Independent Technical Report on Mineral Resources Estimate for the Planalto Project, Canaã dos Carajás/Pará, Brazil

Prepared by **GE21 Consultoria Mineral Ltda**. on behalf of:

Planalto Mineração Ltda

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1 Executive Summary

1.1 Introduction

GE21 Consultoria Mineral Ltda. ("GE21") was engaged by Lara Exploration Ltd. (Lara), to provide technical services for the Planalto Project to prepare Mineral Resource Estimate Studies and a Technical Report according the CIM NI43-101.

The project area is located in the Carajás region in the southeast of Para State, approximately 700 km by road from the state capital Belem, in Brazil. Two copper deposits, namely the Homestead and the Cupuzeiro, were identified by diamond drilling between 2017 and 2022, and drilling more recently in 2023, has shown both to be part of a larger deposit which is now referred to as the Planalto Copper Deposit.

The QPs responsible for this independent Technical Report are Mr. Leonardo de Moraes Soares and Mr. Paulo Bergmann. The Qualified Person responsible for the Mineral Resource Estimation is the geologist Leonardo de Moraes Soares, who has more than 22 years of relevant experience in Geology, Exploration and Mineral Resource Estimation Mr. Soares is a member of the Australian Institute of Geoscientists (MAIG). The Qualified Person responsible for this report's content on issues related to Mineral Processing and Metallurgical Tests, and Recovery Methods is Paulo Bergmann (FAusIMM, B.Sc.), a Mining Engineer with GE21 Consultoria Mineral, who has more than 40 years of experience in mining projects. Mr. Bergmann is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM).

The effective date of the MRE was July 03rd, 2024, when the copper spot price was verified for the Mineral Resource estimate study.

The project area is located in the Carajás region in the southeast of Para State approximately 700 km by road from the state capital Belem, which is located at the mouth of the Amazon River (Figure 1-1). The project is close to the major mining centers of Canaã dos Carajás, Parauapebas and Curionópolis and close to several operating mines such as the Sossego copper (Vale S A), Pedra Branca copper (BHP) and the SIID iron ore (Vale S A) and to the large Cristalino copper deposit currently being developed by Vale S A. BHP has a copper flotation plant at Antas Norte about 15 km north from Planalto. Parauapebas has daily commercial air services from Belem, the Para State Capital and Belo Horizonte in Minas Gerais State.

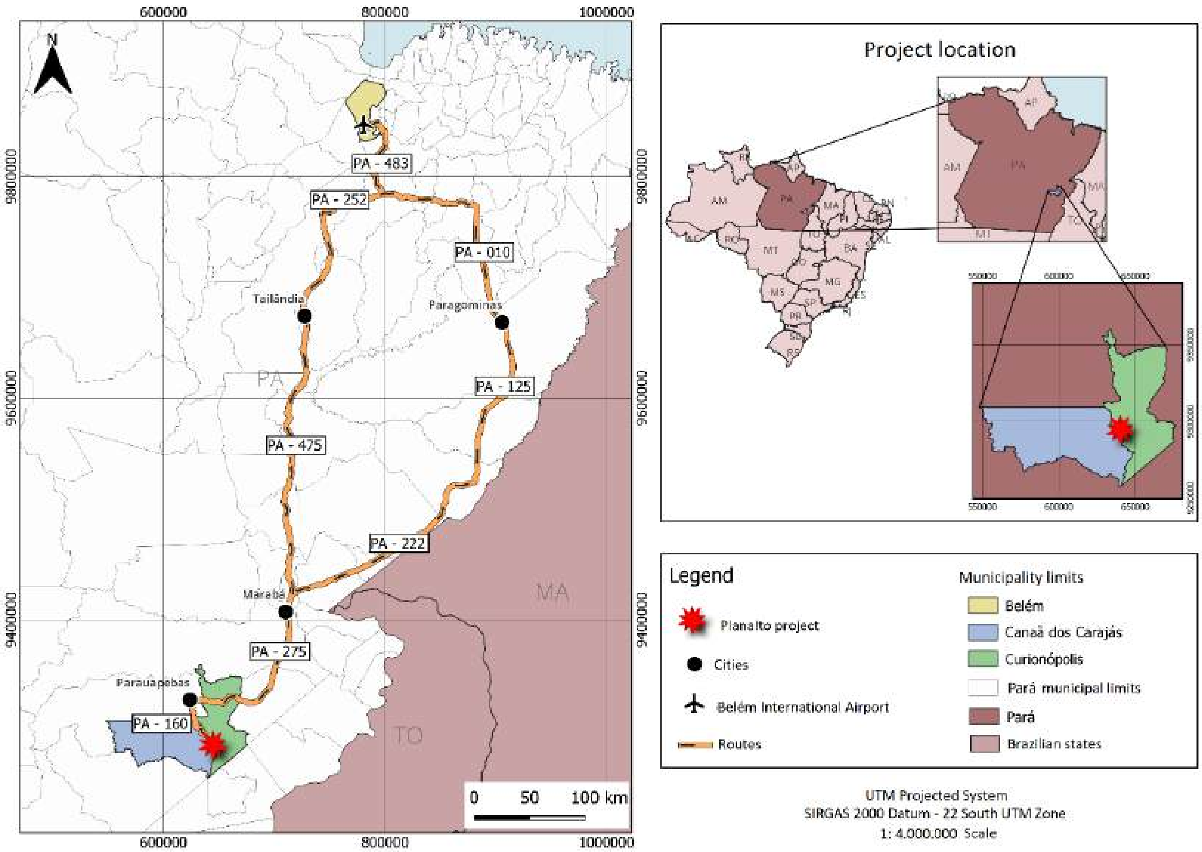


Figure 1-1: Location of the Planalto Project in Para State, Brazil.

Five mineral tenements comprise the Planalto Project, and all are under option to Planalto Mineração Ltda., a wholly owned subsidiary of Lara Exploration Limited. The Planalto Copper deposit straddles three contiguous mineral licenses in the eastern part of the Planalto Project and straddles the border between the municipalities of Canaã dos Carajás and Curionópolis. The municipal border in this area is defined by the Cupuzeiro creek.

The exploration licenses that make up the Planalto Project are shown in Figure 4.3 and are:

- ANM 850.351/2007 (total area 1261.82 ha),
- ANM 850.536/2012 (total area 1404 ha),
- ANM 850.537/2012 (total area 592 ha),
- ANM 850.453/2005 (total area 272.13 ha), and
- ANM 854.856/1996 (total area 336.8 ha).

The Planalto deposit is located at the eastern side of the licenses 850.351/2007 and trends northward across 854.856/1996 and into 850.453/2005 (Figure 1-2).

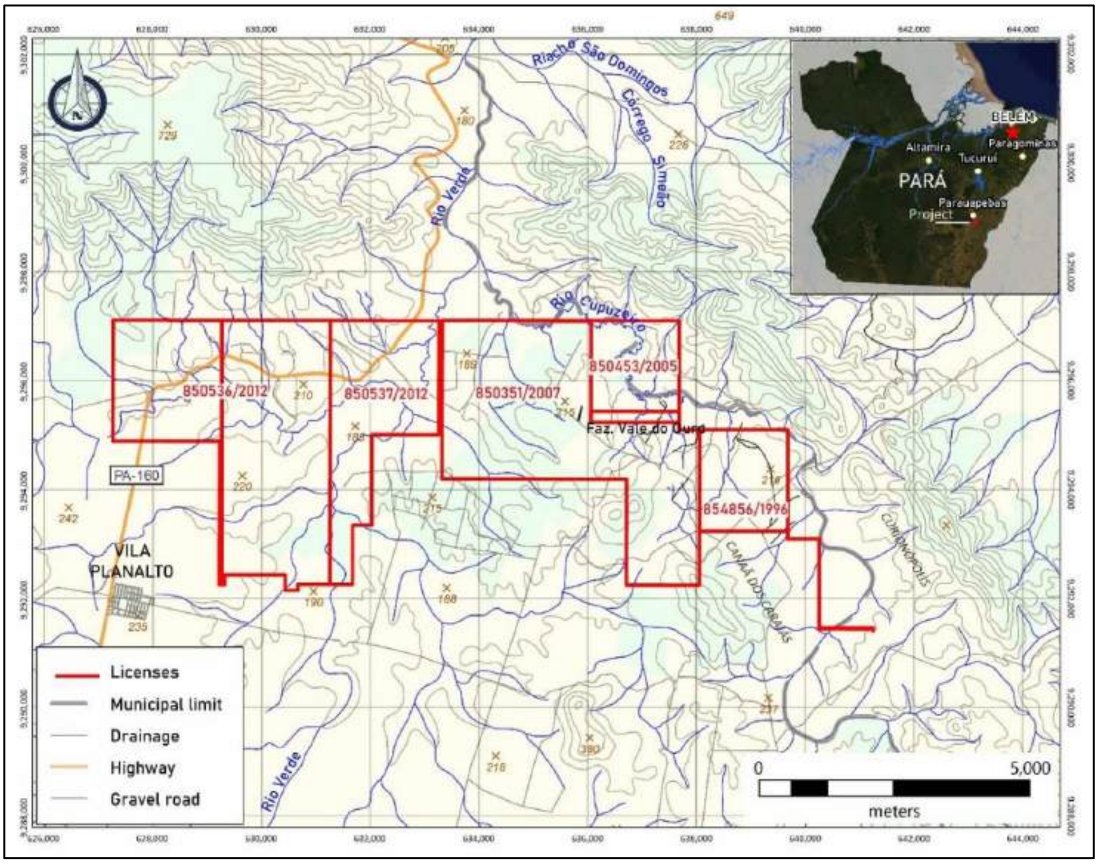


Figure 1-2: Planalto project mineral tenements
Source: Planalto Mineração, 2023.

Mining license applications have been submitted on May 6th, 2022, to the ANM for the three licenses of the BAIP Option. The Brazilian standard PAE (*Plano de Aproveitamento Econômico*) study reports are being analyzed by the ANM.

Final exploration reports for the Anglo and Zaspir Options were submitted on 17/11/2023 to the ANM and both reports were approved on April 15th, 2024. Planalto has one year from that date to submit a PAE study and mining license applications.

Lara retains FFA Legal and Mining Ltda., whose lawyers are qualified to practice law in the Federal Republic of Brazil, to continuously supervise and maintain the Planalto mineral rights in good standing.

No environmental liabilities have been identified within the Planalto Project Exploration Licenses. The current land use at the Planalto Project is solely agricultural cattle grazing. It is expected that the social or community impact of a mine development at the Planalto Project will be negligible since the nearest community is the village of Vila Planalto, located 15 km to the west from the Planalto Project. There are no indigenous communities within the Planalto project area.

1.2 History

The first reported exploration activities in the project area were carried out from 2000 to 2007 by Anglo American Brasil Ltda. ("Anglo American"), a Brazilian Subsidiary of Anglo American plc. Anglo American had, in 1999, entered into an option agreement with Mr. Geraldo Milton Soares, a local landowner who held a number of exploration tenements covering an area much the same size as the actual Planalto Project. In 2007 Anglo American suspended the exploration work and relinquished its option. Exploration activities conducted by Anglo American included geological mapping, geochemical surveys (soil and stream sediment sampling) and a major airborne geophysical survey (electromagnetics, radiometrics and magnetics).

In 2003 Anglo American completed two drill holes for a total of 591.42m, on the same east-west-orientated section of UTM 9295000 N (WGS-84 datum), in the area just north of the main farm dwelling to test a strong copper in soil anomaly.

The first drillhole, FD-73 with a total depth of 242.22m, was drilled to the west at a -60 degree angle and made a significant intersection of copper mineralization of 111m @ 0.51% Cu from 53m down hole within a wider interval of 188m @ 0.4% Cu. The second hole, FD-74, drilled under the first hole to a final depth of 349.20m, intercepted lower grades and more patchy copper mineralization, with the better intervals 50m @ 0.38% Cu and 8m @ 0.34% Cu.

After his rights lapsed, a mineral exploration application of 10,000ha, covering essentially the same area held by Mr Geraldo Soares, was made in the name of Mrs. Vera Lucia Lopez Ferraz. Mrs. Lopez, represented by BAIP, offered this mineral rights application to Lara in 2012. Lara entered into an agreement to acquire the mineral rights application, but due to bureaucratic procedures, it was only in 2016 that the ANM approved and published the mineral rights as three separate licenses covering almost all the original 10,000 ha application.

1.3 Geology Setting and Mineralization

The Planalto copper and gold project is located in the Carajás Province, or the Carajás Mineral Province (CMP), as it is often referred to because of major endowment of world-class iron, gold, manganese, copper and nickel deposits. The Carajás Province is in the eastern part of the state of Para, Brazil. The Carajás Province approximately 500km N-S by 400km E-W, is made up of Archean and Lower Proterozoic rocks divided into two main tectonic domains with the Carajás Domain in the north and the Rio Maria Domain in the south. The Planalto project is located at the contact of the Transition Sub-domain and the Carajás Domain in the southeast part of the Carajás Basin in the horsetail splay zone at the south end of the Carajás Fault.

The Rio Maria Domain in the south (Figure 1-3) is a typical Archean granite-greenstone terrain represented by rocks of the Andorinhas Supergroup (2,904 +/-29 Ma). Several individual belts with east-west and northwest-southeast trends are mapped. The sequences of mafic and ultramafic magmas are covered by later metasedimentary clastic units.

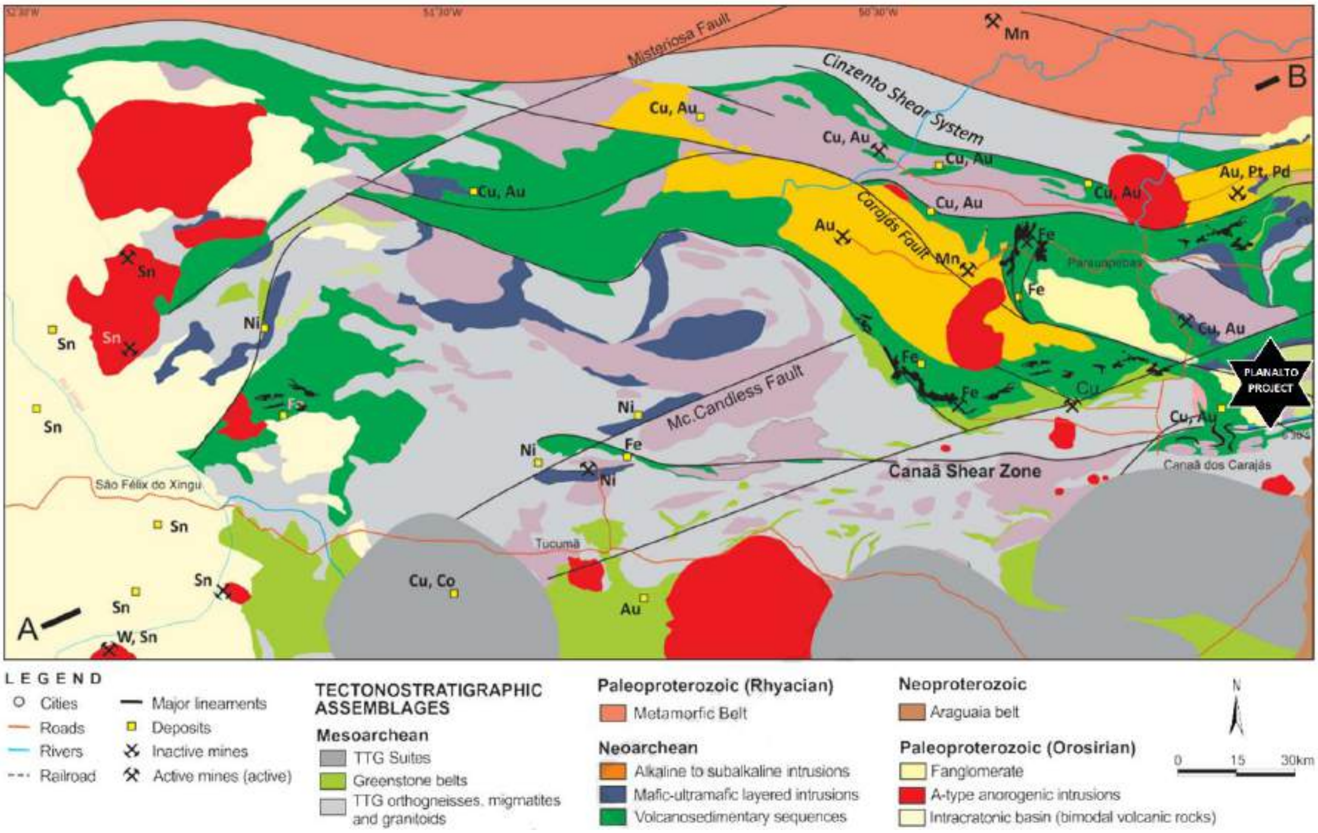


Figure 1-3: Geological units of the Carajás Province.
Source: Planalto Mineração, 2023.

Geological mapping in the vicinity of the Planalto Copper Project shows that the mineralization is hosted in a thick pile (>700m) of intensely altered, mafic-intermediate volcanics most probably correlated to the mafic unit of the Parauapebas Formation. The volcanics are generally deeply weathered with only a few outcrops of fresh rocks along the margins of the Cupuzeiro creek and its tributaries. Widespread lateritic hard cap deposits cover much of the mafic volcanics in the elevated areas away from the drainages.

A granite complex, correlated to the Planalto Granite, occurs at the southern end of the mineralized trend. Mafic volcanics wrap around the western and eastern flanks of this granite.

The contact between the granite and mafic volcanics is marked by a zone up to 50m wide of sodic and potassic metasomatic alteration. Both the granite and the mafic volcanics have the original mineralogy partially to totally altered to rocks dominated by quartz, albite, and K-feldspar.

The Planalto deposit can be classified as a volcanic hosted iron-oxide copper gold (IOCG) deposit like many other deposits in the Carajás Province and elsewhere in the world. The main features of this type of mineralization were defined in the late 1980s and early 1990s based on studies of

Proterozoic deposits such as the Olympic Dam (Australia), Kiruna (Sweden) and Missouri (United States of America) and are:

- Deposits are formed by magmatic hydrothermal processes and contain copper and gold as the main economic metals in association with abundant iron oxides.
- Mineralization styles range from sheeted veins, stockwork veins and breccias,
- Mineralization occurs along high angle fault and fault intersection zones associated with extensional tectonic environments.
- Mineralization is preceded by early regional-scale sodic or sodic-calcic alteration (albitization and scapolitization) with temporally associated disseminated hematite and/or disseminated and veinlet magnetite.
- Sulphide mineralization is associated with late calcic and/or potassic alteration.
- Main copper mineral is chalcopyrite, but some deposits are rich in chalcocite and bornite.
- Overall copper grades at approximately 0.5% Cu are lower than reported for most other Carajás deposits, which range between 0.7% and 2.0% Cu.
- Gold concentrations in the chalcopyrite are significantly lower at an average content of 50ppb Au, compared to 300-500ppb Au in the majority of the Carajás deposits.

1.4 Exploration

Anglo American conducted in the early 2000's a systematic soil sample survey across the entire northern part of what is now the Planalto Project and delineated four separate copper anomalies with soil copper values at >350ppm Cu. These are now referred to as the Homestead, Divisa, Highway-E and Highway-W anomalies. Soil gold results were less impressive with only some gold anomalism in the north part of the Divisa copper anomaly. The soil sampling digital data base made available to Lara did not include any of the sampling data for the Homestead anomaly.

Investigatory reconnaissance visits to the Planalto Project area were made by Lara in late 2012 to assess the geological setting and collect some rock and soil samples that confirmed the presence of anomalous copper occurrences on the property. Based on the positive indications for mineralization of the IOCG type, the property rights were acquired in 2013 by Lara's Brazilian subsidiary Lara do Brasil Mineração Ltda., but exploration activities were initiated only in 2016 once the exploration licenses had been issued.

A Lidar topographic survey was carried out in February and May 2024 over an area of 520ha using a commercial drone surveying equipment. This survey covered the main mineralization zone and potential pit area and other areas adjacent to the mineralized zone. The survey has generated a digital topographic map with 1m contour intervals.

Geological mapping was undertaken on Homestead-Cupuzeiro trend, Sodre Copper target and in Highway Cooper target.

Historic geophysics were conducted by Anglo American in the year 2000 with magnetics, radiometrics and electromagnetics being flown by their own inhouse aircraft-mounted system brought to Brazil. Avanco conducted a ground EM survey at Homestead and Divisa Copper targets. Lara contracted a consultant in Canada, the Ontario-based B-Field Geophysics Ltd. to review and make a reinterpretation of historic geophysical data.

Approximately 40 kilometers of IP survey lines were completed by Planalto Mineração, covering Cupuzeiro, Homestead, Silica Cap and part of the Divisa copper targets. The Homestead–Cupuzeiro trend was covered by 200m spaced, east-west orientated, lines over a strike of 2,200m between 9294600 N and 9296800 N and three survey lines tested the IP response across the Silica Cap target and the eastern contact of the Planalto granite.

The channel sampling program in 2016 and 2017 focussed on sampling of exposures of saprolite in the road cuts crossing the anomalous soil geochemical copper zones. 17 channels, with combined length of over 450m, were cut across weathered volcanics along roads and on fresh rock exposures in the creeks in the Homestead and Silica Cap targets. Significant copper intervals were obtained in both targets and indicated potential formineralization in the underlying fresh rock.

Petrographic studies have been carried out on thin sections from samples of drill core and outcrops from the Homestead and Cupuzeiro sectors of the Planalto deposit. The main goal was to characterize the host rock, the alteration zones and copper mineralization, as well as to present a paragenetic sequence of the hydrothermal minerals resulting from the alteration processes and the relationship with the copper mineralization.

1.5 Drilling

Approximately 25,838m in 85 diamond drill holes has been completed on the Property since 2017 by Lara Exploration and by a joint venture between Lara Exploration and Capstone Copper Corp. (Table 1-1). Two historical diamond drill holes, for a total of 591.42 m, were completed in 2003 by Anglo American Brasil Ltda.

Table 1-1: Drilling campaigns on the Planalto Project (including historic drilling)

YEAR	HOLES	METERAGE	CONTRACTOR	PROJECT
2003	2	591.42	Not Known	Anglo American
2017	2	639.65	Mega Sondas Sondagem e Pesquisa	Lara
2018	3	696.55	Mega Sondas Sondagem e Pesquisas	Lara
2019	35	5669.88	Servdrill / Energold / Pronorte	Lara / Capstone JV
2021	5	1976.25	Rock Sondas	Lara / Capstone JV
2022	16	7682.80	Rock Sondas / Servdrill	Lara / Capstone JV
2023	24	9173.57	Major Drilling / Layne	Capstone Copper
Total	**87**	**26,430.12**		

74 holes for 24,942.95m have been completed on the Homestead-Cupuzeiro target in the eastern part of the project area. On the Silica Cap target, located 500m southeast of Homestead, 1,001.14m in 7 exploration holes have been completed. A further 6 exploration holes have been drilled on other exploration targets elsewhere in the project area.

All drill hole collars, including the two historical holes, have been surveyed by a contractor. The equipment used included the GPS Geodesic Navcon models RTK, NAVSF30340 and HIPER SR instruments. The survey Datum used has been WGS-840 (SIRGAS 2000). All holes were marked by PVC pipes in cement blocks on termination of each hole. Downhole deviation surveys were carried out in all drill holes on the Planalto Project.

All drill core has been securely transported from the site to the dedicated core shed facilities of Lara and later Planalto Mineração in the center of Canaã dos Carajás. This transport has been undertaken by both the drill contractors, usually at the end of each drill shift, and by employees of Lara and Planalto Mineração Ltda. The boxes were always transported securely tied and covered.

