data was imported into Vulcan software for visual validation before being used in modelling and statistical analysis.
Site visits	The Competent Person has visited the Pantera project site and the core processing facility on multiple occasions. The visits included observation of the progress of diamond drilling activities and inspection of the core storage facility in Ourilândia do Norte. Discussions relating to deposits geology and geological interpretation were held with the project geologists.  No issues were identified with the well-established processes and procedures existing at the project.  Visitation to and discussion of the impact and magnitude of the Garimpeiro mining activities were also part of the site visits. These helps form the Competent Persons opinion of the impact and risk to the Mineral Resource estimate.
Geological interpretation	Global confidence in the geological interpretation on the copper hosted shear zone is reasonable and is supported by the completed diamond drilling. Local confidence varies depending upon the density of available input data.  The geological interpretation is primarily based on assay data from drill holes, but also uses multi-element geochemistry and geological logging to assist in the definition of the shear zone. The strike and dip of the interpreted copper hosted shear zone is strongly backed up by structural logging of drill core. It is unlikely that a significantly different interpretation of the main body of the copper hosted shear zone would be possible based on the current drill and structural data. On a more local scale there is potential for alternative interpretations of mineralisation controls particularly if infill drilling is undertaken. Changes in local scale interpretations are likely to have no material impact on the global resource, within the confidence assumptions of Indicated and Inferred Resources, however could have an impact on tonnes and grade locally and impact Mineral Resources particularly at higher cut-off grades.  The copper mineralisation is mainly hosted in brittle structures, presenting as sulphide stringers and breccia hosted massive sulphide. Locally areas of disseminated sulphides are present, particular within lower grade zones.  One main structure is present and represented by a cross-cutting dyke that forms a minor displacement of mineralisation. It is likely that other crosscutting structures may be present but are yet to be defined by the current drilling and would likely only have a minor impact on displacement of mineralisation.  Overall, the mineralisation is generally tabular in geometry, striking approximately 75 degrees and dipping at approximately 50 degrees towards



Criteria	Commentary
	the north-northwest. Mineralised envelopes for copper were modelled using an approximate ≥0.2 % Cu cut-off. This was based both on statistical analysis and geological/sectional observation with a focus of understanding controls on copper mineralisation. Extrapolation of mineralisation along strike is typically half or less of the drill spacing. Down dip mineralisation extrapolation is generally 50 metres below the deepest intercepts however sectional interpretation can be influenced by adjacent sections for consistency to reduce "saw-tooth" profiles in long section. Higher grade zones are present and after observation of the spatial continuity of these samples it was determined that grade shells would not be suitable as it would enforce a lack of geological context and would generally be quite "patchy". It was determined to manage the higher grades using estimation grade restrictions where suitable. Gold mineralisation is also related to the shear zones and copper mineralisation and therefore no independent grade shells were constructed.  The Base of Oxidation surface was constructed using sulphur assays and logging. Below this the Transitional surface was constructed mainly based on logging including copper species observations and copper sulphur ratios.  Current interpretation is considered suitable for the classification applied.
Dimensions	The reported Mineral Resource extends approximately 1,600 metres horizontally along strike and 180 metres horizontally across strike.  Mineralisation typically starts close to surface and based on current drilling extends up to 500 metres vertically below surface at the deepest. The reportable Mineral Resource excludes Oxide and Transitional mineralisation and extends approximately 350 metres vertically below surface constrained by a reportable pit shell. Fresh or sulphide mineralisation (reportable Mineral Resource) commences at approximately 30 metres below surface however is variable.
Estimation and modelling techniques	Interpretation/wireframing was completed using Datamine Studio RM and LeapFrog Geo. Final wireframing checks and adjustments and estimation was completed using Maptek Vulcan software. The mineralisation was modelled using Cu grade envelopes modelled at a 0.2% Cu cutoff grade based on a combination of logged data, assay results and sectional interpretation. A reasonable statistical correlation is observed between Cu and Au and furthermore, Au mineralisation is also related to the shear zones and observed to be related to chalcopyrite and pyrite mineralisation and therefore Au was estimated utilizing Cu grade shells. A total of 42 Cu/Au domains were interpreted and constructed. Eight of these 42 domains were considered to have insufficient data and confidence and were excluded for reporting Mineral Resources.  No "high" grade domains were constructed. Higher grade zones are present and after observation of the spatial continuity of these samples it was determined that grade shells would not be suitable as it would enforce a lack of geological context particularly based on the current drill spacing in these areas. It was determined to manage the higher grades using estimation grade restrictions where suitable.  Dry Bulk Density ("Density") was estimated based on density measurements using Ordinary Kriging.  Sample data was composited to 1m lengths using Vulcan software and "flagged" by mineralisation and weathering domains. Outlier data was analysed using histograms and log-probability plots and was based on the composite database. For all domains, present with elevated "high" Cu grades, a high-grade estimation search restriction was utilised. This was considered the best option as these higher-grade samples represented mineralised (generally massive sulphide) zones rather than individual samples dispersed throughout the deposit. Statistical analysis was undertaken to define the grade restriction where samples greater than the chosen Cu grade threshold were constrained within a restricted search