After drill core boxes are received in the core shed, the core boxes are placed on racks and each core run is checked for depth, run length and recovery information. The drill core was photographed both dry and wet and images stored in the database. The core was then examined to determine suitable hardness (R) and weathering (W) factors, and the quality of the rock mass was determined by recording the RQD factor measurement for each core run. Structural readings such as fractures, veins, shear zone orientations are measured with respect to the core axis and the Alpha and Beta angle readings entered the data base. Magnetic Susceptibility readings were made using a hand-held magnetic susceptibility meter KT-10 device on the core as standard practice up to 2021, with readings taken at 50cm intervals down the core.

In the geological drill hole log description, the following information is collected: granulation, texture, color, mineralogy, magnetism, geological contacts, lithology, geological structures (fractures, faults, veins and crenulations).

1.6 Sample Preparation, Analysis and Security

Samples have been prepared predominantly from NQ diameter drill cores (47.6mm core diameter). The sample selection of drill core intervals for analysis is close to 2.00 meters, with a minimum of 1.00m, taking account of changes in mineralization style, lithology, alteration and structure.

Drill core samples were prepared and analyzed at independent commercial laboratories, SGS Geosol, ALS and Intertek. At all times, samples are in the custody and control of the Company's representatives until delivery to the laboratory, where samples are held in a secure enclosure until processing. The chain of custody of the batches is carefully maintained by the company staff from collection at the drill rig to delivery at the laboratory to prevent accidental contamination or mixing of samples. All samples received at the laboratories are inventoried and weighed before processing.

Density tests were undertaken on selected drill core samples to build a density database related to lithology and copper mineralized zones across the Homestead and Cupuzeiro deposits. Following receipt of the density data this was entered into the project's database.

Drill core samples are prepared at commercial laboratory Parauapebas-PA and sample pulps analyzed by one of the following commercial laboratories, ALS laboratories (Lima, Peru) or SGS Geosol Laboratórios Ltd (Vespasiano-MG, Brazil) and Intertek do Brasil Inspeções (Parauapebas, PA, Brazil).

After the sample preparation, the pulp samples were analyzed by SGS Geosol, ALS and Intertek laboratories. All the analyses undertaken by SGS Geosol, ALS and Intertek laboratories were reported to Planalto Mineração on PDF format certificates, which were also accompanied by an MS Excel digital file.

The QAQC program was applied to chemical analysis performed on samples with the aim of promoting procedures for controlling and guaranteeing the quality and reliability of the samples that are prepared and of the chemical analytical results that are obtained in the laboratory. The analysis of the QAQC data results were generated in the period from 2017 to 2023, and includes blanks, standard reference materials, pulp duplicates and half-core duplicate samples (from diamond drill cores).

The Qualified Person considers that the sampling, sample preparation, security and analysis procedures applied, and results presented by Planalto Mineração and contracted companies are suitable for a Mineral Resource Estimation study. Quality Assurance procedures follow the industry's best practices, and Quality Control results are within industry standards and inside acceptance limits for quality of the assay information for Mineral Resource estimates.

1.7 Data Verification

Data verification by the QP responsible for this section of the Technical Report, Leonardo de Moraes Soares who is a senior geologist from GE21, included one site visit between the 25th and 26th of April 2024. Planalto Mineração allowed unrestricted access to the Company's facilities and geological staff during this time. During the site visit, QP field checked mineralized outcrops, drillhole collar markers and visited the core shed, as well as a review of information about exploration results, sampling procedures, sampling preparation, chemical analysis, topographic and drillhole deviation surveys. Discussions were held in relation to geological and mineralization model interpretation. Data from selected drill holes (sample custody, assays, QA/QC program, downhole surveys, lithologies, alteration and structures) was also checked and discussed with Planalto Mineração technical team.

The QP has reviewed the adequacy of the exploration information and the visual, physical, and geological characteristics of the property and has found no significant issues or inconsistencies that would cause one to question the validity of the data. The QP is satisfied to include the exploration data including the drilling, drill litho-logs, and sample assays for the purpose of resource modelling, evaluation and estimations as presented in this report.

1.8 Mineral Processing and Metallurgical Testing

Metallurgical testwork was performed by Blue Coast Research Ltd. Vancouver Island, BC, Canada. BlueCoast executed a preliminary metallurgical program on three sample composites from the Homestead target in 2020-2021 and late in 2023 on two composites from the Cupuzeiro target. The purpose of this preliminary testwork was to characterize the mineralogy and to determine if a commercial grade copper concentrate can be produced via a conventional flotation process.

Drillhole samples spanning the mineralized zone were selected and composited by levels, excluding the top layer of saprolite. From the tests for the Homestead Target, it is possible to assume that a concentrate with a saleable copper content of over 26% is feasible, with a copper recovery of 90%. From the tests on Cupuzeiro Target, it is possible to assume that a concentrate with a saleable copper content of over 26% is feasible, with a copper recovery of around 85%.

The following recommendations are made for future consideration:

- Homestead Target:

- Conduct an expanded variability flotation program to explore the relationship between gold and copper recovery versus head grade, mass pull, liberation.
- Explore a wider variety of collectors for copper flotation.
- Conduct an expanded grindability program to better determine ore variance with regards to power consumption and equipment wear.
- Evaluate variability samples in closed circuit (Locked-Cycle) testing.
- Further explore gravity concentration in the copper concentrate for opportunities to upgrade gold to a higher payable stream.

- Cupuzeiro Target:
  - Reducing the primary grind size from approximately 80% passing 100µm to 80% passing 60µm increased the copper rougher recovery by 4% (from 88% to 92%).
  - A regrind size of approximately 15µm produced final copper concentrate grades greater than 25% copper.
  - The High-Grade and Low-Grade composites achieved a very similar metallurgical performance to the Master Composite in batch testing, showing repeatability in the flowsheet and in the material.
  - The Locked-Cycle test (LCT) conducted on the Cupuzeiro Master Composite was successful in achieving 85% copper recovery to a final concentrate grading approximately 26% copper with 2.6g/t gold at 68% gold recovery.

1.9 Mineral Resource Estimates

Geological interpretation and modelling of copper and gold mineralization was undertaken by the Planalto Mineração technical team. Initial modeling of the mineralization using drill hole data was undertaken on east-west oriented sections to define mineralization continuity within and between sections, while taking account of structure, alteration and lithology. A 0.3% copper grade shell for modelling purposes was identified as providing a good level of continuity of mineralization within and between sections and was also a visual threshold of a generalized change to a lower grade copper mineralization in down hole drill hole samples. A number of discrete mineralization domains were modelled, which have a south to north orientation, dipping to the east at 18-40 degrees. Mineralization style differs between the south (the Homestead Target) and the north (the Cupuzeiro Target) of the Planalto deposit, the north is characterized by elevated levels of chlorite (darker rocks) with slightly finer grained mineralization and more elevated pyrite mineralization. In the southeast of the Planalto deposit the Silica Cap Target mineralization has been modelled as a separate domain with strike 340 NNE and 40° east dip.

GE21 undertook a review and validation of the Planalto Mineração 3D geological modeling. A Mineral Resource Estimate (MRE) of the Planalto project was undertaken which included statistical and geostatistical analysis and grade estimation. The Mineral Resource classification was based on the assessment of a number of factors, including, the density, and spacing of available data, interpreted mineralization controls, mineralization style, and quality of data. Geological model editing and grade estimate were performed by GE21 using Leapfrog 2023 and Isatis Neo software. All data in the Planalto project is presented in the UTM Projection – Zone 22 South, Datum: Sirgas2000 coordinate system.

The Planalto Mineral Resource Estimate was based on data derived from 87 drill holes totaling 25,337m in length and, incorporating lithology logs and assay results from drill core samples (Figure 1-4).

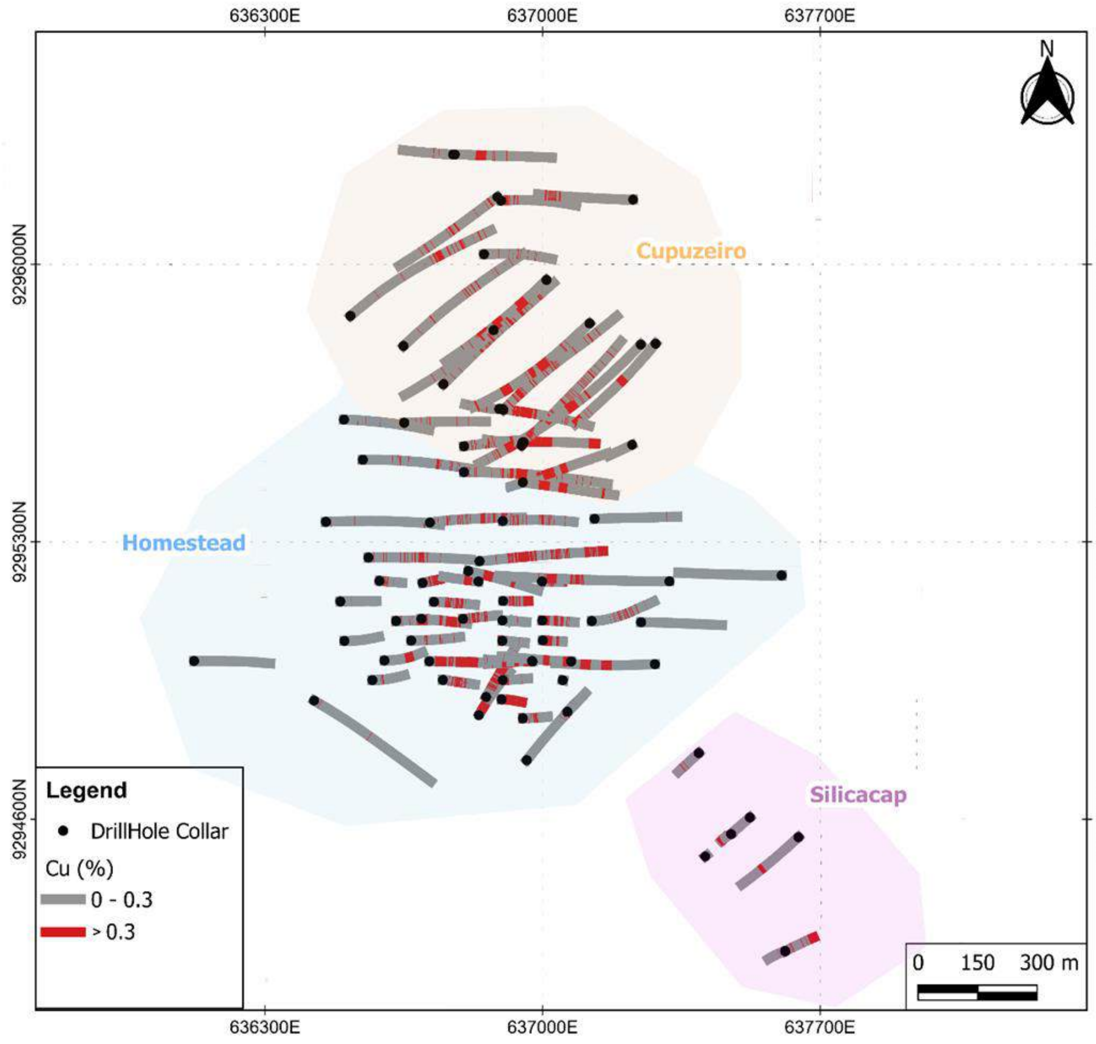


Figure 1-4: Planalto drilling with assay ≥ 0.3 Cu % in red. Plan view.
Source: GE21, 2024.

The Planalto Mineração technical team developed a geological and mineralization interpretation using vertical geological sections throughout the deposit. GE21 edited and updated the model in a few areas to ensure intersections between drill hole samples and modelling wireframes were located correctly in 3D space and to reduce areas of internal waste, by excluding samples and model wireframe boundaries below the modeling cut-off grade of 0.3% Cu. The weathering zone was modelled by GE21 using weathering copper grade and drillhole logging information (Figure 1-5).

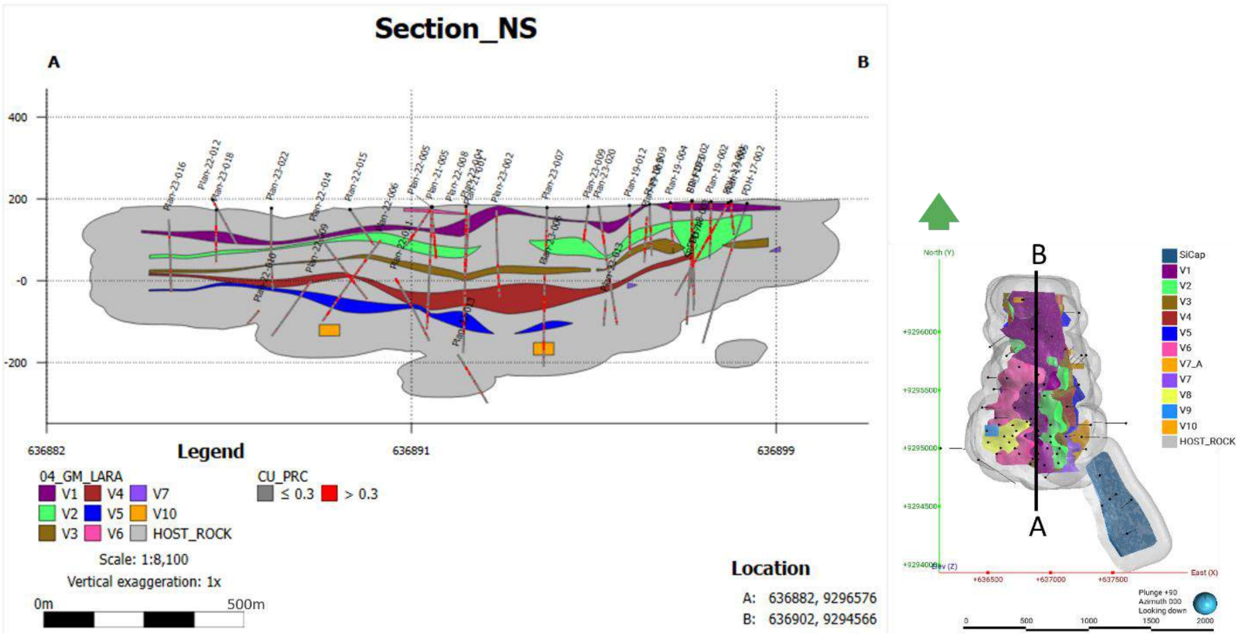


Figure 1-5: N-S cross section looking west Domain Model and Mineralization.
Source: GE21, 2024.

The Qualified Person considers that the geological interpretations and modelling are adequate for a Mineral Resource Estimation study.

GE21 carried out the regularization of samples for the complementary studies of statistics using a nominal length of 2 meters within the domain boundaries and distributed equally any remaining residual samples with a length less than 1 meter. The 2.00m composite sample database was used for resource estimation.

Statistical analysis for Cu (%) and Au (ppm) variables, by the individually modeled domains was undertaken using the regularized 2.00m composite sample database. High grade Cu and Au outlier values were observed within and outside the modelled domains.

The Main Mineralization Domains are gently undulating in a down dip direction towards the east and along strike from the south to the north. Accurately representing the geological distances between samples which lie within folded structures is more difficult, as the geological distance between samples is longer than the straight-line distances between samples. To address the challenge of these undulating structures at the Planalto deposit, a structural analysis was undertaken to identify 3D mineralization Domain surfaces to act as a reference point to unfold the undulating surfaces. Isatis Neo software was used to flatten the top surface and unfold the drill hole sample locations to a new set of transformed coordinates. This transformed dataset was then used to study the spatial continuity by variographic analysis. The modelled variograms were applied individually to all domains. There is a notable correlation between Au (ppm) and Cu (%). The standardized variogram of Cu (%) variable was also applied to estimate the Au (ppm) variable, based on correlation these two variables and in the QP opinion.

GE21 generated a block model to perform the Mineral Resource estimation. The parental block model for the resource estimation was designed to preserve the variance of estimates and ensure geometric fidelity to modeled domains with blocks measuring 40m x 40m x 20m based on one-quarter of the drilling grid size (area-based dimension), and sub-blocks of 10m x 10m x 5m.

GE21 classified 3 zones in the geological model for a density study as follows. The Oxide zone was categorized based on the 3D weathering model, and the boundary between the North and South zones was established by the Planalto Mineração technical team, who advised that they represent different geological contexts for density definition considerations. North zone is slightly higher in density due to more iron rich alteration and pyrite. The North Zone is characterized as all blocks above a northing coordinate value of 9295400N. For Domains with enough density measurements, the Domain density was calculated using the mean density of the samples after treating outlier’s, when anomalous samples evaluated by histogram graphics were excluded from the analysis. Average values of density were applied for each domain individually after the outlier treatment. Domains with a low number of density measurements were assigned the overall average density of the Zone (North, South or Oxide).

The Planalto Copper project block model grade interpolation was undertaken using Ordinary Kriging (OK) interpolation method using Leapfrog Edge software for the Cu (%) and Au (g/t) variables, based on the variographic structural analysis results (ranges, sills and anisotropy). Each mineralized domain was estimated independently, employing a hard boundary strategy, ensuring that samples from one domain did not influence blocks in neighboring domains. GE21 applied dynamic anisotropy for block model grade interpolation, variogram and sample selection using search ellipsoids which were orientated individually for each block model cell. Dip angle and dip orientation parameters of the Domain surface were interpolated into each of the model cells.

The QP carried out the validation of the estimate through visual verification and by the Global and Local bias verification. Global bias checks used The Nearest Neighbour interpolation (NN) method as a comparison estimate by the NN-Check analysis. Local bias was compared using Nearest Neighbour and Inverse Distance interpolation method by Swath Plot Analysis. The comparison was performed for the Main Mineralized Zones and outside the Main Mineralized zone and Hosted Rock individually. The comparison showed that Ordinary Kriging globally respected the average grades, and the global bias in the estimated grades is within the limits of acceptance.

The local bias assessment by the Swath-Plot method aims to analyze the occurrence of local bias by comparing the average grades for the model through Ordinary Kriging, Nearest Neighbour and Inverse Distance interpolation methods in swath coordinates intervals graphs along the X, Y, and Z axes. The results from the Ordinary Kriging grade estimate validation show that the smoothing effect or local and global bias are inside acceptance limits for the Mineral Resource estimate purposes. Silica Cap target presents a significant bias in the Au grade due its low number of samples, but it was considered as having a low estimation confidence in the mineral resource classification (Inferred), and for this reason, considered as within acceptance limits.

The resource classification was supported by a pit optimization process to assess the Reasonable Prospect for Eventual Economic Extraction (RPEEE) of the mineralization. This assessment is performed through a high-level pit optimization process which limits the mineralization blocks classified as resource blocks based on economic and geometric parameters. The Net Smelter Return (NSR) is the net revenue that the owner of a mining property receives from the sale of the mine's metal products less transportation and refining costs. The pit shell calculated using a metal price of 10,000 US$/t Copper and 2,200 US$/Oz gold is used to define the RPEEE limit of the Mineral resource estimate in the Planalto deposit.

The Mineral Resource was classified per CIM Standards and CIM Guidelines (https://mrmr.cim.org/media/1146/cim-mrmr-bp-guidelines_2019_may2022.pdf) utilizing geostatistical and classical methods, along with economically and mining-appropriate parameters relevant to the deposit type. The mineral resource classification boundaries were modelled by GE21 as solid volumes for the Indicated, and Inferred categories which were established through an approach that considered a comprehensive set of factors. These factors included the sampling procedure analysis, the sample grid spacing, the survey methodology, and the quality of assay data. Additionally, the progressive expansion of the search radius during grade estimation stages was also considered, as well as the continuity of the geological model mineralization.

Classification was applied as follows:

- Measured Mineral Resourcesclass has not been applied in the deposit.
- The classification of Indicated Mineral Resource was based on the first and second step of Ordinary Kriging, which utilizes the variogram range in the search ellipsoid of up to: 105m x 60m x 20m in the Main Mineralized domain only.
- The Inferred Mineral Resource classification is all remaining estimated blocks in Main Mineralized domain.
- The Host Rock zone was classified as Inferred resource class, irrespective of the search step used, due to the lower confidence in mineralization continuity.

- All other the blocks outside the pit optimization were not classified as mineral resources.

A cut-off of 0.16% equivalent Cu was applied to all model cells; (Main Mineralization and the Host Rock mineralization) within the chosen pit shell, which was calculated using metal prices of 10,000 $/t Cu and 2,200 $/Oz Au. Equivalent Copper grade was calculated block by block using the formula below:

*Equivalent Cu grade= Cu grade + ((Au Recovery x Au price x Payable Au)/(Cu Recovery*Cu price x Percentage Payable for Cu in NSR)) x Au grade*

Where: Payable Au = 90% and Percentage Payable for Cu in NSR = 83.7%, the formulae is simplified to Cu-Eq% = Cu% + (Au g/t x 0.578).

Mineral resources inside the selected RPEEE pit optimization shell are presented in the Table 1-2 and Figure 1-6.

Table 1-2: Planalto Project Mineral Resource Estimate

Zone	Category	Resource (Mt)	Cu Grade (%)	Au Grade (g/t)	Cu (Kt)	Au (Koz)	Equivalent Cu (%)
Main Mineralization	**Indicated**	**47.7**	**0.53**	**0.06**	**252.8**	**92.0**	**0.56**
	Inferred	77.7	0.51	0.06	396.3	149.9	0.54
Host Rock Mineralization	Inferred	76.3	0.20	0.03	152.6	73.6	0.22
Total	**Indicated**	**47.7**	**0.53**	**0.06**	**252.8**	**92.0**	**0.56**
	Inferred	154.0	0.36	0.04	548.9	223.5	0.38

Notes related to the Mineral Resource Estimate:

1. *The Mineral Resource Estimate (MRE) was restricted by a pit shell defined using metal prices of 10,000 US$/t Cu and 2,200 US$/oz Au, Mining cost of 2.9 US$/t mined, processing and G&A cost of 11.50 US$/t processed. Process recovery of 88% Cu and 68% Au. Concentrate transport and selling costs of 208 US$/t concentrate. Commercial smelter terms copper treatment and refining charges 59.5 US$/t concentrate, 0.06 US$/t metal, Gold refining charge 4.47 US$/Oz.*
2. *Indicated and Inferred Resources estimate reported above a 0.16 equivalent Cu (%) cut off.*
3. *Copper Equivalent grade = Cu grade + ((Au Recovery x Au price x Payable Au)/(Cu Recovery x Cu price x Percentage_Payabloe for Cu in NSR)) x Au grade , where: Payable Au = 90% and Percentage Payable for Cu in NSR = 83.7%*
4. *The MRE contains fresh rock domains only, the oxide mineralization is not reported.*
5. *Grades reported using dry density.*
6. *The MRE is within Planalto Mineração tenement areas.*
7. *The MRE was estimated using ordinary kriging in 40m x 40m x 20m blocks with sub-blocks of 10m x 10m x 5m.*
8. *The MRE report table was produced in Leapfrog Geo software.*
9. *The MRE was prepared in accordance with the CIM Standards, and the CIM Guidelines, using geostatistical and/or classical methods, plus economic and mining parameters appropriate to the deposit.*
10. *The effective date of the MRE is July 03rd, 2024.*
11. *The QP responsible for the Mineral Resources Estimate is geologist Leonardo Soares (MAIG #5180).*
12. *Mineral Resources are not ore reserves and are not demonstrably economically recoverable.*
13. *The MRE numbers provided have been rounded to the estimate relative precision. Values cannot be added due to rounding.*
14. *QP's/ authors are not aware of any legal, permitting, political, environmental, or other risks that could materially affect the development of the Mineral Resource.*

The RPEEE Resource Pit shell includes an oxide mineralization zone which has not been classified as a Mineral Resource, due to the lack of information related to metallurgical recovery of this type of material. This material was not considered in the RPEEE pit optimization process as revenue generating, reporting to waste. The possible oxide mineralization tonnage and grades expected for this exploration potential material are approximately 3.0 - 4.0 Mt at 0.4% to 0.5% Cu and minor gold of approximately 0.04 to 0.05 g/t Au. This potential quantity and grade are conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource'.

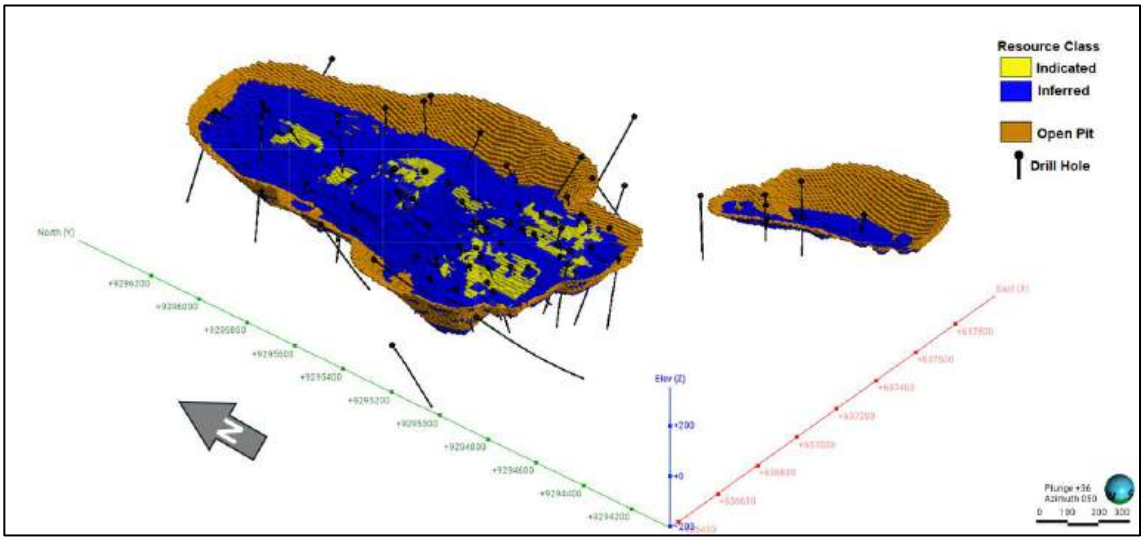


Figure 1-6: Oblique view - Mineral Resource classification inside RPEEE pit.
Source: GE21, 2024.

The Planalto Mineração technical team and the QP discussed extensively the application of a cut-off grade for the Resource classification reporting of the Planalto mineral resource estimate. The RPEEE pit optimization marginal cut-off grade for the 10,000 US$/t copper price pit shell was calculated to be 0.16% Equivalent Cu grade (CuEq). A sensitivity analysis was also undertaken to understand the impact of different copper prices to resulting pit optimization shells for the Planalto mineralization. Pit optimizations using the same parameters as those used in the RPEEE pit optimization were undertaken using the Planalto mineralization block model and applying copper prices ranging from 8,000 to 12,000 US$/t to create a series of optimization shells. Initial observations from this optimization sensitivity analysis relating to the Planalto mineralization identify a number of broad trends which may impact the potential eventual development of the Planalto deposit as follows.

1) The overall pit shape remains largely similar and the deposit does not break down into smaller sub pits as the optimization metal price is reduced, indicating that the overall mineralization has the potential to be mined as a single pit over a range of different metal prices. The Silica Cap target is mined as a separate pit in all cases.
2) The Main Mineralization domain tonnage varies from 116Mt at the lowest copper price to

130Mt at the highest price with the copper equivalent (CuEq)% grade varying marginally from 0.56% to 0.55% respectively. The higher-grade mineralization is contained within the optimization pit shells over a range of copper prices.

3) The Host Rock domain mineralization occurs adjacent and between the Main Mineralization domain and is more sensitive to metal price in this optimization analysis, with significant variation in tonnage from 26Mt through to 125Mt within the optimization pit shells from the lowest price to the highest price copper pit shell respectively. The change in strip ratio (above cut-off grade to waste material) would indicate that there is low grade mineralization material to be processed instead of being classified as waste as the marginal cut-off grade decreases with increased copper prices.

1.10 Conclusions and recommendations

The effective date of the MRE was July 03rd, 2024.

The Planalto copper gold deposit has many of the characteristics similar to other IOCG deposits in the Carajás. Potentially economic mineralization occurs over a footprint of 1,500 x 800m, and is interpreted to occur in stacked sub-parallel sheet-like structures that can be modelled fairly continuously over the 1500m north-south strike length along the mineralized zone. Individual zones vary from a few meters to up to several tens of meters thick, and where there is an amalgamation of zones the mineralization can be as much as 100m in thickness. Chalcopyrite is the only copper-bearing mineral recognized in the deposit. Pyrite is rarely seen in the drill core in the Homestead sector. In the Cupuzeiro zone, pyrite can constitute up to 5% of the rock and is very abundant in the drill core intervals with more than 1% Cu.

The Qualified Person considers that the sampling, sample preparation, security and analysis procedures applied, and results presented by Planalto Mineração and contracted companies are suited for a Mineral Resource Estimation study. Quality Assurance procedures follow the industry's best practices, and Quality Control results are within industry standards and inside acceptance limits for quality of the assay information for Mineral Resource estimates.

During the site visit between 25 and 26 of April 2024, QP checked the outcropping mineralization, drill collar markers and the drill cores, as well as undertaking a review of information relating to exploration results, sampling procedures, sampling preparation, chemical analysis, topographic and drillhole deviation surveys. Discussions were held in relation to geological and mineralization model interpretation. The QP has reviewed the adequacy of the exploration information and the visual, physical, and geological characteristics of the property and has found no significant issues or inconsistencies that would cause one to question the validity of the data. The QP is satisfied to include the exploration data including the drilling, drill litho-logs, and sample assays for the purpose of resource modelling, evaluation and estimations as presented in this report.

Metallurgical testwork was performed by Blue Coast Research Ltd. which executed a preliminary metallurgical program on samples from the Planalto Copper Project. The Locked-Cycle test (LCT) conducted on the Homestead master composite (PL-3MC) was successful in achieving 90% copper recovery to a final concentrate grading approximately 29% Cu and with 1.79 g/t Au at about 44 % gold recovery.

GE21 undertook a review and validation of the Planalto Mineração 3D geological modeling. A Mineral Resource Estimate (MRE) of the Planalto project was undertaken, which included statistical and geostatistical analysis and grade estimation. The Mineral Resource classification was based on the assessment of a number of factors, including, the density, and spacing of available data, interpreted mineralization controls, mineralization style, and quality of data. The Qualified Person considers that the geological interpretations and modelling are adequate for a Mineral Resource Estimation study.

The Planalto Copper project block model grade interpolation was undertaken using Ordinary Kriging (OK) interpolation method using Leapfrog Edge software for the Cu (%) and Au (g/t) variables, based on the variographic structural analysis results (ranges, sills and anisotropy). Each mineralized domain was estimated independently, employing a hard boundary strategy,

The QP carried out the validation of the estimate through visual verification and by the Global and Local bias verification. The comparison showed that Ordinary Kriging globally respected the average grades, and the global bias in the estimated grades is within the limits of acceptance.

The local bias assessment of grade estimation was undertaken by comparing the average grades for the model through Ordinary Kriging, Nearest Neighbour and Inverse Distance interpolation methods in swath coordinates intervals graphs along the X, Y, and Z axes. The smoothing effect or local and global bias are inside acceptance limits for the Mineral Resource estimate purposes. The Silica Cap target presents a significant bias in the Au grade due its low number of samples available for grade estimation, but was assigned a low estimation confidence in the mineral resource classification (Inferred), and for this reason, considered as within acceptance limits.

The Mineral Resource was classified per CIM Standards and CIM Guidelines. The resource classification was supported by a pit optimization process to assess the Reasonable Prospect for Eventual Economic Extraction (RPEEE) of the mineralization. This assessment is performed through a high-level pit optimization process which limits the mineralization blocks classified as resource blocks based on economic and geometric parameters. A cut-off of 0.16% of equivalent Cu grade was applied to all model cells; (Main Mineralization and the Host Rock mineralization) within the chosen selling prices of US$10,000/t Cu and 2,200 US$/oz pit shell. A pit shell optimization sensitivity analysis using the copper price was undertaken to better understand the variability, opportunity and the risks of the deposit.

Mineral Resources were classified as 47.5 Mt at 0.53% Cu and 0.06 g/t Au in the Indicated class and 154.0 Mt at 0.36% Cu and 0.04 g/t Au in the Inferred class.

The primary recommendation is to continue the development of the Project through more detailed exploration, technical and engineering studies. The aim being to first complete a Preliminary Economic Assessment (PEA) to better understand the high level economic and engineering drivers to the project.

The following recommendations are made with respect to future work on the Property. The work proposed is required for upgrading Planalto Copper Project Mineral Resources to Indicated and Measured category.

GE21 proposes the following recommendations for the continuous improvement of the Mineral Resource estimate:

- Preliminary Economic Assessment
    - Understand the high level economic and engineering drivers to the project using the current data available.
    - Undertake an assessment of the mineral processing characteristics of the near surface oxide mineralization to determine if copper recovery is viable and economic.
- Mineral Resource Classification Upgrade:
    - Conversion of Indicated Resources to Measured Resources. A 50m x 50m infill drilling program in the domain of indicated resource classification.
    - Conversion of Inferred Resources to Indicated Resources. A 100m x 100m infill drilling program in the domain of inferred resource classification.
    - Update Mineral Resource Estimate after completion of infill drilling program.
- Exploration Targets Drilling:
    - Test existing copper soil geochemical and geophysical anomalies within the Planalto licence. Exploratory drilling campaign for the Divisa, Highway-W and Highway-E targets with 100m x 200m spaced diamond drill holes to achieve inferred resource classification.

The Table 1-3 presents the estimated budget for the implementation of the recommendations.

Table 1-3 Planned Budget recommendations.

Recommended work		Estimated cost (US$)
Preliminary Economic Assessment	PEA study using all current technical and engineering information available for the project	~$150,000
Mineral Resource Classification Upgrade Bring all mineralization within open pit limit to minimum Indicated category resource	A 50x50m infill drilling program	~$1,000,000
	A 100x100m infill drilling program	~$2,500,000
	Updated mineral resource estimate	~$100,000
Exploration Targets Drilling	Exploratory 100m x 200m drilling program	~$1,000,000
Total		**US$ 1,750,000**

2 Introduction

GE21 Consultoria Mineral Ltda. (“GE21”) was engaged by Lara Exploration Ltd. (Lara), to provide technical services for the Planalto Project to prepare Mineral Resource Estimate Studies and a Technical Report according the CIM NI43-101.

The project area is located in the Carajás region in the southeast of Para State, approximately 700km by road from the state capital Belem, in northern Brazil. Two copper deposits, namely the Homestead and the Cupuzeiro, were identified by diamond drilling between 2017 and 2022, and drilling more recently in 2023, has shown both to be part of a larger deposit which is now referred to as the Planalto Copper Deposit.

This Report and the estimates herein comply with the requirements of the Canadian Securities Administrators’ National Instrument 43-101 – Standard of Disclosure for Mineral Projects (“NI 43-101”) and Form 43-101F1 – Technical Report (“Form 43-101F1”).

2.1 Qualifications, Experience, and Independence

GE21 is a specialized, independent mineral consulting company. The geological reconnaissance and due diligence evaluation have been conducted by GE21 staff members, who are members of the Australian Institute of Geoscientists (AIG) and Australasian Institute of Mining and Metallurgy (AusIMM) and are Qualified Persons (QPs) as defined by NI 43-101.

2.2 Sources of Information

GE21 used reports, images and maps in digital format as sources of information for the work carried out, as well as databases in MS-Excel format and 3D mineralization model files in Datamine format, all of which were provided by Lara. Information was also provided verbally and via e-mail during several technical discussions.

2.3 Qualified Persons

The QPs responsible for this independent Technical Report are Mr. Leonardo de Moraes Soares and Mr. Paulo Bergmann

The Qualified Person responsible for the Mineral Resource Estimation is the geologist Leonardo de Moraes Soares, who has more than 22 years of relevant experience in Geology, Exploration and Mineral Resource Estimation. Mr. Soares is a full-time employee of GE21 Consultoria Mineral. He has considerable experience dealing with commodities, such as copper, gold, and PGMs. Mr. Soares is a member of the Australian Institute of Geoscientists (MAIG) and inspected the property in one site visit between the 25th and 26th of April 2024, as detailed in Chapter 12 of this report.

The Qualified Person responsible for this report's content on issues related to Mineral Processing and Metallurgical Tests, and Recovery Methods is Paulo Bergmann (FAusIMM, B.Sc.), a Mining Engineer with GE21 Consultoria Mineral, who has more than 40 years of experience in mining projects. Mr. Bergmann is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM).

Each of the authors of this report has the required qualifications, experience, competence, and independence to be considered a "Qualified Person," as defined by NI 43-101.

Neither GE21 nor the authors of this report have or have had, any material interest vested in Lara Exploration Ltd., or any of its related entities. GE21's relationship with Lara Exploration is strictly professional, consistent with that held between a client and an independent consultant. This report was prepared in exchange for payment based on fees stipulated in a commercial agreement. Payment of these fees is not dependent on the results of this Report.

Table 2-1 presents the QPs Matrix of responsibility.

Table 2-1: QPs Matrix of Responsibility.

Company	Professional	Site Visit	Responsibility
GE21	Leonardo de Moraes Soares	Between 25 and 26 of April 2024	Items 1 to 12, 14 and partial responsibility for 25 to 27.
GE21	Paulo Bergmann	-	Items 13 and partial responsibility for 25 to 27.
All Qualified persons are responsible for the corresponding sections within Items related to the preceding Items of this Technical Report.			

2.4 Units of Measure

Unless otherwise stated, the units of measurement in this Report are all metric in the International System of Units ("SI"). Unless stated otherwise, all monetary units are expressed in United States Dollars ("US$"). The UTM projection, Zone 24 South, SIRGAS 2000 datum, was adopted as a spatial reference.

2.5 Effective Date

The effective date of the Mineral Resource Estimate study (MRE) was July 03rd, 2024.

3 Reliance On Other Experts

The authors of this Report are Qualified Persons as defined under NI 43-101, with relevant experience in mineral exploration, data validation, and mineral resource estimation.

The information presented regarding the tenure, status and work permitted by permit type within the Planalto property in Chapter 4 – Property Description and Location, is based on information published by the National Mining Agency of Brazil (Agência Nacional de Mineração, "ANM") and is available to the public on the "Cadastro Mineiro" and "Geoinformação Minersl – SIGMINE" sistems accessed by the site www.gov.br/anm/pt-br/assuntos/acesso-a-sistemas.

The Lara VP Exploration, Michael Bennell, shared his extensive geological knowledge and insights to the Planalto deposit with GE21.

GE21 determined that the economic factors used in the determination of specific technical parameters of this Report, including, Copper, Gold and the USD:BRL assumptions used were in-line with industry norms, broader market consensus and are acceptable for use in the current mineral resource estimate. The Authors of this Report have not identified any significant risks in the underlying assumptions, as in addition to the above, the underlying assumptions are in line with spot market conditions as at the date of this Report.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Project Description & Ownership

Planalto is an exploration stage mineral project comprising the Planalto Copper Project. Two copper deposits, namely the Homestead and Cupuzeiro, were identified by diamond drilling between 2017 and 2022, and drilling more recently in 2023, has shown both to be part of a larger deposit which is now referred to as the Planalto Copper Deposit.

The project area is located in the Carajás region in the southeast of Para State approximately 700km by road from the state capital Belem, which is located at the mouth of the Amazon River (Figure 4-1). The project is close to the major mining centers of Canaã dos Carajás, Parauapebas and Curionópolis and close to several operating mines such as the Sossego Copper (Vale S A), Pedra Branca Copper (BHP) and the SIID Iron Ore (Vale S A) and to the Cristalino copper deposit currently under development by Vale S A. (Figure 4-2). BHP has a copper flotation plant at Antas Norte about 15 km north from Planalto. Parauapebas has daily commercial air services from Belem, the Para State Capital and Belo Horizonte in Minas Gerais State.

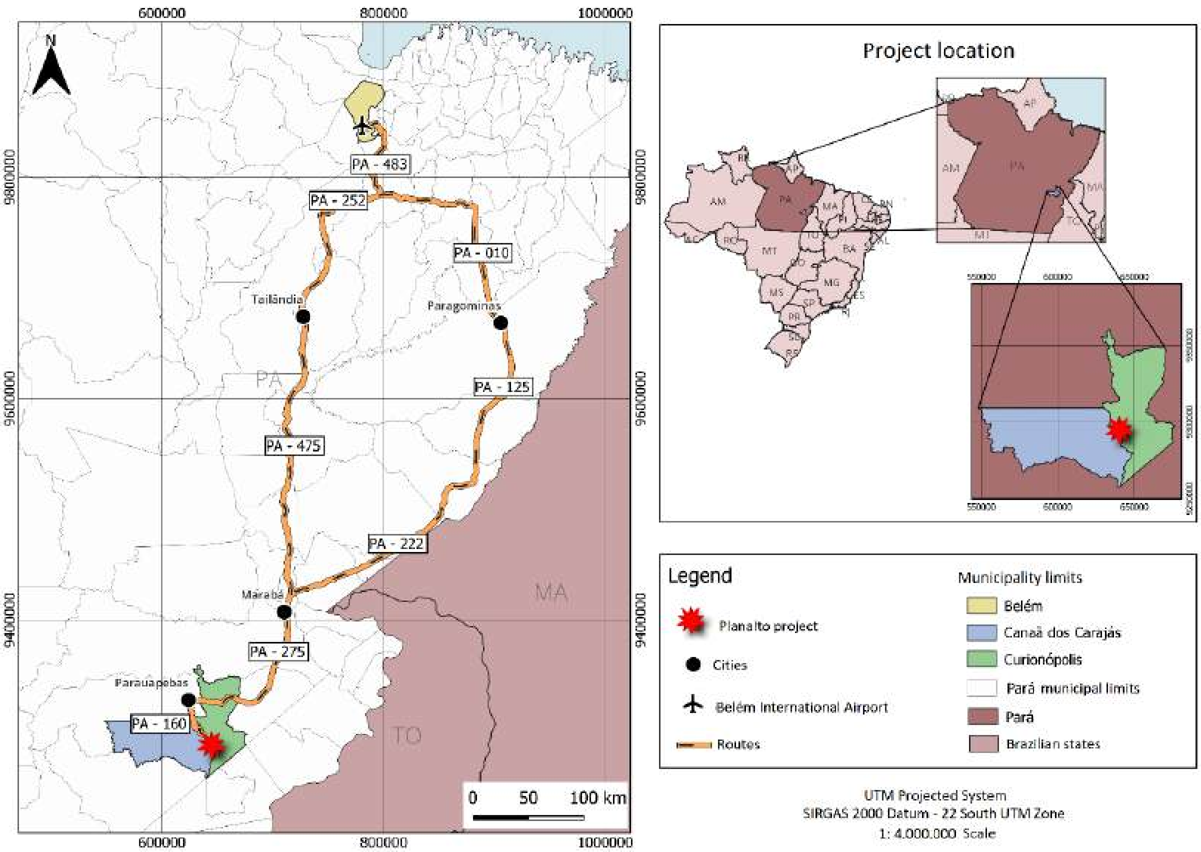


Figure 4-1: Location of the Planalto Project in Para State, Brazil.
Source: Planalto Mineração, 2023.

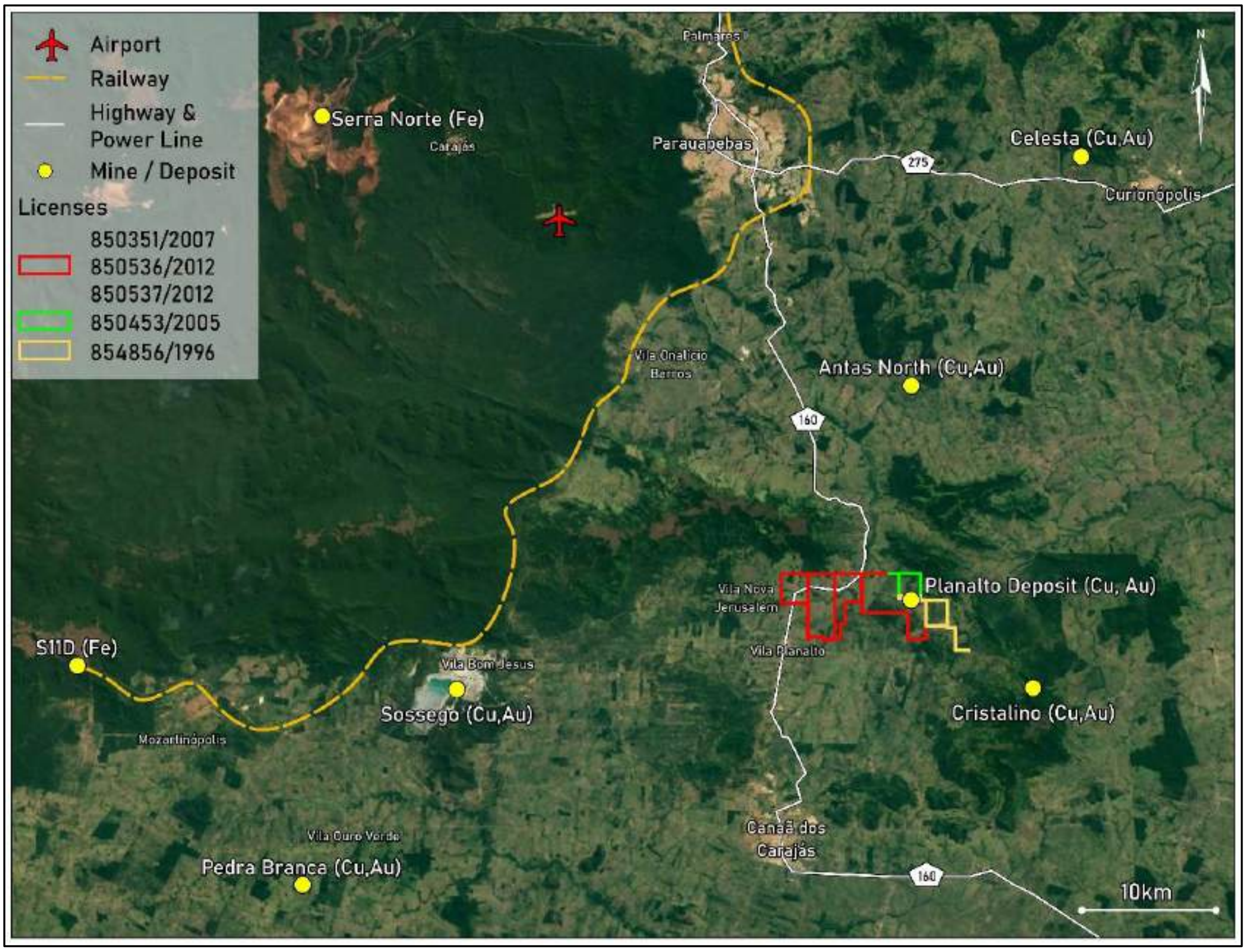


Figure 4-2: Semi-detailed Planalto Project Location Map.
Source: Planalto Mineração, 2023.

The deposit is primarily a copper deposit with a minor amount of gold. Chalcopyrite is the only copper-bearing mineral and the gold is primarily contained in the chalcopyrite lattice. Anomalous amounts of rare earth elements (Ce, La) and molybdenite are present locally in the deposit but are currently not considered to be of economic significance.

Five mineral tenements comprise the Planalto Project, and all are under option to Planalto Mineração Ltda., a wholly owned subsidiary of Lara Exploration Limited. The Planalto Copper deposit straddles three contiguous mineral licenses in the eastern part of the Planalto Project and straddles the border between the municipalities of Canaã dos Carajás and Curionópolis (Figure 4-3). The municipal border in this area is defined by the Cupuzeiro creek.