Criteria	Commentary
	radius of 25 x 25 x 5 metres with 25 metres representing approximately half the drill section spacing. This method endeavours to honour the massive sulphide mineralization with the spatial constraints reflecting the observations from drilling and drill core.
	For Density only one domain required the use of a high-grade restriction. For Au, samples were capped and generally had only a minor impact to composite mean grades after capping. Interpreted mineralised domain boundaries were treated as hard boundaries for the purposes of Mineral Resource estimation.
	To allow for the changes in orientation of the mineralised domains, an anisotropy model was created in Vulcan, using the "Two Surfaces" method. This method assigns into the block model axis rotation angles for each block, for the purposes of both search ellipsoid orientations and variogram model axis directions. The axis directions for each block are derived from the orientation of the facets of the upper and lower surfaces.
	Estimation in grade domains used Ordinary Kriging ("OK") in Vulcan software. Variography was analysed using Snowden Supervisor software for Cu, Au and Density. Variography was conducted on all domains treated as one domain as this achieved the most robust variogram model and was applied to all domains. Waste for Cu and Au was estimated using Inverse Distance Cubed (ID3). Nickel (Ni) and Uranium (U) were also estimated using ID3 however these variables were not utilised as any inputs for reporting the Mineral Resource.
	Up to three estimation passes were utilised for Cu, Au and Density. The first pass was 35 x 25 metres with the major and semi-major distances representing approximately 35% of the variogram ranges and 80% of the total sill for Cu. Minor search directions were kept larger than the variogram range ratios suggest, ensuring samples are selected along strike and down dip in domains that are not completely planar. The second pass was 120 x 120 x 50 metres followed by a third pass of 200 x 200 x 200 metres. The first pass search size was trialled using several different search ellipse sizes with a focus on improving the quality of the local estimate. Approximately 40% of blocks were estimated on the first pass, 60%
	on the second pass and only minor on the third pass.  For Cu, Au and Density, and passes one and two, a minimum of six composites and a maximum of 16 composites were allowed, with at most four composites per drill hole. For pass three a minimum of one and a maximum of 16 composites were allowed with a maximum of four composites per drill hole. For Cu the maximum drill holes to be used per estimate was four.
	Quantitative Kriging Neighbourhood Analysis ("QKNA") was undertaken as a guide for maximum sample determination however multiple estimation runs were undertaken utilizing different sample parameters and a maximum of 16 samples resulted in the most optimum local estimate while still utilising a considerable number of composite samples.
	As previously described, a high-grade restriction was used for Cu grades above a chosen threshold within a restricted search radius of 25 x 25 x 5 metres with 25 metres representing approximately half the drill section spacing. For Density only one domain required the use of a high-grade restriction. For Au, samples were capped and generally had only a minor impact to composite mean grades after capping.
	The block size used in the model was based on drill sample spacing and mineralisation orientation. The Parent block size was 25 (X)×5 (Y)×10 (Z) metres. Sub-blocks to a minimum of 1.25 (X)×1 (Y)×1 (Z) metres were permitted. The block size is not intended to imply a selective mining unit size with parent block sizes chosen based on the understanding of the grade variability in the major/semi-major and minor directions and QKNA.
	Drillhole and sample spacing was also considered to prevent parent block sizes from being significantly smaller than the variability that can be