The exploration licenses that make up the Planalto Project are shown in Figure 4.3 (Figure 4-3) and are:

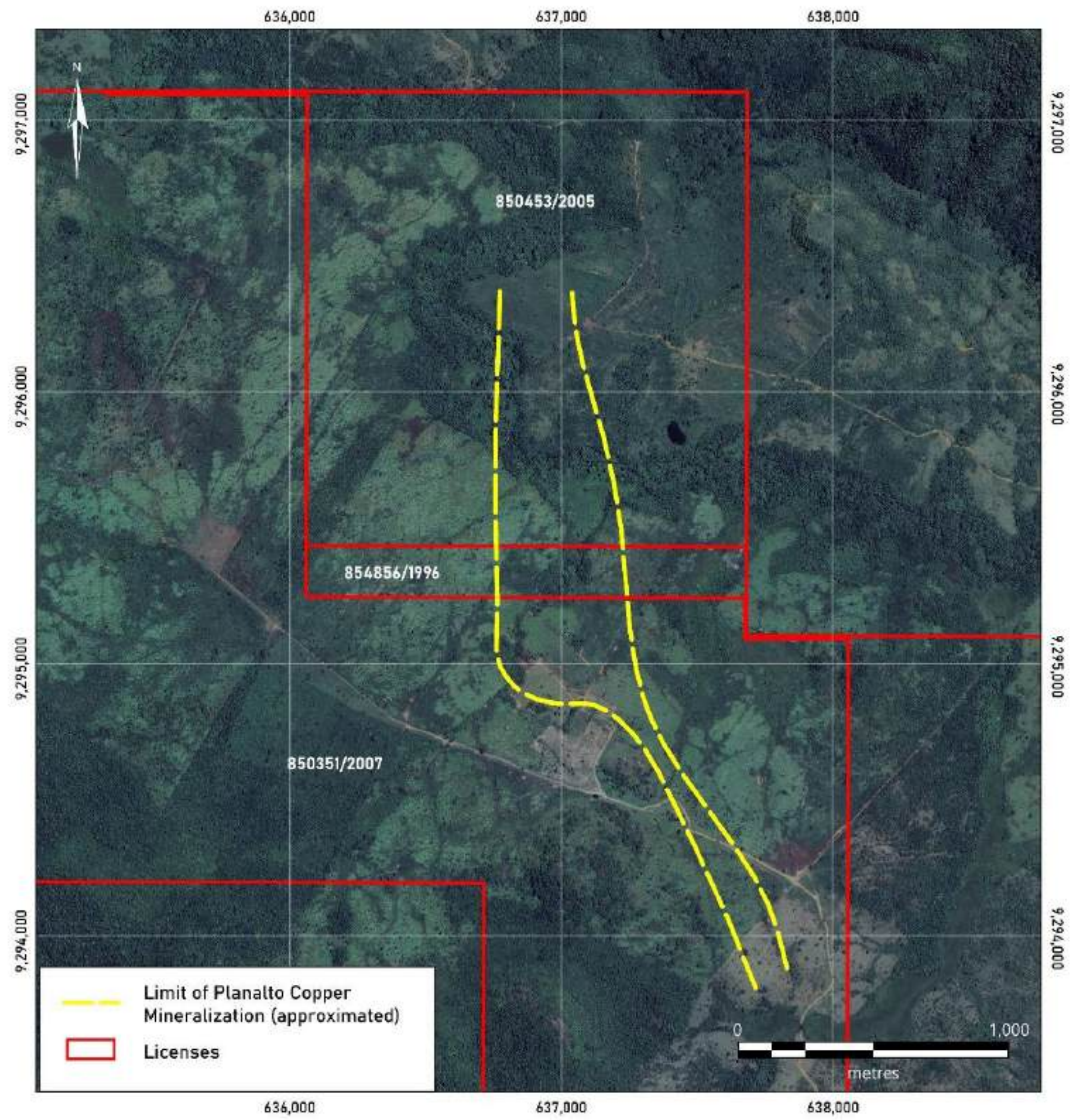
- ANM 850.351/2007 (total area 1261.82 ha),
- ANM 850.536/2012 (total area 1404 ha),

- ANM 850.537/2012 (total area 592 ha),
- ANM 850.453/2005 (total area 272.13 ha), and
- ANM 854.856/1996 (total area 336.8 ha).

All these Exploration License are located about 30 km north and northeast of the town of Canaã dos Carajás and the mineral property is centered approximately at coordinates - 6^0 22' 36.70'' S/ - 49^0 45' 41.84'' W.

The Planalto deposit is located at the eastern side of the licenses 850.351/2007 and trends northward across 854.856/1996 and into 850.453/2005 (Figure 4-3).

Two copper exploration targets, the Highway-W and the Sodre targets, are present on the licenses 850.536/2012 and 850.537/2012, respectively, located to the west from the main Planalto project. Exploration conducted to date on these two targets has included soil sampling surveys, geological mapping and a few scout diamond drill holes. Diamond core drilling has identified a few intervals of low-grade chalcopyrite mineralization, and oxide copper mineralization has been identified in the overlying saprolites. Further exploration drilling will be required before these two targets could be considered for inclusion into the project mineral resource inventory to CIM standards.



PROCESS	AREA (ha)	PHASE	NAME	SUBSTANCE
850.453/2005	272.13	Authorization for application to exploitation	Planalto Mineração Ltda	Copper
850.351/2007	1261.82	Exploitation application being analyzed by the ANM	Planalto Mineração Ltda	Copper Ore
854.856/1996	336.8	Authorization for application to exploitation	Planalto Mineração Ltda	Gold

Figure 4-3: Location of Planalto Copper Project-detail.
Source: Planalto Mineração, 2024.

4.2 Land Access

The Planalto Project is located on private farmland used for cattle farming. There are no indigenous claims in the area. Protected woodlands in the area occur along the margins of the Cupuzeiro Creek and some of its tributaries.

To carry out exploration activities in Brazil, including drilling, an access agreement is required with the surface rights owner (landowner). The Mining Code of Brazil considers that the sub-soil is owned by the Brazilian state, and in the case of the refusal by a landowner to grant permission for access to carry out exploration, access can be obtained through a court order.

Land access agreements are currently in place with the landowners in the Curionópolis municipality via an agreement with a farming family. In the Canaã dos Carajás municipality access is currently granted to Lara in the area of the Planalto deposit via a court order while a more definitive agreement is being negotiated.

Drill pad environmental permits for drilling in the municipality of Canaã dos Carajás were issued by the Municipal Environmental Department (Secretaria Municipal de Meio Ambiente-SEMMA). Permits for drilling in the Curionópolis municipality were issued by the state agency of Secretaria de Meio Ambiente (SEMAS) in Belem. The permit for access to surface water for drilling operations was also issued by SEMAS.

4.3 Mining Legislation, Administration and Rights

Brazilian Mining Legislation, Administration and Rights are governed by the Brazil Mining Code (Federal Law Decree No. 227/1967), which regulates the exploration and development of mineral resources and mining projects in Brazil.

Mineral tenements in Brazil generally comprise Prospecting Licenses, Exploration Licenses and Mining Licenses. These are granted subject to various conditions, including an annual fee per hectare payment and reporting requirements. Each tenement is granted subject to standard conditions that regulate the holder's activities and regulations that are designed to protect the environment.

The holder of a granted Prospecting License, Exploration License or Mining License is not required to spend a set annual amount per hectare in each tenement on exploration or mining activities. There is no statutory or other minimum expenditure requirement in Brazil. However, annual rental payments are made to the Brazilian National Department of Mineral Production (Mining National Agency, ANM), and the holder of an Exploration License must pay rates and taxes ranging, (R$4,53 to R$6,78) based on the current exchange rate, from US$0.91 to US$1.36 per hectare to the Government.

If a mineral tenement is located on private land, then the holder must arrange or agree with the landowners to access the property; however, in the absence of an agreement, the company can request access in court and by depositing a compensation value that is established and estimated by the court.

4.3.1 Prospecting Licenses

A Prospecting License entitles the holder, to the exclusion of all others, to explore for minerals in the area of the License but not to conduct commercial mining. A Prospecting License may cover a maximum area of 50 hectares and remain in force for up to 5 years. The holder may apply for a renewal of the Prospecting License, which is subject to approval by ANM. The period of renewal may be up to a further five years.

4.3.2 Exploration Licenses

The federal department responsible for issuing Exploration Licenses is ANM. Exploration licenses are typically granted for three years and can be extended for a further three years maximum, subject to ANM approval. An exploration license allows the holder to explore for minerals in the granted concession but not to conduct commercial mining.

License applications must include applicant details, the elements or metals to be explored for, the application license area, and be accompanied by stipulated technical documents prepared under the responsibility of a qualified geologist or mining engineer. Such documents typically include:

- Budget forecasts for the planned exploration program.
- Maps of the intended area.
- Payment of governmental fees and taxes.
- Proof of sufficient funds or financing for the investment forecast set forth in the proposed exploration plan.

Licenses are deemed granted when they are published in the National Official Gazette (DOU). To renew an exploration license, the ANM shall take into consideration the development of the work performed. The request for renewal of the exploration license must be presented 60 days before the expiration date of the original license. As to the renewal request, a report must be presented of the work already carried out, indicating the results achieved, as well as reasons justifying continuing the work. The renewal of the exploration license does not depend on the publication of a new license but only on the publication of the decision to renew it.

A final exploration report summarizing the economic viability and technical feasibility of the license must be supplied to the ANM prior to the expiration of the granted period. Such report must be prepared under the technical responsibility of a legally qualified professional and must also contain the following:

i information on the area, means of access and communication.

ii plan of the geological surveys completed.

iii description of the main aspects of the deposit.

iv quality of the mineral substance and definition of the deposit.

v genesis of the deposit, as well as its qualification and comparison to similar deposits.

vi report on the assay results of samples collected.

vii demonstration of the economic feasibility of the deposit, and

viii the necessary information for the calculation of the reserve, such as the density, area, volume, and grade.

The final exploration report must be presented independently from the work results and shall indicate the feasibility or non-feasibility of the development and exploitation of the mineralization or the non-existence of the deposit. The holder of an exploration license who does not present a final exploration report within the date established by the regulations may be subject to fines. Nevertheless, the exemption from submitting the report is permitted when the titleholder relinquishes the license. The ANM must confirm the relinquishment, provided it happened in one of the two following instances:

i at any time, if the titleholder has not been successful at entering the area, despite all the efforts made, including judicial means, or;

ii before one-third (1/3) of the term of duration of the exploration license has passed.

Should the final exploration report conclude that mineral exploitation or development is temporarily non-feasible (due to economic conditions, logistics, and commodities prices). In that case, the license holder may request the postponement of the decision related to the report ("*Sobrestamento*"), which the ANM shall review.

A concession holder has one year from the approval of the final exploration report to apply for a mining concession or to transfer this right to a third party. The application period may be extended for longer than a year at the discretion of the ANM, if requested by the holder before the expiration date, with necessary motivations and justifications (for example, more time to obtain environmental approvals or conduct further studies on economic viability and technical feasibility).

Development of mining projects is governed by three phases: Preliminary License (LP), Installation license (LI) and Operating license (LO). Issuance of these licenses is governed by the Brazilian Institute of Environment and Renewable Natural Resources ("IBAMA"), the State Environmental Agencies, which would be the Pará State Environmental Agency ("SEMA") for the Planalto Project or the Municipal Authorities.

Stage 1 Licensing: Preliminary License (LP)

Receipt of the LP requires the licensing agency to evaluate the location and overall design of the project, environmental impact, social/community impact and establish terms of reference for future development. The Planalto Project occurs on predominantly privately owned, cleared land. There are no indigenous communities within the property boundary or a 10km radius, so there is no consultation requirement under the National Foundation of the Indian Fundação Nacional do Índio ("FUNAI"), the federal agency that establishes and manages policies relating to indigenous communities.

Stage 2 Licensing: Installation License (LI)

Receipt of the LI allows earthworks and mine construction to start. Application for the LI must include the layout of the mine, processing plant, tailings dam and all associated infrastructure. It also details mining methods, recovery methods, tailings dam design (and dam failure studies). The LI also expands and updates the environmental and social/community studies included in the LP terms of reference and conditions.

Stage 3 Licensing: Operating License (LO)

Receipt of the LO allows operating activities to start and is essentially a review of the operation to ensure it was constructed according to the detail provided in the LI.

4.4 Mineral Tenure

The outlines of the mineral tenure of all five licenses granted by the Ministerio de Minas e Energia (Ministry for Mines and Energy-"MME") and now held by Lara though its Brazilian subsidiary Planalto Mineração Ltda. (PML), are as follows and shown in Figure 4-4:

Three licenses 5128, 5130 and 5131 are part of the original Planalto Project and were optioned from Vera Lucia Lopez Ferraz through her agent, Brasil Americas Investimentos and Participacoes and will be referred to as the BAIP Option. Two other licenses were added to the project in 2021 and are the Tariana Option, acquired from a subsidiary of Anglo American do Brasil, and the Zaspir Option acquired from Mineração Zaspir Ltda.

The full list of the tenements is as follows:

- BAIP Option: Exploration License No.5128 and designated as ANM 850.351/2007 (area 1261.82 ha)
- BAIP Option: Exploration License No. 5130 and designated as ANM 850.536/2012 (area 1404 ha)
- BAIP Option: Exploration License No. 5131 and designated as ANM 850.537/2012 (area 592 ha)
- Tariana Option: Exploration License No. 8033 and designated as ANM 850.453/2005 (area 272.13 ha)

- Zaspir Option: Exploration License No. 9521 and designated as ANM 854.856/1996 (area 336.8 ha)
- The total area of the project licenses is 3866.75 ha.

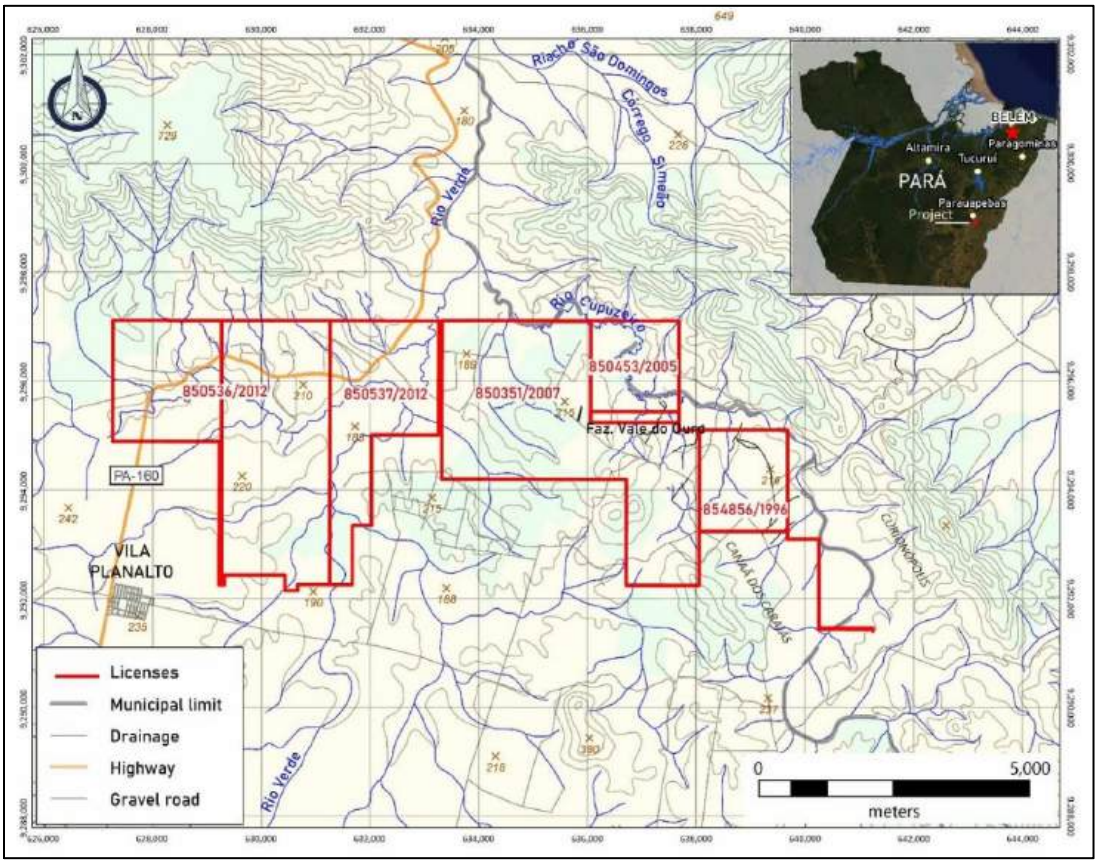


Figure 4-4: Planalto project mineral tenements
Source: Planalto Mineração, 2024.

Mining license applications have been submitted on May 6th, 2022, to the ANM for the three licenses of the BAIP Option. The Brazilian standard PAE (*Plano de Aproveitamento Econômico*) study reports are being analyzed by the ANM.

Final exploration reports for the Anglo and Zaspir Options were submitted on 17/11/2023 to the ANM and both reports were approved on April 15th, 2024. Planalto has one year from that date to submit mining license applications. and the PAE study reports

Lara retains FFA Legal and Mining Ltda., whose lawyers are qualified to practice law in the Federative Republic of Brazil, to continuously supervise and maintain the Planalto mineral rights in good standing.

Table 4-1: Mineral license summary

Process No.	Municipality	Stage	Mineral Substance	Title Owner (2)	Size (ha)	License no.
850.351/2007	Canaã dos Carajás	Mining license requested 06/05/2022	Cu & Au	PML	1262	5128
850.536/2012	Canaã dos Carajs	Mining license requested 06/05/2022	Cu & Au	PML	1404	5130
850.537/2012	Canaã dos Carajs	Mining license requested 06/05/2022	Cu & Au	PML	592	5131
850.453/2005	Canaã dos Carajás/Curionopolis	Positive final exploration report approved	Cu & Au	PML	272	8033
854.856/1996	Canaã dos Carajás	Positive final exploration report approved	Cu & Au	PML	336	9521

(1) Source ANM April, 2024 (2) PML-Planalto Mineração Ltda.

A Summary of historical of mineral licenses follows:

Table 4-2: Summary of historical mineral licenses

License Process No.	License No.	Application date	First three years granted	Final Exploration report presented to ANM	Final Exploration report approved by ANM	Mining License application date	Date of transfer of mineral rights to PML
850.351/20077	5128	29/052007	27/05/2016	27/05/2019	31/10/2019	06/05/2022	14/12/2020
850.536/2012	5130	21/05/2012	27/05/2016	27/05/2019	31/10/2019	06/05/2022	28/05/2020
850.537/2012	5131	21/05/2012	27/05/2016	25/05/2019	31/10/2019	06/05/2022	28/05/2020
850.453/2005	8033	29/06/2005	14/09/2015	17/11/2023	15/04/2024		10/03/2022
854.856/1996	9521	09/07/1996	24/11/2021	17/11/2023	15/04/2024		24/02/2022

(1) License issued for two years

4.5 Mineral License Acquisitions and Transaction Terms

4.5.1 Licenses 850.351/2007, 850.536/2012 and 850.537/2012 - BAIP Option

On February 25, 2013 Lara announced that it had entered into an option to acquire 100% interest in the three mineral titles (850.351/2007, 850.536/2012 and 850.537/2012) all held in the name of Vera Lucia Lopes Ferraz through the intermediary of Brasil Americas Investimentos e Participacoes - “BAIP”.

Terms of the agreement are as follows:

- US$500,000 in staged cash payments (all paid).
- Lara to fund all exploration expenses.
- Lara to pay a 2% NSR royalty to BAIP on production. Lara retains the right to acquire 50% of the royalty (i.e. 1%) for US$ 2 million.

Lara has transferred these mineral rights to Planalto Mineração Ltda.

4.5.2 License 850.453/2005 - Tariana Option

On January 11, 2021 Lara, through its subsidiary Planalto Mineração Ltda. (PML), announced that it had entered into an option agreement with Mineração Tariana Ltda., a subsidiary of Anglo American do Brasil Ltda. to acquire the mineral license 850.453/2005.

Terms of the agreement are:

- Staged cash payments of US$150,000 (all paid)
- PML to complete a minimum of 2,000m of diamond drilling (completed)
- PML to complete mineral resource and reserve studies.
- PML to pay a 1.25 % NSR on production with no buy back rights.
- If the Anglo license is not in production by 31/07/2027 then a penalty payment of US$50,000 will be due and PML will then pay a monthly amount of US$4,167 for the sooner of five years or when production starts. These monthly payment amounts can be recovered by PML from up to 50% of royalties payable thereafter.

4.5.3 License 854.856/1996 - Zaspir Option

On March 15, 2021 Lara, through its subsidiary Planalto Mineração Ltda., announced it had entered into a option agreement to acquire the mineral license application 854.856/1996 from Mineração Zaspir Ltda. Terms of the agreement are:

- Staged cash payments of US$ 250,000 (all paid).
- Paying a 2% NSR royalty on any production. Lara retains the right to buy one half of the NSR royalty (i.e. 1%) for US$250,000.

4.6 Royalties

The following royalties for mineral rights options are applicable to the Planalto Project:

- 1.25% NSR royalty to Anglo American do Brasil Ltda., from production from the Anglo option.
- 2% NSR royalty to Brasil Americas Investimentos e Participacoes Ltda., from production from the BAIP option.
- 2% NSR royalty to Mineração Zaspir Ltda., from production from the Zaspir option.

The Federal Government Royalties (CFEM) on concentrate sales from production are:

- 1.5% NSR royalty on Au.
- 2% NSR royalty on base metals (Cu).

The Private Landowner Royalty is equal to 50% of CFEM royalties (i.e. 0.75% on Au and 1% on Cu concentrate sales). Insurance and freight transport charges are deductible from the sales price.

4.7 Environmental and Social Liabilities

No environmental liabilities have been identified within the Planalto Project Exploration Licenses. The current land use at the Planalto Project is solely agricultural cattle grazing.

The most significant activity impacting the environment during the past seven years of exploration has been the relatively low impact caused by drilling activities. There has been some destruction of grassland, however the drill pads and access roads have all been rehabilitated. Rehabilitation of the drill pad sites has been a condition of the drill pad environmental licensing issued by the Secretary of Environment of the Canaã dos Carajás Municipality (Secretaria de Meio Ambiente- “SEMMA”). PML has annual reporting obligations with SEMMA and must show photographic evidence of rehabilitation of the drill pads. Routinely, an environmental officer of SEMMA conducts an annual site inspection to check firsthand the progress of the rehabilitation activities.

It is expected that the social or community impact of a mine development at the Planalto Project will also be negligible since the nearest community is the village of Vila Planalto, located 15 km to the west of the Planalto Project. There are no indigenous communities within the Planalto project area.

GE21 considers based on the information presented, discussions with Lara’s technical team and the site visit that there are no other known significant factors and risks that may affect access, title or the right or ability to perform work on the property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility and Physiography

The main access to the Project is from within the small village Vila Planalto, which is located 15km north from Canaã dos Carajás on the highway PA160 linking the towns of Canaã dos Carajás and Parauapebas. The project is then accessed via 15km mostly unpaved municipal roads to the northeast from the Vila Planalto. Firstly, using road VS-45 for 8 km to the east then by 7km to the north on road VS-46. The road VS-46 extends into the Curionopolis municipality and farm access roads along the north side of the Cupuzeiro creek give access to the part of the exploration license ANM 850.453/2005 in that municipality.

The closest population centre to the Project is the town of Canaã dos Carajás, with a population of approximately 40,000 located approximately 30km south-southwest of Planalto. The village of Vila Planalto, population of about 1,000 is approximately 12km to the southwest from the project. There are no communities within the Project boundary. Labour for the operating mines in the region is mostly sourced from Canaã dos Carajás.

Parauapebas, with a population of over 213,000 (data from 2020), is located approximately 40km to the northwest and is also a major service centre provider and labour source for Vales' iron ore mines in the Carajás North region and other operating mines. Any future operation is expected to be able to source good, qualified people for mining operations. The nearest rail services are those privately owned by Vale in with the line starting from the S11D iron ore terminal in the western part of the Canaã dos Carajás municipality. This line connects with Parauapebas and passes through Maraba and out to the seaport of São Luis in Maranhão State.

The nearest commercial-scale port facility is Vila da Conde, located adjacent to Belem, the state capital, is approximately 660km to the north by road. The port facilities can also be accessed via barge on the Tocantins River, the nearest access to which is also in Marabá. Currently all the smaller copper concentrate producers in the region truck the copper concentrates in 30t containers to Vila da Conde.

Parauapebas has an airport with regular commercial flights from/to some of the larger cities in Brazil, such as Belo Horizonte, Belém and Brasília. Canaã dos Carajás has a small general aviation airstrip, but no commercial air service.

The topography in the project area is generally undulating with elevations between 180m and 220m but is higher in the southeast part of the project where the Planalto granite forms high rounded hills up to 350m to 400m elevation. Wide alluvial flats occur along the headwater of the Verde River and its tributaries. The Verde River flows northwards and discharges into the

Parauapebas River. The Cupuzeiro creek, which cuts across the Planalto deposit, flows northwest and discharges into the Verde River about 3km downstream from the project.

Immediately to the north of the project area is the South Para Plateau where the altitudes vary from 500m to 700m above sea level in the Serra do Rabo (Figure 5-1).

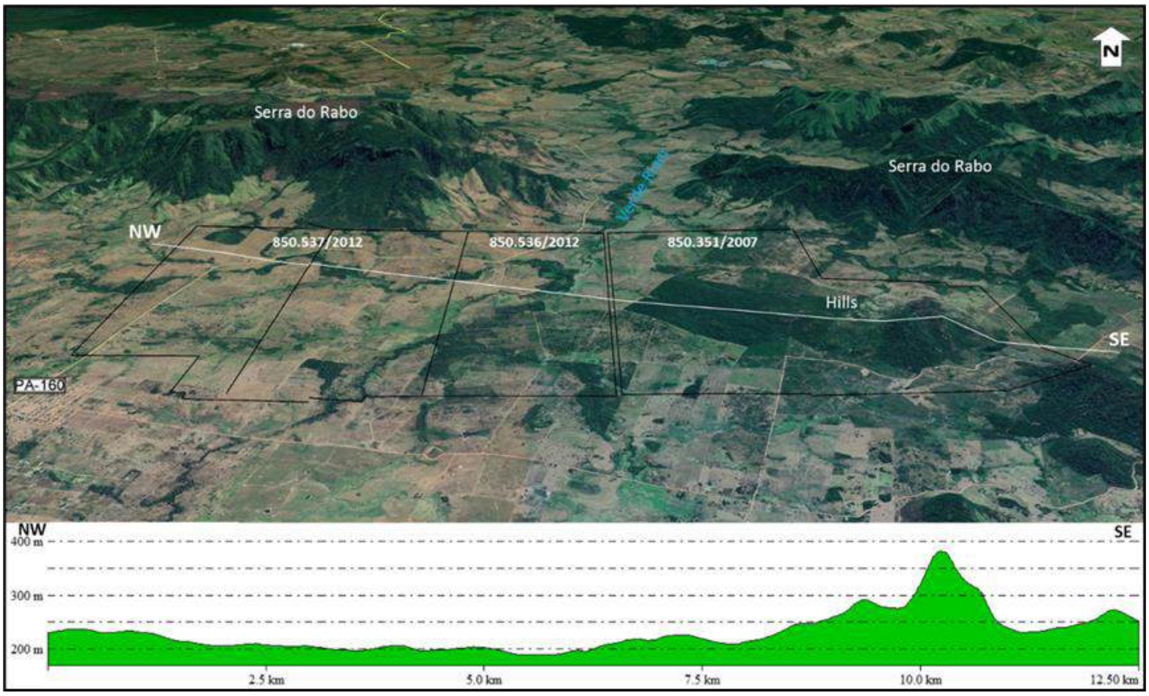


Figure 5-1: Oblique 3D view of the project area illustrating the geomorphological features and topographic profile along NW-SE section.
Source: Planalto Mineração, 2019.

Figure 5-2 shows some typical photographs of the different landforms in the project area and adjacent areas.

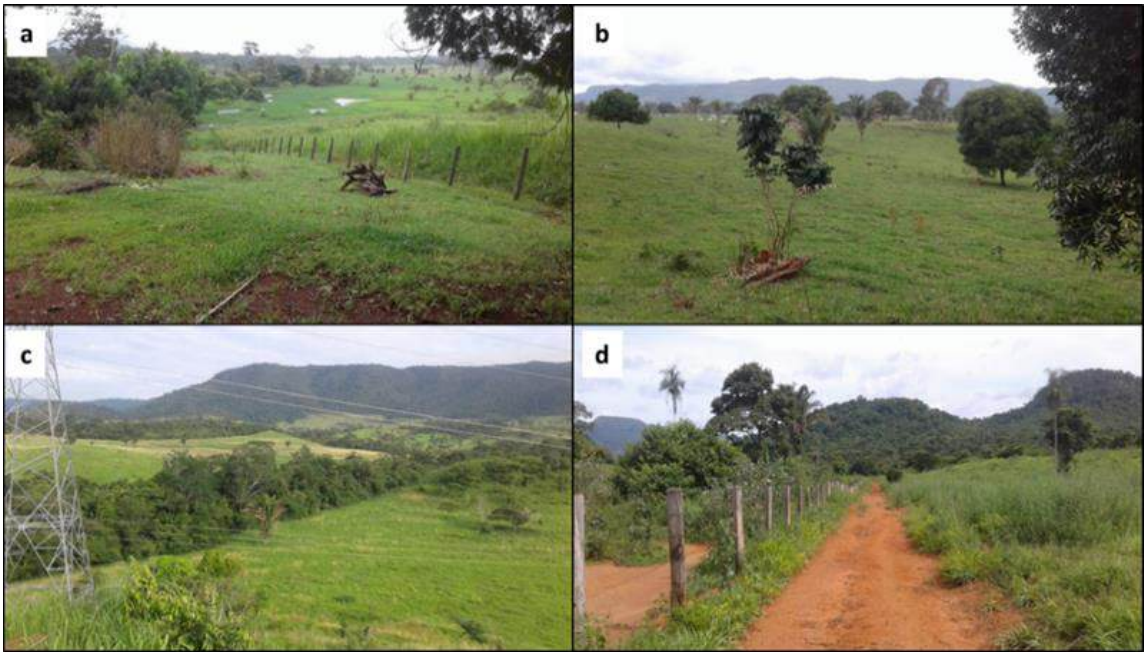


Figure 5-2: Landforms in the Planalto project area and adjacent area.

(a) Gently undulating terrain in the exploration permit 850.536/2012 with wide swampy areas along the Verde River; (b) gently undulating terrain in the exploration permit 850.537/2012 with the higher plateau of the Serra do Rabo in the background; (c) Serra do Rabo Plateau to the north seen from exploration permit 850.537/2012; (d) Half-orange shaped hills of the Planalto granite complex in the south eastern portion of exploration permit 850.351/2007 in contrast to the gentle topography in the foreground.

Source: Planalto Mineração, 2019.

5.2 Climate and Operating Season

The area has an Am-type climate, according to the Köppen classification, defined by tropical monsoon-humid features with periodic excessive rainfall. The average rainfall in the project area is approximately 2,000mm per year (National Institute of Meteorology - INMET), with 90% of the rainfall occurring during the wet season commencing in November and generally finishing in April. July is the driest month, with an average of 18mm of rainfall, while March is the rainiest month with an average of 290mm (Figure 5-3). Geological fieldwork can be undertaken throughout the year, though heavy rainfall can cause some deterioration in the condition of the unpaved roads accessing the project area.

Temperatures are generally high, with the annual average of 26.3°C, being the maximum average around 32.0°C and minimum of 22.7°C. Relative humidity is quite high with oscillations between the wettest and driest seasons, ranging from 90% to 52%, with the real average of 78%.

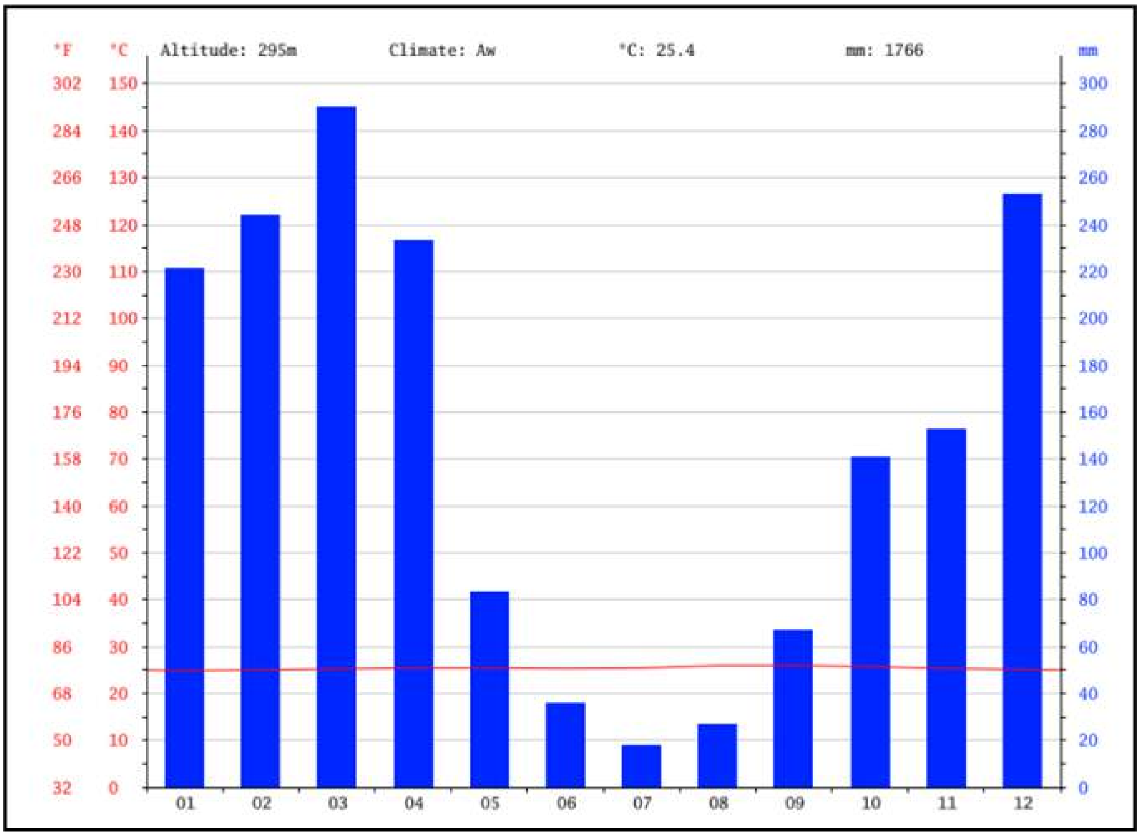


Figure 5-3: Annual rainfall distribution of in the region and yearly variation in temperature.
Source: Planalto Mineração, 2019.

5.3 Local Resources and Infrastructure

The Planalto Copper Project is easily accessible by paved roads from Marabá and Parauapebas, the fourth and sixth largest town in the Pará State, respectively. A Vale controlled railroad serving the S11D iron mine runs approximately 30km to the north of the project and is exclusively used by Vale to transport its iron ore and copper concentrates to the coastal port near Sao Luis, in Maranhao state.

Canaã dos Carajás and Parauapebas are the two main logistical centers for the significant mining activity currently undertaken in the Carajás region. Manufacturing and engineering support services are all available, in addition to a large pool of qualified labor for mining operations. Three high tension power lines cross the northern part of the project area and are accessed from substations on the main Brazilian power grid located about 40km north of the project near Parauapebas and Curionopolis.

The Tocantins River and its tributaries are of vital economic importance to the region, both as a source of fresh water and as a source of hydroelectric power. Downstream from Marabá, the Tucuruí hydroelectric dam expanded its capacity in 2005 to lift output to 8,370MW.

6 HISTORY

6.1 The Carajás Mineral Province

The Archean Carajás Province contains one of the world's largest known concentrations of large tonnage IOCG deposits, two of which are being mined by Vale S.A., the Salobo deposit (789 Mt @ 0.96% Cu and 0.52 g/t Au) and the Sossego deposit (245 Mt @ 1.1% Cu 0.28g/t Au). Two main belts hosting deposits are recognized at the margins of the Carajás Basin. The northern belt, hosting the Salobo deposit, occurs along the WNW-ESE-trending Cinzento shear zone. This belt also hosts other large deposits such as the Igarapé Bahia-Alemão (219 Mt @ 1.4 % Cu, 0.86 g/t Au) and the Alvo GT46 deposits, as well as several other satellite deposits (e.g., Grota Funda, Paulo Afonso, and Gameleira).

The southern copper belt is a W-NW-striking, 60km long shear zone along the southern margin of the Carajás Basin and includes the Sossego mine, the Cristalino and Alvo 118 deposits, as well as several other satellite deposits owned by Vale S.A. (e.g., Visconde, Castanha, Bacaba, Jatobá and Bacuri). The high grade Pedra Branca underground mine (BHP: 5Mt at 2.5% Cu) is located on the margins of this belt. The Planalto deposit is located 8km northwest of the Cristalino deposit and 30km east of the Sossego mine.

These IOCG deposits are located close to or along regional shear zones, in the contact between the metavolcano-sedimentary units of the Carajás rift basin sequence (Itacaiúnas Supergroup-ca. 2.73−2.76 Ga) and the Mesoarchean cratonic basement rocks (ca. 3.0−2.83 Ga). The Carajás deposits normally display an early alteration sodic-calcic of the high-temperature (>500°C), controlled by ductile structures and mylonitic fabrics. This sodic-calcic alteration is characterized by hydrothermal rocks containing variable amounts of albite-scapolite-actinolite alteration. Subsequent brittle deformation is associated with potassic alteration, with K-feldspar and biotite, which is generally overprinted by lower temperature (<300°C) chlorite, carbonate-epidote, or sericite-hematite alteration and Cu-Au mineralization. The Carajás Province also hosts some of the world's richest deposits of iron ore, with Vale S A operating the world class Serra Norte (2.55Bt at 66.7% Fe) and SD11 mines (4.24Bt at 66.7% Fe). The Carajás Province was also the home of the 1979-1986 Serra Pelada gold rush, where over 100,000 pick and shovel miners extracted more than 1.5 Moz of gold according to official documentation.

6.2 Planalto Project - Previous Exploration

The first reported exploration activities in the project area were carried out from 2000 to 2007 by Anglo American Brasil Ltda. ("Anglo American"), a Brazilian Subsidiary of Anglo American plc. Anglo American had, in 1999, entered into an option agreement with Mr. Geraldo Milton Soares, a local landowner who held a number of exploration tenements covering an area much the same size as the actual Planalto Project.

In 2007 Anglo American suspended the exploration work and respecting the contractual terms, delivered to Mr. Geraldo Soares a copy of all exploration data and a report summarizing all of the work activities carried out. Lara was able to acquire copies of these documents from Mr. Geraldo Soares in 2017.

Exploration activities conducted by Anglo American involved geological mapping, geochemical surveys (soil and stream sediment) and a major airborne geophysical electromagnetics (Spectrem), radiometrics (gamma-spectrometry) and magnetics surveys. Local ground surveys included small magnetic and IP surveys. Two exploration diamond drill holes tested the soil geochemical copper target in the area which is now referred to by Lara as the Homestead target..

As part of the Tariana Option, Planalto received digital data sets to part of the Anglo American exploration database and copies of exploration reports presented to the Mines Department for the Soares, as well as, for the Tariana option.

6.3 Historical drilling

Anglo American conducted, in 2003, the two-hole exploration diamond drilling program. A total of 591.42m was drilled with the holes on the same east-west-orientated section of UTM 9295000 N (WGS-84 datum), in the area just north of the main farm dwelling to test the zone of strong copper soil anomaly.

The first drillhole, FD-73 with a total depth of 242.22m final depth, was drilled to the west at a -60 degree angle and made a significant intersection of copper mineralization of 111m @ 0.51% Cu from 53m down hole and part of a wider interval of 188m @ 0.4% Cu. The second hole, FD-74, drilled under the first hole to a final depth of 349.20 m, intercepted lower grade and more patchy copper mineralization with better intersections of 50m @ 0.38% Cu and 8m @ 0.34% Cu (Figure 6.1).

Both drillholes were reported to have intersected a mafic to intermediate metavolcanic rock package with hydrothermal alteration characterized by the presence of quartz, albite, magnetite, carbonates, and epidote. Copper and gold mineralization was reported as being associated with sulphides represented by chalcopyrite and pyrite, disseminated in the host rock or in stockwork vein zones. The bedding or layering of the host rocks to the copper mineralization was interpreted to be sub-vertical as indicated in Figure 6-1 constructed by Anglo American geologists. The mineralized copper intersections for each hole are listed in Table 6-1.

Table 6-1: Significant Drillhole copper intersections at the Homestead Target.

Hole ID	0.4%Cu) From (m)	To (m)	Length (m)	Cu (%)	Remarks
FD73	0.00	17.00	17.00	0.35	Oxide coper mineralization
	43.00	231.00	188.00	0.40	Including 15m @ 0.67% Cu / 14m @ 0.68% Cu / 10m @ 1.18% Cu
FD74	4.00	58.00	54.00	0.30	Oxide copper mineralization
	133.00	183.00	50.00	0.38	Including 21m @ 0.60% Cu
	310.00	334.00	24.00	0.20	Including 8m @ 0.34% Cu

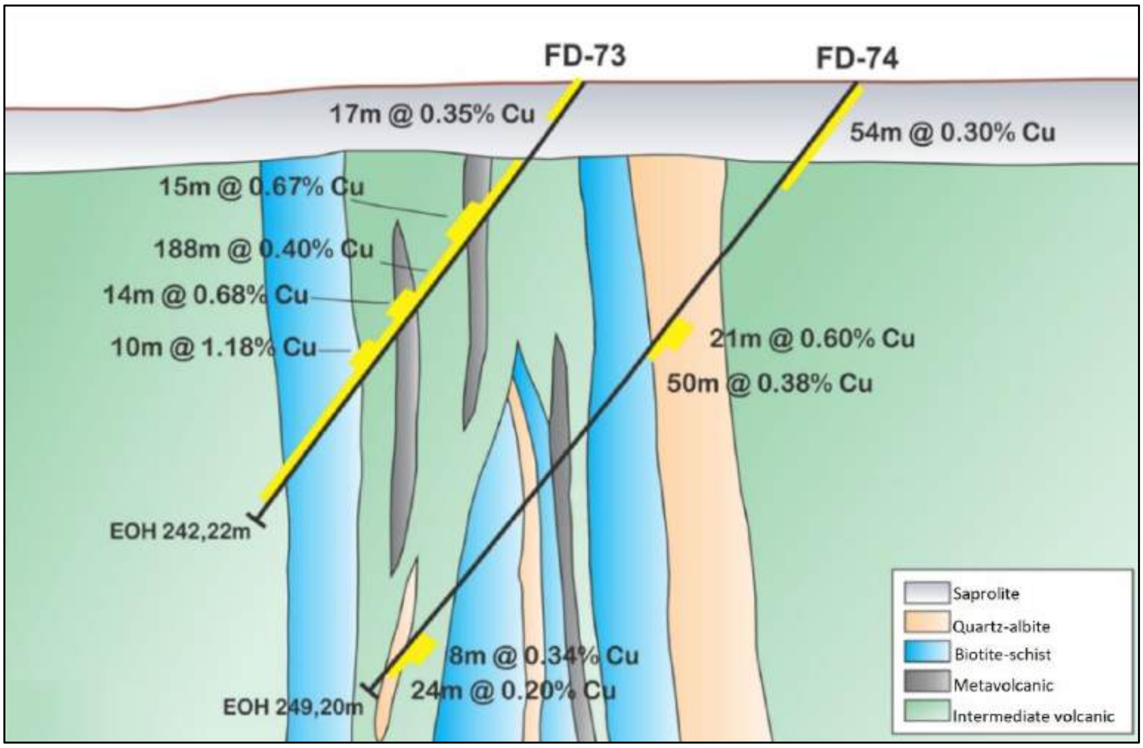


Figure 6-1: FD-73 and FD-74 vertical section constructed by Anglo American.
Source: Anglo American, 2007.

The Anglo American report prepared for Mr Geraldo Soares indicated that the perceived size of the mineralization did not meet the company's objectives, and the licenses were returned to Mr Geraldo Soares and subsequently expired.

A mineral exploration application of 10,000ha, covering essentially the same area held by Mr Geraldo Soares, was made in the name of Mrs. Vera Lucia Lopez Ferraz. Mrs. Lopez, represented by BAIP, offered this mineral rights application to Lara in 2012. Lara entered into an agreement to acquire the mineral rights application, but due to bureaucratic procedures, it was only in 2016 that the ANM approved and published the mineral rights for three separate licenses covering almost all the original 10,000 ha application.

6.4 Historical Mineral Resources and Mineral Reserves Estimates

There were no historical mineral resources or mineral reserves estimates in Planalto Project.

6.5 Historical Production

There was no historical production in Planalto Project.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology of the Carajás Province

The Planalto Copper gold project is located in the Carajás Province, or the Carajás Mineral Province (CMP), as it is often referred to because of major endowment of world-class iron, gold, manganese, copper and nickel deposits. The Carajás Province is in the eastern part of the state of Para (Figure 7-1).

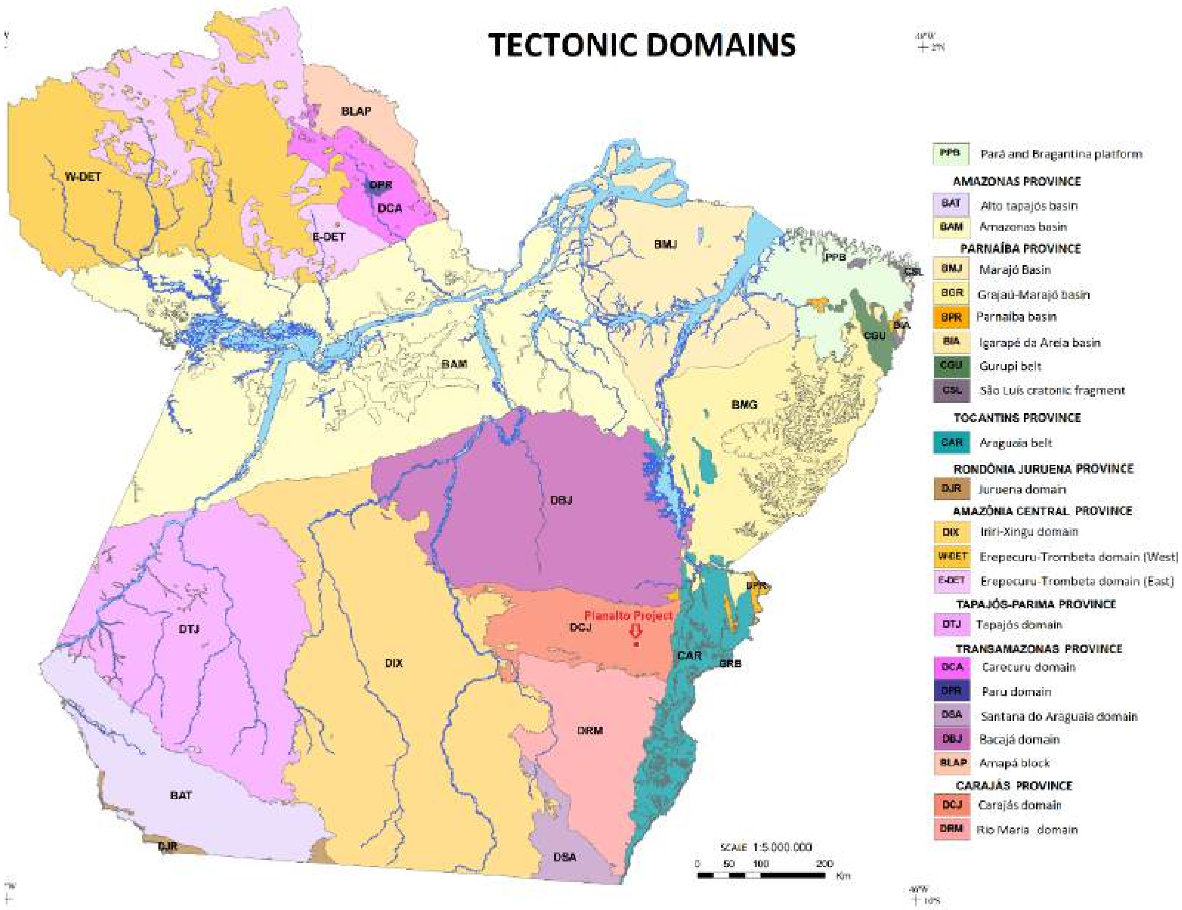


Figure 7-1: Carajás Province and regional geological setting of the Planalto project.
Source: Planalto Mineração, 2023.