Criteria	Commentary
	modelled/calculated from sample data.  Bulk density was estimated into the block model using Ordinary Kriging of density measurements derived from the Archimedes method. A value of 2.8 was applied to all fresh waste in the model based on the mean value. Only 3 samples were taken in transitional zones, and a default value of 2.7 for mineralised transitional and 2.6 for waste transitional was applied based on these samples. The dyke was assigned a density of 2.9 based on expected values for this rock type and the saprolite zone was assigned 1.9 based on similar deposits in the region.  A three-step process was used to validate the model. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average of Cu, Au and Density grades of the composite file input against the block model output for all the estimation domains. Validation of the model then included detailed comparison of composite grades and block grades by easting and elevation. Validation/swath plots showed good correlation between the composite grades and the block model grades. While some smoothing is noted within the grade estimates as to be expected with an OK estimate it is considered appropriate for the style of mineralisation and current drill spacing and the understanding of grade distribution and variability. Geological continuity of the shear zone is well established with good continuity observed, the continuity of the internal grade lenses and associated grade variability is not as well understood and further drilling work is required to better understand grade continuity.  No reconciliation data is available.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	This Mineral Resource has been constrained within an Lersch-Grossman pit shell developed by SDPM Mining Consultants using optimisation parameters agreed by OZ Minerals in order to provide a basis of 'reasonable prospects for eventual economic extraction'.  The resultant metal prices utilised to generate the reporting pit shell were US\$9,100/tonne for copper and US\$1,650/oz for gold both of which are considered acceptable for the purpose of reasonable prospects. This copper price was also utilised to generate the 0.25% Cu reporting cut-off.  Copper was chosen as the reporting metal as it includes a higher revenue potential, opposed to gold, and would be the main influencer of grade control and plant feed considerations. Recoveries utilised were 95% for Cu and 70% for Au (Au block value was included in the reportable pit shell construction) based on a preliminary metallurgical study undertaken taken in 2018. A mining cost of ~US\$3.30/tonne rock and processing costs of ~US\$15/tonne was utilised. Based on the above, 0.25% Cu was determined an appropriate threshold copper grade for reporting Mineral Resources.  It is the Competent Person's opinion that these methods, including the reportable pit shell, and cut-off grades satisfy the requirements for reasonable prospects for eventual economic extraction. It is noted that a Lersch-Grossman shell was completed, to report the Mineral Resource contained within to demonstrate reasonable prospects for eventual economic extraction, and highlights that this pit does not constitute a completed scoping study or a detailed mining study which along with further work, is required to be completed to confirm economic viability. The copper and gold price assumptions used in the cut-off determination is in line with the OZ Minerals corporate economic assumptions which are released periodically each year.



Criteria	Commentary
Mining factors or assumptions	It is assumed that the Pantera deposit would be mined by a conventional open pit load and haul mining fleet. All mineralised materials are anticipated to be crushed and processed on site. A simplistic optimisation assessment was made using justifiable assumed cost, recovery and revenue parameters from similar types of deposits and mining operations currently being mined in the Carajás region. Values for these assumptions are set out in the cut-off parameter criteria above. An optimised pit shell was constructed from the assumptions and following the geotechnical parameters outlined below based on a 2021 Geotechnical review:  - 85 degree face angle, - 20 metre batters, 8 metre berms, - 13 metre ramp width, - 67 degree overall slope
Metallurgical factors or assumptions	It is assumed that Cu and Au can be recovered. Preliminary test work was conducted in 2018 and in 2021. Additional follow-up test work is planned in the coming year. This would include further grindability and flotation tests. The results from the 4 composites tested in 2018 indicated that:  - The presence of pyrite associated with chalcopyrite indicates the need to regrind the rougher concentrate to obtain concentrates with higher copper contents.  - Gold is associated with chalcopyrite and pyrite however is not considered refractory.  - More selective flotation for copper leads to lower gold recoveries.  The 2021 study with two composited samples highlights the necessity to continue the grinding and flotation tests to get a better understanding of recovery performance. It is considered that the metallurgical test work is preliminary however does indicate that there is potential to obtain commercial concentrates.
Environmental factors or assumptions	No assumptions have been made regarding environmental factors however no significant issues have arisen at this stage. Currently no test work on acid rock drainage considerations has been completed. This is an area of work for future testing and studies. It is noted that elevated sulphur grades are confined to the mineralisation zone.  Waste and non-economic mineralisation from the mine would be stockpiled into an integrated waste landform adjacent to the mining operation in line with Brazilian environmental regulations. This waste landform would include containment requirements for the management of contaminated waters and sediment generation.  It is assumed that economic mined material would be processed by a standard flotation process at the Pantera site. Copper concentrate would be sold to customers and tailings generated from the processing of the Pantera mineralisation would be filtered and sent to an onsite storage facility.
Bulk density	A total of 8,907 density samples were taken on the deposit focused on mineralised zones. All OZ Minerals and Vale core holes were systematically sampled for the purposes of density determination. Density measurements were collected using the Archimedes' method of water immersion carried out on 10-20cm long full or half core samples. The core is generally non-porous and no wax-coating or other sealant was used in the