The Carajás Province approximately 500km N-S by 400km E-W, is made up of Archean and Lower Proterozoic rocks divided into two main tectonic domains with the Carajás Domain in the north and the Rio Maria Domain in the south. An east-west shear zone with distinct differences in basement geology and magmatism style is recognized between the two and is known as the Transition Subdomain.

The Planalto project is located at the contact of the Transition Sub-domain and the Carajás Domain in the southeast part of the Carajás Basin in the horsetail splay zone at the south end of the Carajás Fault.

Younger Paleoproterozoic gneiss-migmatite-granulite terrains developed during the late Lower Proterozoic Transamazonic orogenic event border the Carajás Province to the north (Bacaja Domain) and to the south (Santana de Araguaia Domain). The western part of the Carajás Province is overlain by Paleoproterozoic felsic-intermediate volcanic sequences and related granites generically assigned to the Uatumã Supergroup in the Iriri-Xingu domain of the Central Amazon Province. To the east the Carajás Province is bounded by the Araguaia Fold-thrust Belt formed during the Neoproterozoic, as result of the convergence and collision of the Amazon Craton and São Francisco Cratons.

7.1.1 Carajás Domain

The Carajás Domain is dominated by Neoarchean metamorphosed volcano-sedimentary sequences of the Itacaiunas Super Group of the Carajás Basin (Figure 7.2). In the immediate project area at the southeast of the Carajás Basin these rocks have been included in the Grão Para Group and comprised by a thick succession of bimodal mafic and felsic volcanics and contain interbedded banded iron formations (jaspilite) formed at ca. 2.75Ga.

The Carajás Formation, which overlies the Grão Para Group, contains more continuous and thicker banded iron formation units interbedded with mafic and acid volcanics dated at 2.74Ga. This is the host unit for the major Carajás iron ore deposits. The basement of the Carajás Domain is the Xingu Complex and consists mainly of gneiss-migmatite-granulite terrains considered older than 3Ga.

Different models have been proposed to explain the evolution of the Archean volcano-sedimentary basin sequences with the most widely accepted being that the Grao Para Group was deposited in an intraplate rift-sag basin whereas others have suggested subduction-related environments.

These volcano-sedimentary sequences are covered by low-grade metamorphic sequences of carbonaceous siltstones and clastic sedimentary rocks of the Lower Proterozoic Águas Claras and Gorotire Formations.

7.1.2 *Rio Maria Domain*

The Rio Maria Domain in the south (Figure 7-2) is a typical Archean granite-greenstone terrain represented by rocks of the Andorinhas Supergroup (2,904 +/-29 Ma). Several individual belts with east-west and northwest-southeast trends are mapped. The sequences of mafic and ultramafic magmas are covered by later metasedimentary clastic units.

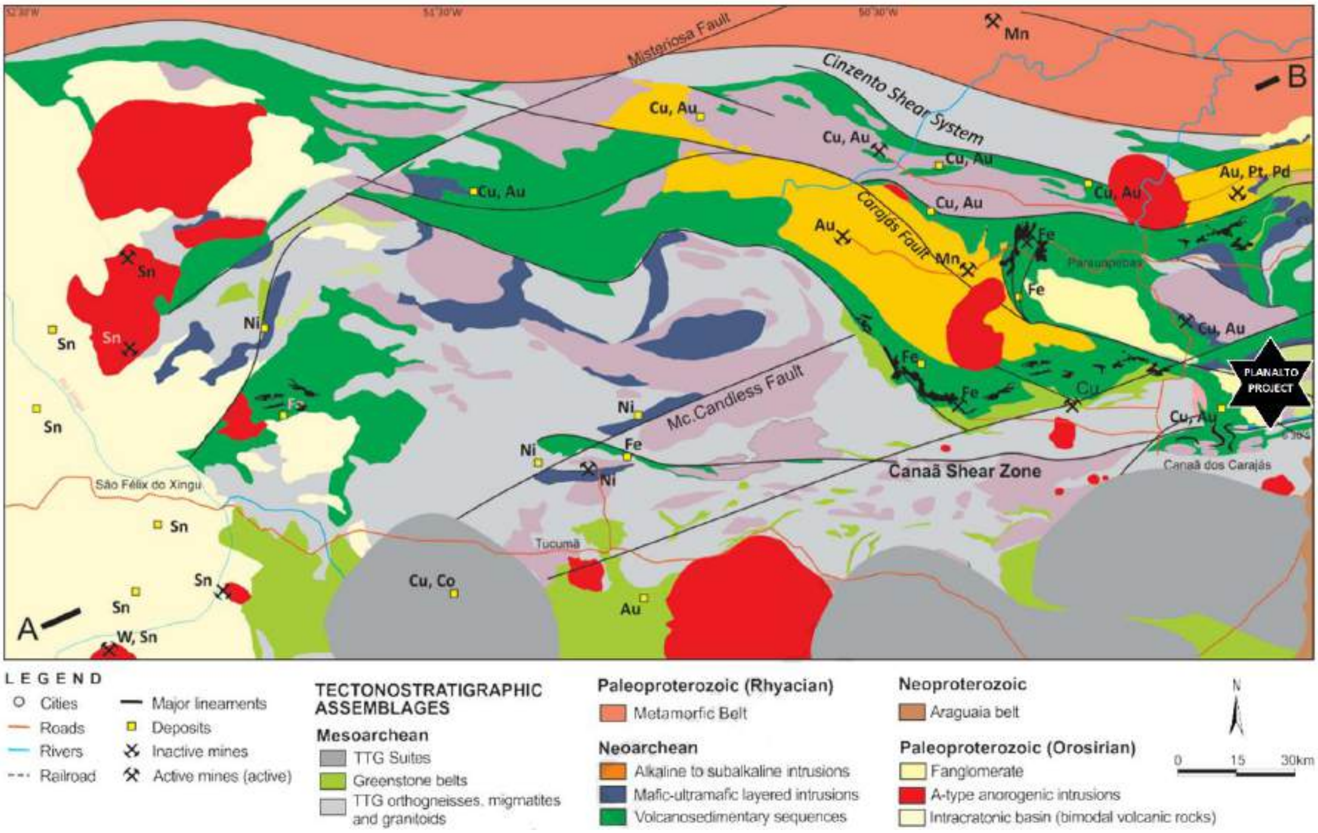


Figure 7-2: Geological units of the Carajás Province.
Source: Planalto Mineração, 2023.

7.1.3 *Transition Sub-Domain*

The Transition Sub-domain is dominated by a high grade metamorphic granitoid-gneiss-granulite terrain intruded by a wide variety of granitoids with expressive differences in magmatism style when compared to the Rio Maria Domain (Figure 7-2). Magmatic suites include tonalites, trondjhemites, granodiorites, calk-alkaline granites and charnockitic rocks with ages generally older than 2.8Ga. Most rocks are strongly foliated and banded.

Supracrustal volcanic-sedimentary rocks, including banded iron formations, of the Siqueirinha Group occur locally. Numerous layered mafic and ultramafic intrusive complexes are identified, some being capped by large lateritic nickel deposits.

Syntectonic alkaline and sub-alkaline granites (2.74-2.76Ga) and Paleoproterozoic within plate A-type alkaline granites (~1.88Ga) occur in both the Carajás Domain and the Transition Subdomain.

7.2 Local Geology Setting in the Planalto Project

Mapping by the Brazilian Geological Survey (CPRM) on the Rio Verde 100k geological map sheet indicates that the Planalto project is located in a complex thrust fault zone at the southern edge of the Carajás Basin where older rocks of the Transition subdomain are partially thrust onto the Carajás basin volcanics. Many of these thrust faults may be reactivated faults originally developed as splay faults emanating from southern end of the regional NW-SE-orientated Carajás fault bisecting the Carajás basin (Figure 7-3).

Fault slices of felsic and mafic metavolcanics of the Parauapebas Formation occur in the eastern part of the project. Tonalites and granodiorites of the Campina Verde Tonalite occur in the central and western parts. The Bom Jesus foliated migmatitic orthogneiss, with lenses of amphibolite, occur in the extreme south and some minor supracrustal rocks of the Siqueirinho Group occur in the far northwest of the Planalto Project. Bodies of the Planalto granite complex (2.74Ga) occur in the southeast and in part separate the Carajás basin sequences from the units of the Transition sub-domain.

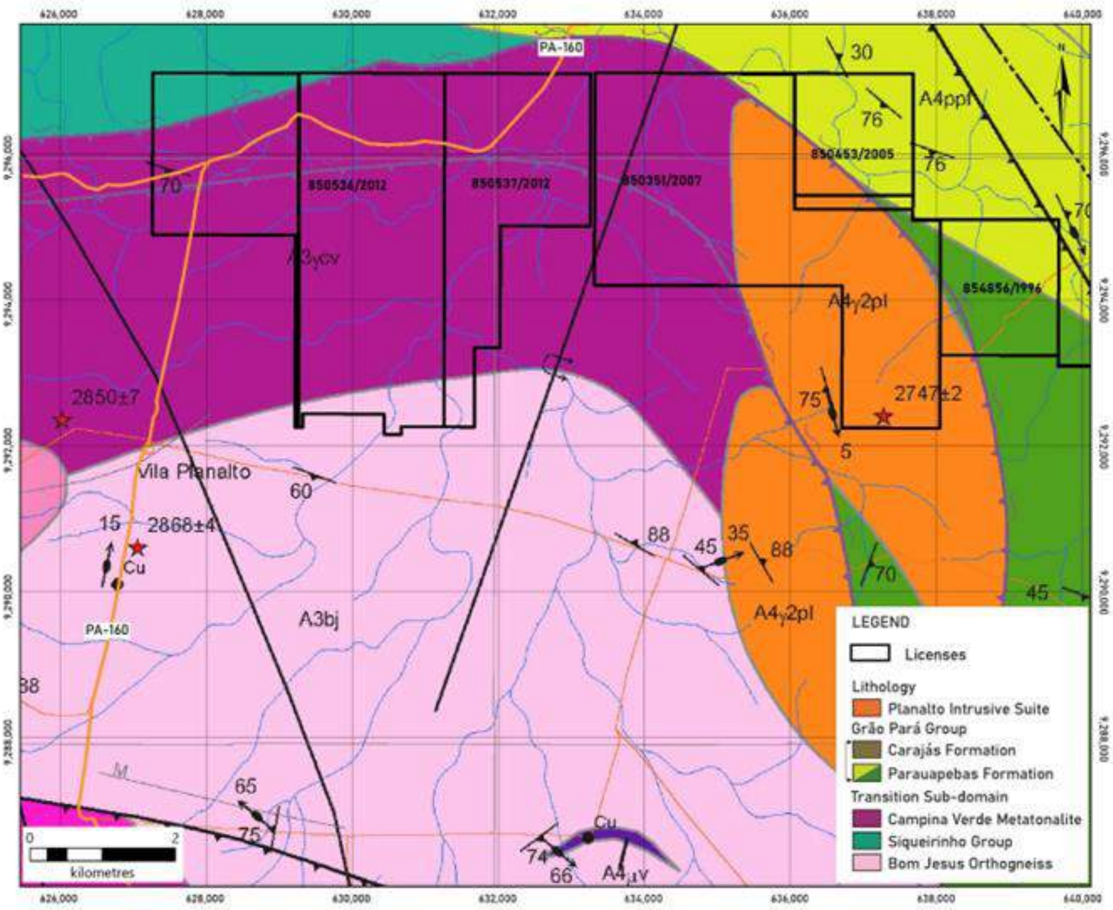


Figure 7-3: Local geological setting of the Planalto project (Modified from Tavares, 2014).

7.3 Local Geology of the Planalto Copper Deposit

Geological mapping in the vicinity of the Planalto Copper Project shows that the mineralization is hosted in a thick pile (>700m) of intensely altered, mafic-intermediate volcanics most probably correlated to the mafic unit of the Parauapebas Formation. The volcanics are generally deeply weathered with only a few outcrops of fresh rocks along the margins of the Cupuzeiro creek and its tributaries. Widespread lateritic hard cap deposits cover much of the mafic volcanics in the elevated areas away from the drainages.

A granite complex, correlated to the Planalto Granite, occurs at the southern end of the mineralized trend. Mafic volcanics wrap around the western and eastern flanks of this granite.

The contact between the granite and mafic volcanics is marked by a zone up to 50m wide of sodic and potassic metasomatic alteration. Both the granite and the mafic volcanics have the original mineralogy partially to totally altered to rocks dominated by quartz, albite, and K-feldspar.

7.3.1 Mafic-Intermediate Andesitic Volcanic Unit

The host volcanics have compositions that vary between andesitic to dacitic. The rocks usually have a greenish grey to dark grey and black coloration and are commonly porphyritic (Figure 7-4). It is difficult to determine if these volcanics were originally flows or tuffaceous rocks. Fragmental textures are present locally (Figure 7-5) suggesting at least some tuffaceous component.

Quartz, K-feldspar and epidote veining is commonly observed in outcrops and chalcopyrite and pyrite are present locally on fractures.

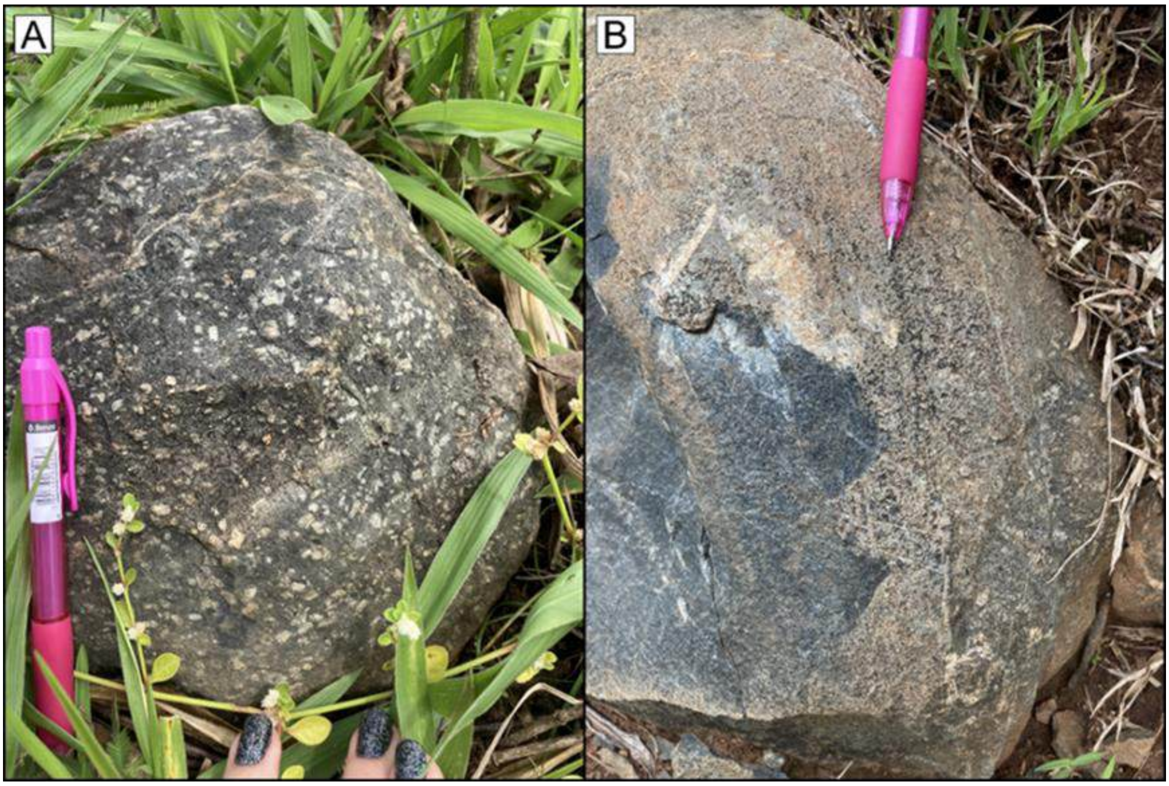


Figure 7-4: : Blocks of mafic to intermediate volcanics; (A) Porphyritic andesite with plagioclase phenocrysts in a fine mafic aphanitic matrix; (B) Dacite with phaneritic texture and crosscut by early system of fine quartz veining.
Source: Planalto Mineração, 2023.

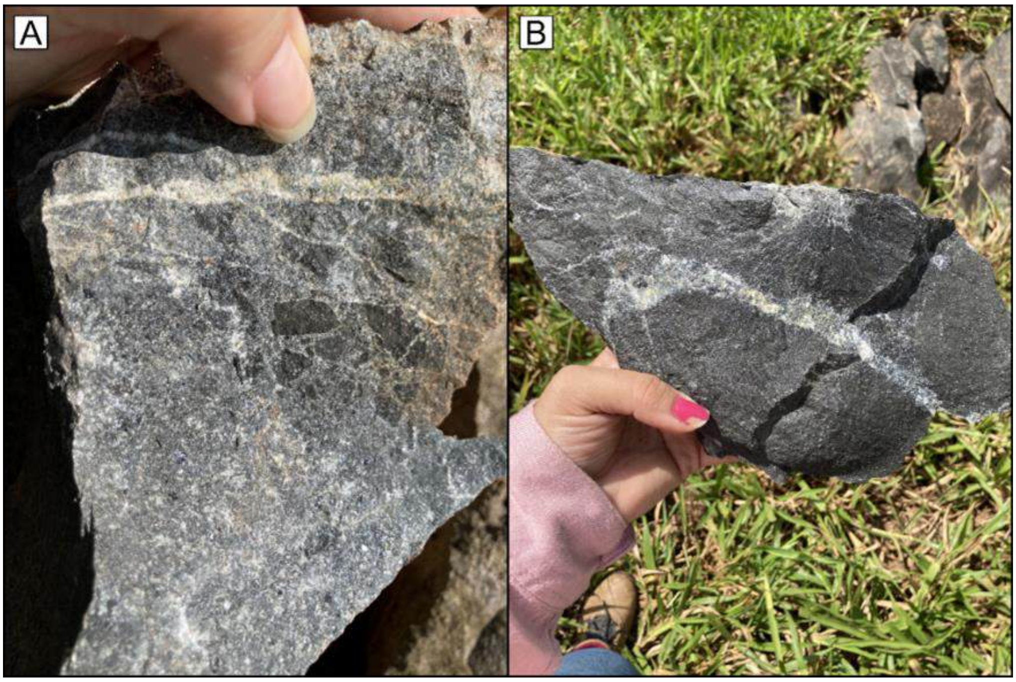


Figure 7-5: Mafic to intermediate to volcanics; (A) Fragmental tuff with clasts of aphanitic mafic rock and crosscut by multiple of quartz and epidote veining; (B) Phaneritic volcanic with quartz-epidote veining.
Source: Planalto Mineração, 2023.

During field mapping and core logging the rocks have been mostly classified as porphyritic plagioclase and pyroxene andesites, fragmental lithic and crystal tuffs and as fine grained aphanitic mafic volcanics. Some coarser grained units in drill core have been logged as gabbro. Locally, strongly mylonitized mafic volcanics are mapped over drill core intervals of a few meters.

Contacts between the different andesite units are gradational with no bedding features observed. Banding, or layering, is recognized in some surface exposures of porphyritic andesite and this has a NW-SE-orientation. Drill core logging suggests that this banding has a weak to moderate southwest dip.

The volcanics have been affected by several episodes of veining, with the earliest a strong stock working of quartz veining. This veining is gently to tightly folded in proximity to mylonite zones. Later veining consists of pinkish K-feldspar, epidote, carbonate and fluorite veins from a few millimeters to several tens of centimeters wide. Magnetite veins, from a few millimeters to a few tens of centimeters wide are common. Disseminated magnetite occurs throughout the volcanics but is most common within the chalcopyrite-rich zones.

The earliest hydrothermal alteration affecting the volcanics was a strong sodic alteration forming albite and locally scapolite. This was followed by strong potassic alteration with the formation of K-feldspar and biotite. A later propylitic alteration resulted in intense chloritization of earlier formed mafic minerals. Chalcopyrite and pyrite are the main sulphide minerals observed and occur as disseminations, fracture fill and as irregular aggregates several centimeters in size.

7.3.2 Planalto Granite Complex

The Planalto granite complex has a core zone of typical coarse grained strongly foliated biotite and hornblende bearing porphyritic K-feldspar-rich granite. The rock has a strong subvertical north-south trending foliation.

The outer part is non-foliated and generally finer grained K-feldspar and albite rich granite facies. Neither of these facies has biotite or hornblende. Large decametric-size rafts of foliated granite are preserved within the alkali-rich granite zone and indicates that this was formed by metasomatic alteration of the older Planalto granite.

7.3.3 Metasomatite alteration zones

Surface mapping along the granite contact and core logging have shown that metasomatite zones, rich in albite-K-feldspar and quartz, have two distinct geological settings. The first is at the contact between the alkali-granite phases and the mafic volcanics and can attain thicknesses of tens of meters where both rock types have had the original mineralogy strongly replaced.

The second setting is within the mafic volcanic unit, where the original mineralogy is replaced by albite, K-feldspar and quartz, in places forming a very coarse pegmatoidal texture. Ghost-like fragments of the mafic volcanics are observed locally. Drill core logging has identified a sub-horizontal, north-trending pipe-like body of metasomatic alteration infiltrated into the volcanics for approximately 350m along the axis of the Homestead deposit at 100m-150m vertical below the current surface. Zones of strong chalcopyrite mineralization are nested above and below this metasomatite body.

Fracture and breccia zones cut the metasomatite near the outer contact and in places these are partly cemented by chalcopyrite. These are interpreted as part of the fluid channel ways that funneled the copper-bearing fluids into the volcanic pile. Rare earth elements are abundant in this metasomatic alteration zone.

7.3.4 Metamorphism

Metamorphic assemblages are difficult to recognize in the fine grained aphanitic mafic hydro-thermalized volcanics lithologies and no obvious metamorphic minerals are recognized in the fresh rock exposures of the porphyritic andesites.

From the little petrographic work that has been carried out, the metamorphic grade of the lithologies in the project area is believed to be of lower greenschist facies. No characteristic amphibole facies metamorphic minerals are identified under the hand lens or in the thin section petrographic work.

The lithologies for the most part, have undergone intense metasomatic and hydrothermal fluid alteration dominated by pervasive biotite, and later chlorite alteration which has over printed all the volcanic lithologies resulting in the original mineralogy being almost completely replaced. Thin section studies do recognize the presence of relicts of primary feldspars and pyroxenes in some of the rock samples studied from outside the main mineralization/hydrothermal alteration trend. Most rock units display evidence for intense fracturing and the formation of a network of stockwork quartz veining.

7.3.5 Chalcopyrite Mineralization

Drilling has demonstrated that copper mineralization is present along a north-south trend of more than 1500m long and this trend is as much as 400m wide from east to west. This trend is interpreted to cut across the regional NW-SE stratigraphic bedding or layering in the volcanics.

Potentially economic grade mineralization, at >0.25% Cu, is interpreted to occur in stacked sub-parallel sheet-like structures that can be modelled fairly continuously over the 1500m north-south strike length along the mineralized zone. Individual zones vary from a few meters to up to several tens of meters thick, and where there is an amalgamation of zones the mineralization can be as much as 100m in thickness. The individual zones can extend for several hundred meters from surface down the dip direction to the west. Potentially economic grade mineralization at the southern end of the trend (Homestead sector) extends down to about 130m vertically below the surface, but towards the north (Cupuzeiro sector) the mineralization occurs in wide zones reaching as much as 400m vertical below the surface.

Chalcopyrite is the only copper-bearing mineral recognized in the deposit. Chalcopyrite occurs as coarse mm-cm-size aggregates and fillings in irregular mm to cm-wide fractures (Figure 7-6). Chalcopyrite also occurs as films in hairline fractures and as fillings in fractures in K-feldspar and epidote, quartz, calcite and fluorite veins. Chalcopyrite also occurs as fine dissemination in strongly chloritized volcanics. Pyrite is rarely seen in the drill core in the Homestead sector. In the Cupuzeiro zone, pyrite can constitute up to 5% of the rock and is very abundant in the drill core intervals with more than 1% Cu.

Figure 7-6: Example of drill core with coarse chalcopyrite veining in the volcanics.
Source: Planalto Mineração, 2023.

8 DEPOSIT TYPE

8.1 Introduction

The Planalto deposit can be classified as a volcanic hosted iron-oxide copper gold (IOCG) deposit like many other deposits in the Carajás Province and elsewhere in the world. The main features of this type of mineralization were defined in the late 1980s and early 1990s based on studies of Proterozoic deposits such as the Olympic Dam (Australia), Kiruna (Sweden) and Missouri (United States of America) and are:

- Deposits are formed by magmatic hydrothermal processes and contain copper and gold as the main economic metals in association with abundant iron oxides (magnetite or hematite) in host rocks from the Late Archean to Meso-Cenozoic epochs.
- Associated elements are uranium, rare earths, cobalt, nickel, bismuth, molybdenum and tin.
- Mineralization styles range from sheeted veins, stockwork veins and breccias,
- Mineralization occurs along high angle fault and fault intersection zones associated with extensional tectonic environments.
- Mineralization commonly shows close temporal relationship with A-type granites with alkaline to subalkaline affinity.
- Mineralization is preceded by early regional-scale sodic or sodic-calcic alteration (albitization and scapolitization) with temporally associated disseminated hematite and/or disseminated and veinlet magnetite. This early alteration can be along structural shear zones (eg. Carajás) or as large irregular zones (eg. Gawler craton)
- Sulphide mineralization is associated with late calcic and/or potassic alteration.
- Main copper mineral is chalcopyrite, but some deposits are rich in chalcocite and bornite.
- Most deposits were formed in non-orogenic extensional settings in intracontinental rift basins or in collisional continental margin settings associated with orogenic extensional basins (back arc basin or collision basin) which provides the mechanism and space for the formation of regional magma fluid differentiation, migration and mixing.

8.2 The Planalto Deposit

The Planalto copper gold deposit has many of the characteristics listed above, and in common with other IOCG deposits in the Carajás region including:

- Host rocks are metavolcanics developed in Archean cratonic continental rift basin.
- Mineralization is in a complex fault system adjacent to the major basin-scale Carajás fault.
- Mineralization is associated with early sodic metasomatic/hydrothermal alteration typified by albite and scapolite formation and followed by potassic alteration (K-Feldspar and biotite)
- An Alkaline granite complex is located immediately adjacent to the mineralization and has similar sodic and potassic alteration.
- Copper-bearing mineral is chalcopyrite which contains a minor gold content.
- Chalcopyrite shows a strong association with magnetite.
- Chalcopyrite mineralization occurs both disseminated and in a stockwork pattern of veins and fine fractures.
- Mineralization has some local concentrations of rare earth elements (hosted in allanite) and patchy molybdenite.

However, some features of the Planalto deposit differ from the typical deposits in the Carajás, including:

- Deformation is mostly associated with shallow level brittle fracture deformation, with little or no ductile deformation, except for a few local bands of mylonite.
- Mineralization is associated with a set of stacked flat to gently west dipping lens-shaped structures.
- Absence of major breccia formation commonly described in many of the Carajás deposits.
- Overall copper grades at approximately 0.5% Cu are lower than reported for most other Carajás deposits, which range between 0.7% and 2.0% Cu.
- Gold concentrations in the chalcopyrite are significantly lower at an average content of 50ppb Au, compared to 300-500ppb Au in the majority of the Carajás deposits.
- The presence of tourmaline and topaz could indicate granite fluids may have played some role in alteration and/or mineralization phases.
- Ubiquitous association of chalcopyrite mineralization with the late propylitic alteration

causing the widespread chloritization of the host volcanics.

- Mineralization has a close spatial relationship above and below, at least in the Homestead deposit, with a sub-horizontal pipe-like metasomatic rock, dominated by albite-K-feldspar-quartz, which causes complete substitution of the volcanic rock.

9 EXPLORATION

Investigatory reconnaissance visits to the Planalto Project area were made by Lara in late 2012 to assess the geological setting and collect some rock and soil samples that confirmed the presence of anomalous copper occurrences on the property. Based on the positive indications for mineralization of the IOCG type, the property was acquired in 2013 by Lara's Brazilian subsidiary Lara do Brasil Mineração Ltda., but exploration activities were initiated only in 2016. Between 2016 and early 2019 exploration activities conducted by Lara included regional and detailed soil surveys and regional geological mapping. A saprolite channel sampling program and a five-hole diamond drill program was conducted on the Homestead target in 2017 and 2018.

In mid 2017 Avanco Resources Ltd. signed a Memorandum of Understanding to take an option on the project and conducted Fixed Loop Transient Electromagnetic surveys over the Homestead and Divisa targets. Avanco reported that no EM anomalies that could be attributed to possible occurrences of massive sulphides were detected and did not finalize the option agreement.

Planalto Mineração Ltda. (PML) was created in early 2019 to control the mineral licenses under the joint venture agreement between Lara and Capstone Mining Corp., now Capstone Copper Corp. (Capstone). The joint venture was operated by Lara until early 2023 and exploration activities during this period included, geological mapping, additional soil surveys, Induced Polarization surveys and several diamond drill programs, including the program that discovered the Cupuzeiro deposit on the Tariana Option.

Capstone assumed operatorship of Planalto Mineração Ltda. in early 2023 and conducted a further 9,000m of diamond drilling, before withdrawing from the option agreement and returning the project 100% to Lara at the end of 2023. The first drilling in the narrow corridor of the Zaspir option that separates the BAIP and Tariana options, was conducted by Capstone in 2023 and has shown that the Homestead and Cupuzeiro deposits are part of the same mineralized system.

9.1 Soil Sampling

9.1.1 Historical Soil Sampling

Anglo American conducted in the early 2000's a systematic soil sample survey across the entire northern part of what is now the Planalto Project and delineated four separate copper anomalies with soil copper values at >350ppm Cu. These are now referred to as the Homestead, Divisa, Highway-E and Highway-W anomalies (Figure 9-1). Soil gold results were less impressive with only some gold anomalism in the north part of the Divisa copper anomaly. The soil sampling digital data base made available to Lara did not include any of the sampling data for the Homestead anomaly.

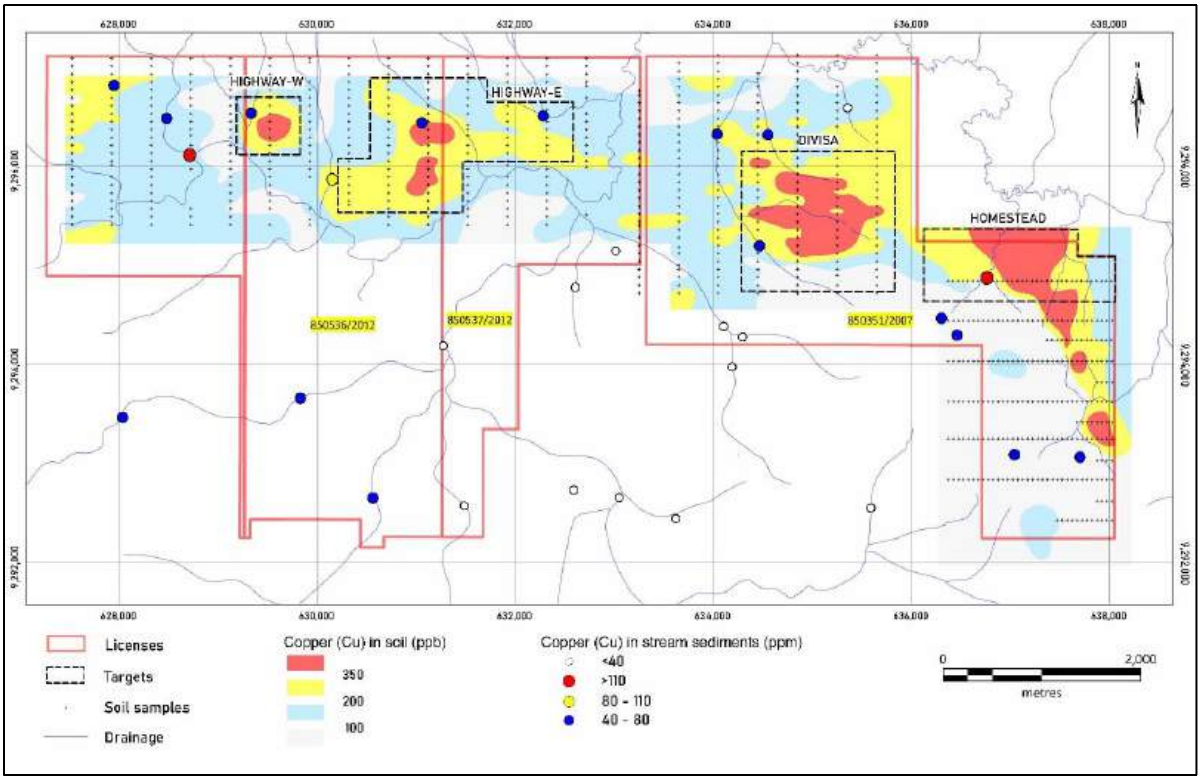


Figure 9-1: Anglo American Soil copper survey showing location of Homestead, Divisa, Highway-East and Highway -West soil copper anomalies.
Source: Planalto Mineração, 2019.

9.1.2 Lara Soil Sampling

Lara conducted systematic -80 mesh (80 openings per inch, opening size-180 µm) B-horizon, soil sampling survey across the Homestead zone and in the Silica Cap target along the edge of the granite complex to the southeast from Homestead. Strong copper soil anomalism was located with several zones of >1,000ppm Cu outlined in the Homestead target.

Lara also conducted regional soil sampling on 1km-spaced lines covering the central and western parts of the project. The Sodre copper target, located south of the Highway East target, was identified during this soil sampling program (Figure 9-2). Follow-up grid sampling at Sodre outlined anomalous copper zone more than 150m long and up to 60m wide coincident with a semi-massive magnetite body that was subsequently drill tested.

Lara also conducted in-fill soil sampling on the Divisa, Highway-E and Highway-W anomalies to confirm the historic sampling. A discrete north-south orientated anomaly, 200m long by 50m wide, with >500ppm Cu was identified at Highway-W and subsequently drill tested.

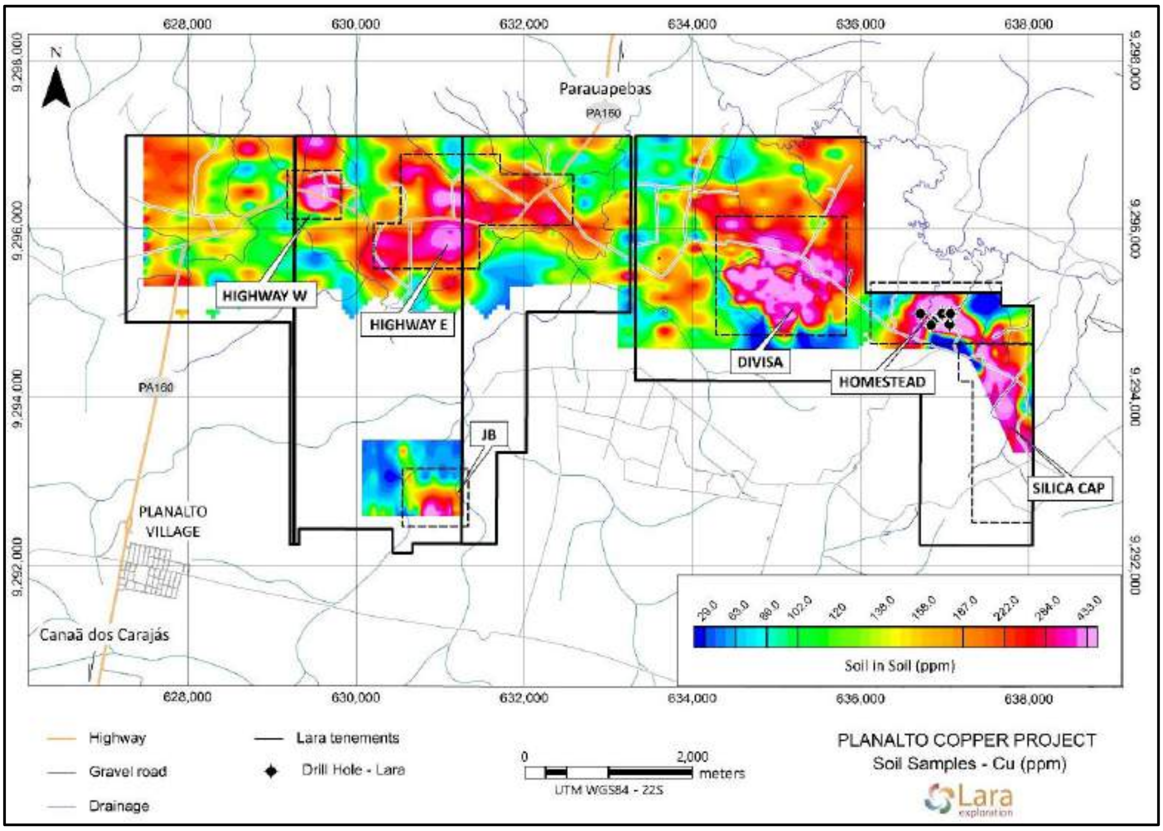


Figure 9-2: Combined map of historic and Lara regional and detailed soil copper sampling on the Planalto Project in early 2019.
Source: Planalto Mineração, 2019.

9.1.3 Planalto Mineração Ltda. soil sampling

9.1.3.1 Planalto Project

Systematic soil sampling was conducted over an area of 700m by 700m covering a discrete magnetic anomaly located 400m southwest of the Homestead target. This area is mostly underlain by metasomatic albite- and K-Feldspar-rich granite. No anomalous copper was recorded in any of the soils.

9.1.3.2 Tariana Option soil survey

Historical soil sampling by Anglo American and infill sampling by Planalto has defined a significant soil copper anomaly in the southern part of the Tariana Option (Figure 9-3) This is now known as the Cupuzeiro target and is located 400m north from, and along the same general trend of the Homestead copper mineralization.

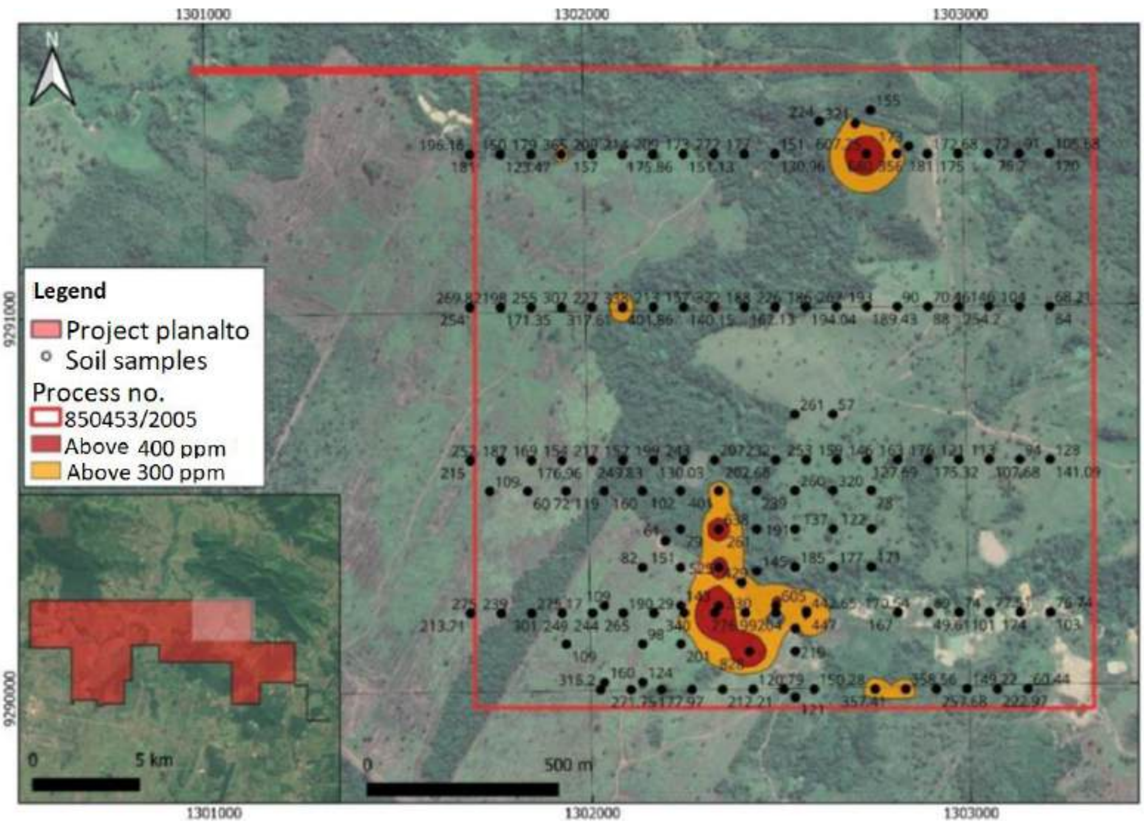


Figure 9-3: Tariana Option soil sampling-showing anomalous copper anomalies
Source: Planalto Mineração, 2023.

9.1.3.3 Zaspir Option soil survey

Soil sampling on the Zaspir option was conducted in the corridor at the south of the Tariana Option and across the larger area located to the southeast and east from the Silica Cap target. Some low level, discrete, spotty copper anomalies (>200ppm Cu) were identified south of the Cupuzeiro target and to the east of Silica Cap (Figure 9-4).

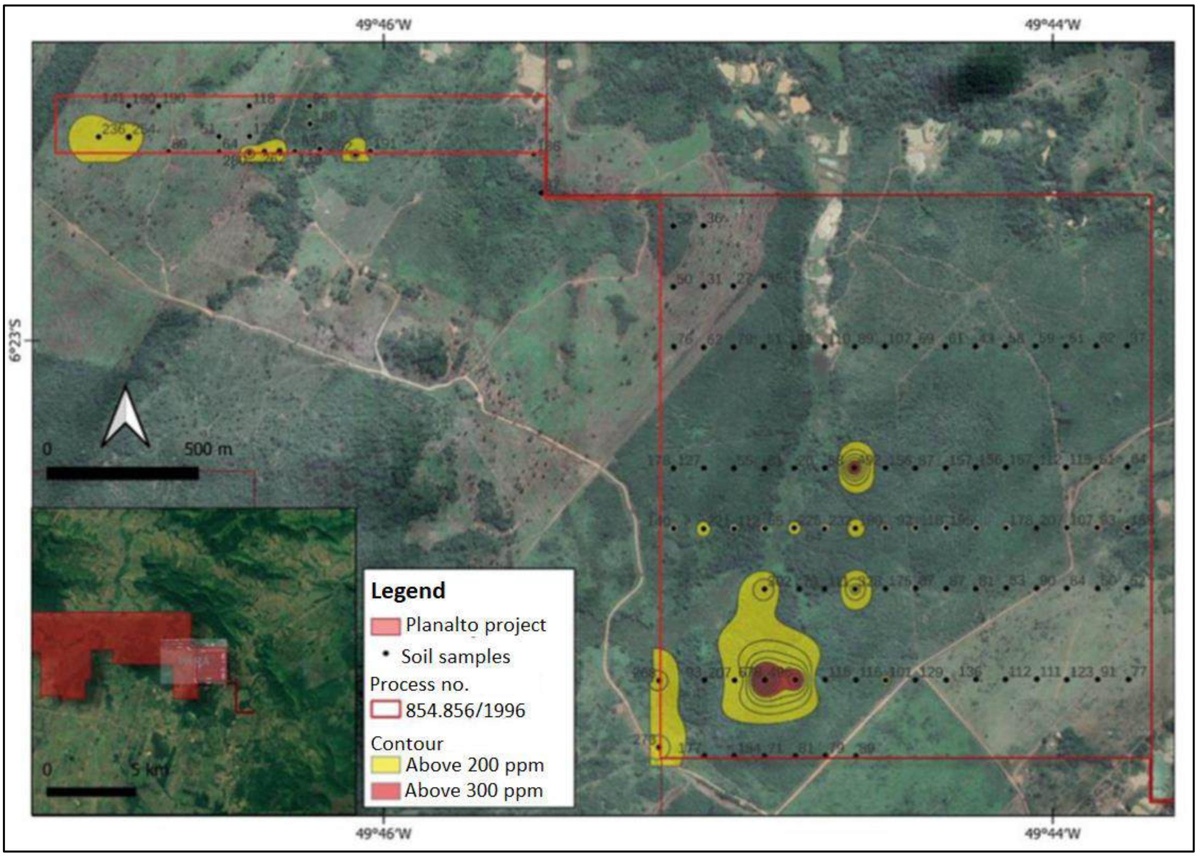


Figure 9-4: Zaspir Option soil sampling- copper anomalous zones
Source: Planalto Mineração, 2023.

9.2 Topographic Surveys

A Lidar topographic survey was carried out in February and May 2023 over an area of 520ha using a commercial drone surveying equipment. This survey covered the main mineralization zone and potential pit area and other areas adjacent to the mineralized zone. The survey has generated a digital topographic map with 1m contour intervals. Ground surveying was used for control of accuracy, positioning and georeferencing.

9.3 Geological Mapping

9.3.1 Homestead-Cupuzeiro Trend

Geological mapping, conducted between 2016 and 2023, shows the Homestead-Cupuzeiro-Silica Cap mineralized trend is dominated by mafic to intermediate volcanics that wrap around the northern margin of the Planalto granite complex (Figure 9-5). The volcanics are generally deeply weathered from 5 to30 m vertical below the surface, with only small exposures of fresh rock along the margins of the Cupuzeiro creek and its small tributaries. The soil development on the volcanics is generally very thin (<1m). Mafic volcanic saprolite, preserving the original rock textures, is exposed at surface in many of the road cuts.

The Planalto granite complex contains a core zone of foliated, coarse-grained to porphyritic alkaline granite with abundant biotite and hornblende. A wide metasomatic aureole surrounds this core zone and is dominated by pinkish, fine to medium grained, non-foliated K-Feldspar-rich alkaline granite. Patches of whitish albite-rich granite are common in the northern part of the complex.