Criteria	Commentary
	density determination process.  Bulk density was estimated into the block model on a block-by-block basis using Ordinary Kriging. Further density measurements are required in the saprolite and transitional zones to better define the density in these rock types.
Classification	Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and mineralisation continuity.  Indicated Resources were defined in areas that had sufficient drilling to model the current understanding of grade continuity that is based on drilling to date. In general the drill hole spacing was required to be approximately 50 metres or tighter with geological continuity being robust. At a range of 50m approximately 90% of the sill is reached, based on modelled variograms, and this is considered acceptable to define Indicated Resources. All Vale holes drilled in 2013 were excluded from the estimation and determination of Indicated Resources due to a lack of information on sample quality and only define Inferred material. Inferred Resources allow for a drill spacing up to approximately 100 metres. Transitional and oxide zones were excluded from Mineral Resource classification due to a lack of understanding of metallurgical performance and more complex copper speciation and mineralisation
	While geological continuity of the shear zone is well established with good continuity observed, the continuity of discrete grade lenses and associated grade variability is not as well understood and further work is required to confirm grade continuity. It is considered the global metal content of the estimation, and definition of higher-grade zones to be suitable and representative, however greater variability on a local scale is likely.  The Mineral Resource classifications applied appropriately reflect the view of the Competent Person.
Audits or reviews	A preliminary unreleased Mineral Resource estimate, completed November 2021, was reviewed by an external consultancy during November/December 2021. The review found no material concerns regarding the Mineral Resource estimate, reporting and Classification. The current 2022 Mineral Resource Estimate is based on the November 2021 estimate using a comparable interpretation/domaining and estimation rationale.  This current Mineral Resource estimate has undergone an internal review and no fatal flaws were identified.
Discussion of relative accuracy/ confidence	The accuracy and confidence level in the Mineral Resource estimate is commensurate with that implied by the classification. Global accuracy of the Mineral Resource estimate at any given cut-off grade is sensitive to the understanding and management, in the estimation process, of the higher-grade zones of the deposit. This also affects the local estimate in these areas.  The Mineral Resource is a global estimate, but it is derived from a block model that is intended to have sufficient local accuracy to be useful for preliminary mining studies.  The datasets associated with the earlier Vale drilling is lacking in QAQC data and information. Due to the uncertainty associated with this data, it was only used for grade shell interpretation. It was not used for grade estimation and Mineral Resources were not classified above a level of Inferred in areas defined by this earlier drilling.  Mining studies used to inform the reportable cut-off grade and construct the reasonable prospects pit shell are at a preliminary stage however



Criteria	Commentary
	parameters used are considered reasonable and in line with similar projects in the region. Metallurgical test work of the Pantera mineralisation is ongoing and further refinements to the expected metallurgical performance will be updated in future Mineral Resource reporting.  There has been no official production from Pantera to compare with the estimated Mineral Resource however locally in the project area there are artisanal ("Garimpeiro") mining activities for copper. The depth extension of the shafts and drifts are highly uncertain as most of the activities are not well documented, however based on local information obtained by OZ Minerals, most of the abandoned mining activities were focused in the saprolitic/oxidised zone. There are currently a small number of operating shafts actively exploiting chalcopyrite mineralisation in fresh rock. In these areas the artisanal mining extends below surface to depths of 40-60 metres. Based on information from the active Garimpeiro's, mining voids were developed and used to exclude mineralisation for the purposes of Mineral Resource reporting. Also based on this information, the suggested mining rate, and subsequently estimated tonnes extracted are deemed to be immaterial, therefore the expected error associated with the excluded tonnage and grade is believed to be relatively low. This "small scale" depletion will have a minor effect on the Mineral Resource estimate on a local scale. Further work is required to better understand the extent of artisanal mining on the Project and allow for depletion in future Mineral Resource updates.

## **Competent Person Declaration**

#### **Competent Person Statement**

The information in this report that relates to Mineral Resources is based on and fairly represents information and supporting documentation compiled by Mr Colin Lollo, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 225331). Mr Lollo is a full-time employee of OZ Minerals Limited. He is a shareholder in OZ Minerals Limited and is entitled to participate in the OZ Minerals Performance Rights Plan.

Mr Lollo has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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' (JORC 2012). Mr Lollo consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This Mineral Resource Statement has been compiled in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition).

#### Colin Lollo Manager MROR Projects - Brazil OZ Minerals Ltd

#### Contributors

- Overall
  - Colin Lollo OZ Minerals Limited
- Data Quality
- Colin Lollo, Mark Burdett, Marcos Ferreira OZ Minerals Limited
- Geological Interpretation
  - Allan Douglas da Silva and Mark Burdett OZ Minerals Limited
- Estimation & Technical Review
  - Mark Burdett and Colin Lollo OZ Minerals Limited

Colin Lollo is responsible for Mineral Resource classification but has relied on, and checked and reviewed, data and advice from OZ Minerals geologists regarding data quality, interpretation and estimation.