The contact zone between the metasomatic granite and the volcanics is marked by a zone of a few tens of meters wide of intense metasomatic alteration forming a rock dominated by an albite, K-Feldspar and quartz that replaces the original mineralogy in both the granite and the volcanics. The volcanics are covered by a widespread lateritic duricrust to the west and east of the mineralized trend. Alluvial deposits occur along the margins of the Cupuzeiro creek.

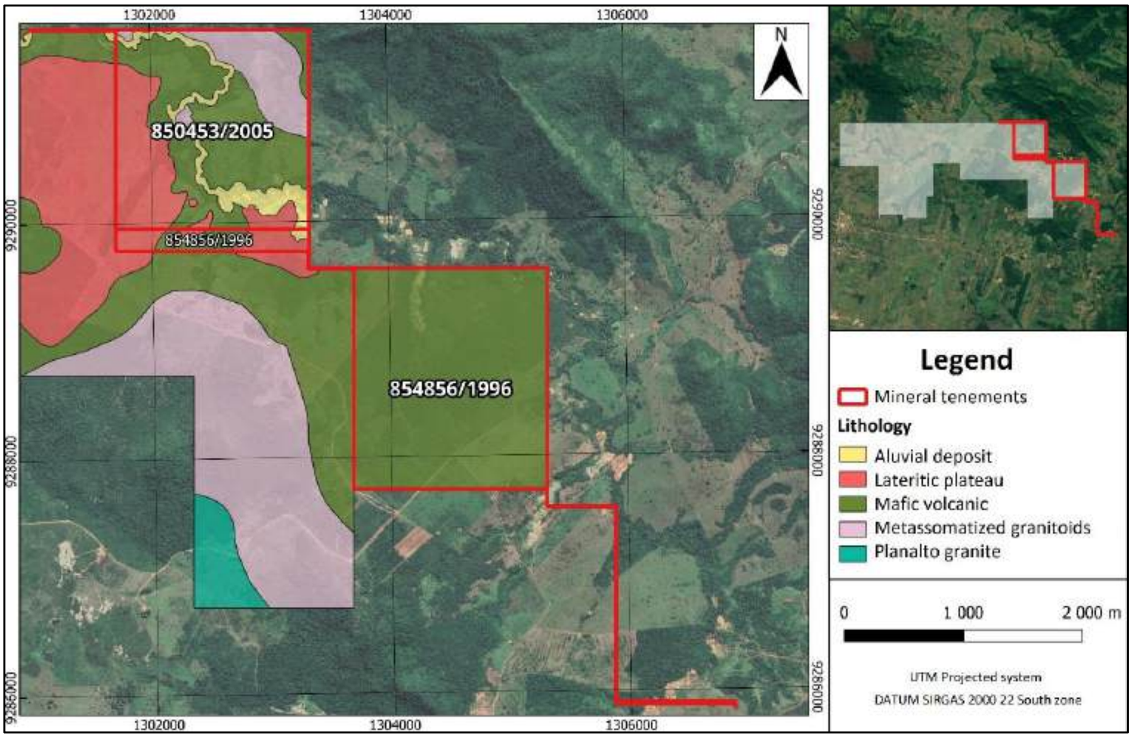


Figure 9-5: Geological mapping on the Homestead-Cupuzeiro copper trend.
Source: Planalto Mineração, 2023.

9.3.2 Sodre Copper target

Geologic mapping in the Sodre copper target identified a 200m long by 2m-10m wide, NNW-orientated trend of small outcrops and float blocks of massive magnetite. Subsequent drilling has confirmed that the magnetite fills a fault structure in a massive granodiorite host.

9.3.3 Highway-West Copper target.

Granodiorite outcrops occur close to the soil copper anomaly zone at the Highway-W target. The granodiorite is in contact with banded iron formations pf the Siqueirinha Group. Subsequent drilling indicated that hydrothermal alteration zones in a granodioritic body carry minor chalcopyrite mineralization.

9.4 Geophysics

9.4.1 Historical Geophysics

Airborne surveys were conducted by Anglo American in the year 2000 with magnetics, radiometrics and electromagnetics being flown by their own inhouse aircraft-mounted system brought to Brazil. The EM was carried out using their own SPECTREM system which was the most advanced EM survey equipment in use at the time. This survey covered most of what is now the Planalto project. Flight lines in the survey were flown in east to west orientation. Some reprocessing of the data and interpretation has been done by Planalto Mineração.

9.4.1.1 Historic airborne magnetics survey data

The Analytical Signal map derived from the magnetics data is shown in Figure 9.6. Several interesting features can be observed in this image, notably a zone of very high magnetism occurs along the northern edge of the project area. This is caused by the presence of shallow banded iron formation outcropping on the high ridges one the southern margin of the Carajás basin.

Two distinct linear, NNW-orientated magnetic anomalies are present in the center and south of the western part of the Planalto project. The central zone is coincident with the Sodre soil copper target and the other in the south passes through the JB copper anomaly. K-Feldspar-epidote-magnetite alteration has been identified in mafic gneisses on the JB target.

In the eastern part of the project two distinct oval-shaped magnetic anomalies underly the Homestead and Cupuzeiro copper targets (Figure 9-7).

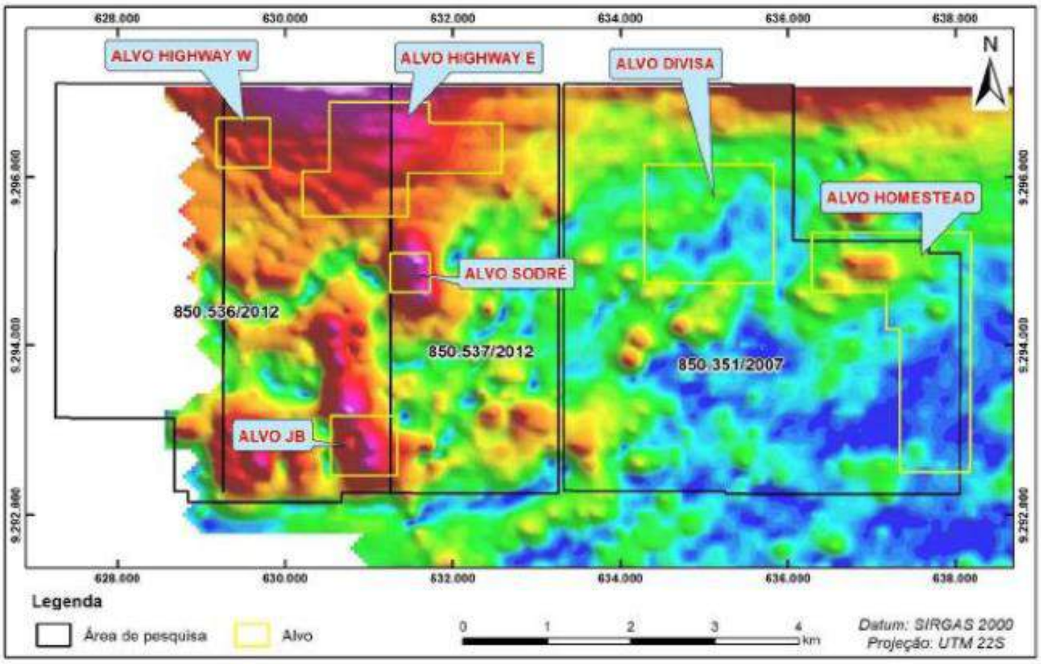


Figure 9-6: Analytical signal map derived from Anglo Airborne magnetics survey data.
Source: Planalto Mineração, 2023.

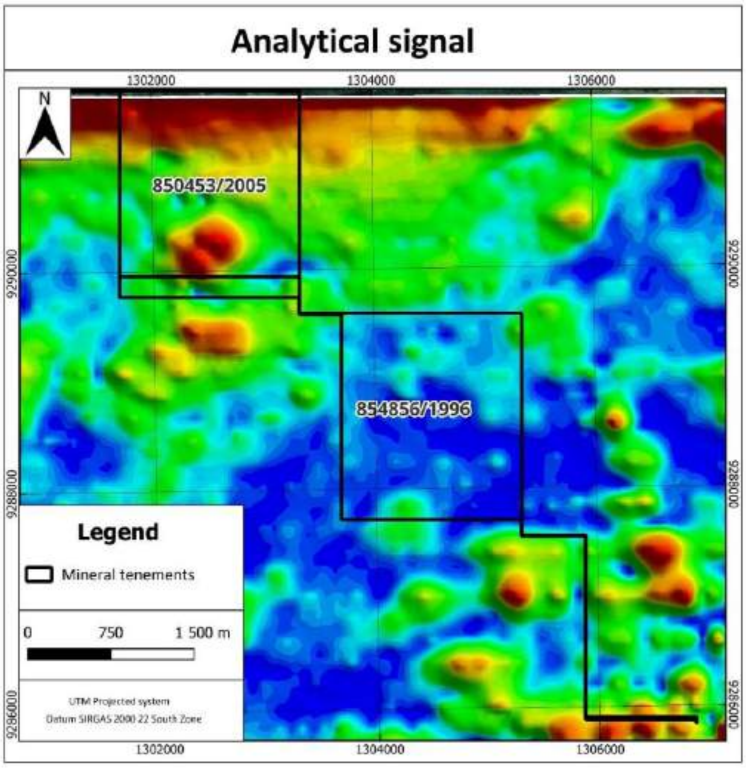


Figure 9-7: Analytical signal map derived from Anglo Airborne magnetics survey data
Source: Planalto Mineração, 2023.

9.4.1.2 Historic airborne radiometric survey data

The Total Count radiometric image in Figure 9-8 shows the highest radiation levels are present in the southwest of the project co-incident with the Planalto granite complex. The granite is known to have a high content of K-feldspar in all rock types of the complex.

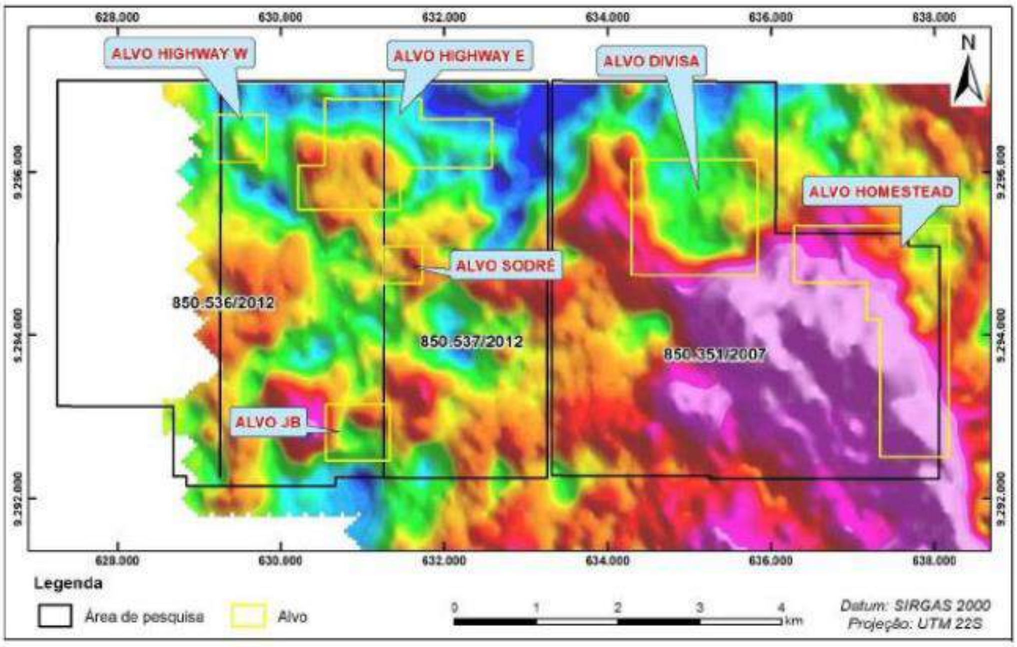


Figure 9-8: Total count radiometric data for the Planalto Project.
Source: Planalto Mineração, 2023.

9.4.1.3 Historic airborne Electromagnetics survey data

Figure 9-9 and Figure 9-10 show the response of the of the Tau-X vertical and Tau-Z horizontal components of apparent conductivity derived from the Anglo EM survey data. A broad anomalous EM zone occurs in the Divisa soil copper anomaly area and down the east side of the Homestead target. Both images show a low EM response that forms a wide, north-south orientated break in the east of the area. This break coincides with the Planalto granite complex and the Homestead-Cupuzeiro mineralized trend and probably represents a major fault-shear zone that controlled the intrusion of the granite complex, as well as the introduction of the copper mineralizing fluids. A notable feature in the image of Figure 9-10 is the EM response for the zone of high-grade mineralization along the granite contact in the Silica Cap copper target.

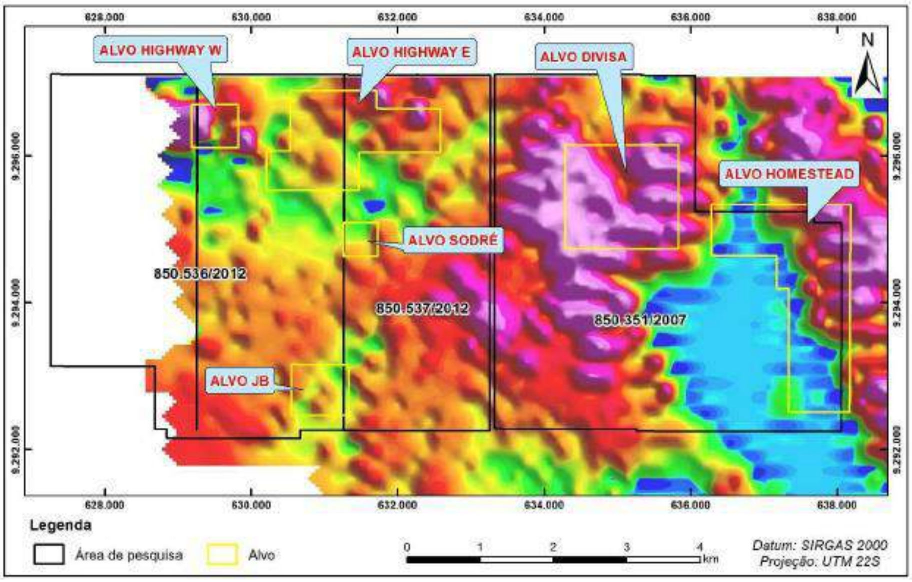


Figure 9-9: Tau-X vertical component of the EM data for the Planalto Project.
Source: Planalto Mineração, 2023.

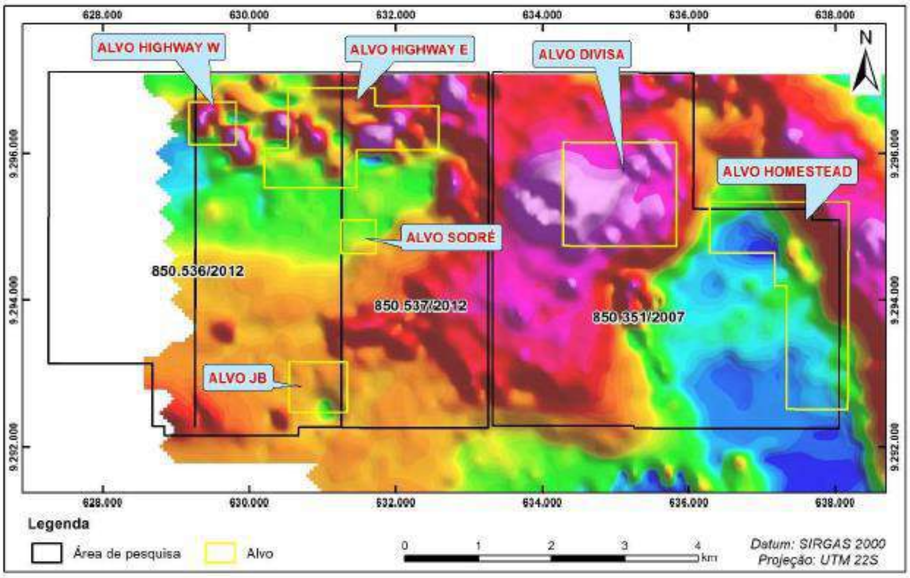


Figure 9-10: Tau-Z horizontal component of the EM data for the Planalto Project
Source: Planalto Mineração, 2023.

9.4.2 Ground EM surveys by Avanco Resources

9.4.2.1 Avanco Fixed Lop Transient EM (FLTEM) Survey

Figure 9-11 shows the location and orientation of the FLTEM surveys at the Homestead copper target (Loop 01) and the Divisa copper target (Loop 02). Both grids were made using an EMIT SMARTem receiver, recording 3 components of the EM field simultaneously. These 3 components of the EM field were measured down-line (x), across line (y), and vertical (z). The data was recorded using a transmitting frequency of 2 Hz. In total, 22.5 kilometers were surveyed, recording data on 21 lines from 2 transmitting loops. The survey lines were evenly spaced, 100 meters apart, and measurements points were recorded down these lines at an even station spacing of 50 meters.

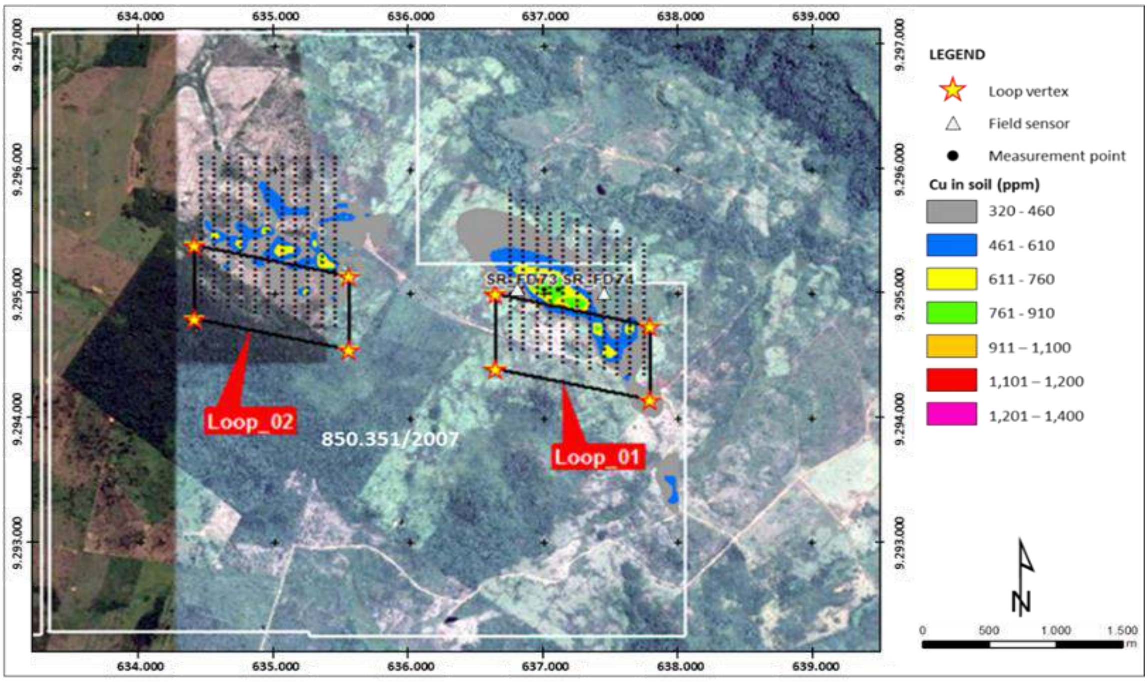


Figure 9-11: Location of the FLTEM survey loops at the Homestead (Loop_01) and Divisa (Loop_02) targets.
Source: Planalto Mineração, 2018.

Avanco did not report any significant EM anomalies from either survey that could be related to massive sulphide mineralization. Lara contracted a consultant in Canada, the Ontario-based B-Field Geophysics Ltd. to review and make a reinterpretation. Despite several flaws being noted in the survey set-up and design, several conducting plates were interpreted for both surveys. The C zone of Loop 01 in Figure 9-12 was interpreted to contain two or three fuzzy anomalies that could be attributed to massive sulphide mineralization.

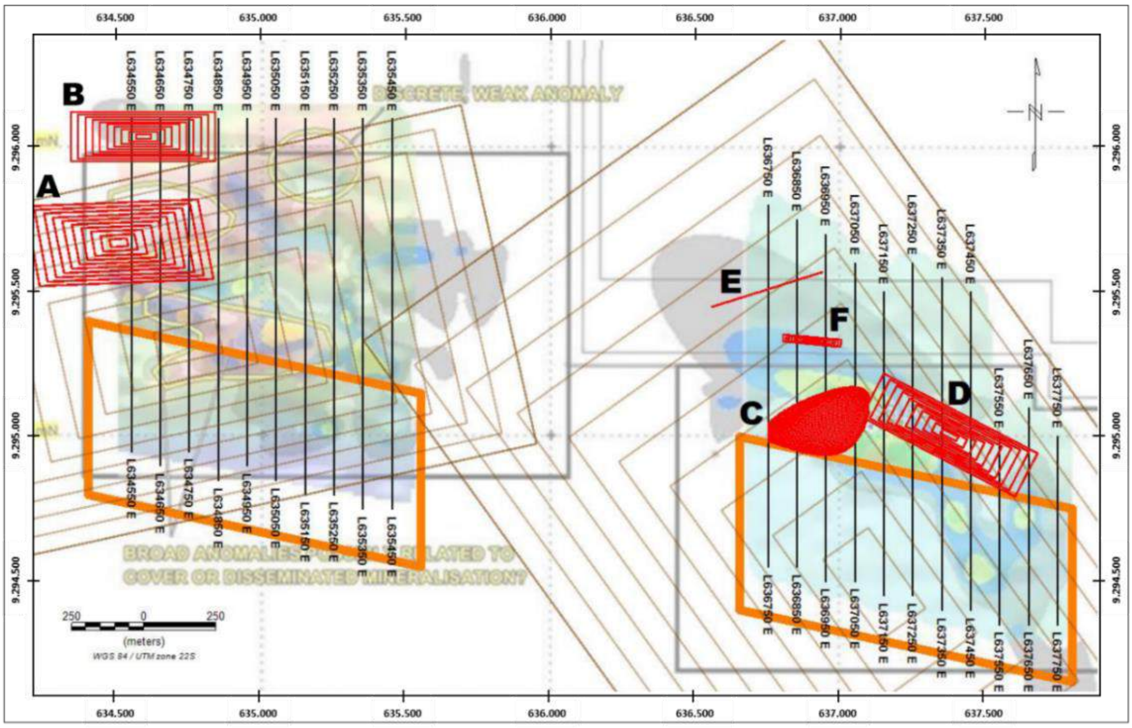


Figure 9-12: Plan view of plates representing possible massive sulphide zones from the interpretation of the Planalto fixed loop EM survey (B-Field report).
Source: Planalto Mineração, 2019.

9.4.3 Planalto Mineração Ltda IP Surveys

Approximately 40 kilometers of IP survey lines were completed covering the Cupuzeiro - Homestead, Silica Cap and part of the Divisa copper target. The Homestead–Cupuzeiro trend was covered by 200-m spaced, east-west orientated, lines over a strike of 2,200m between 9294600 N and 9296800 N and three survey lines tested the IP response across the Silica Cap target and the eastern contact of the Planalto granite.

Figure 9-13 shows a plan view of the IP chargeability projected to the surface. A very broad zone of high chargeability occurs over the granite and volcanics in the Homestead deposit area in the south and no direct relationship between IP response and copper mineralization is observed. To the north in the Cupuzeiro trend the chargeability response is more discrete probably related to the increase in pyrite content in the Cupuzeiro trend. The IP response tapers off to the north of line 9296000 N. No distinct IP response occurs on the Silica Cap trend.

Figure 9-14 is an example of the survey data and the inversion profiles for resistivity and I P chargeability for the line 9295600 N across the Cupuzeiro mineralization. The profiles have been modelled to a nominal 400m vertical depth. Inversion profiles tend to indicate a moderate west dip on the sulphide bearing structures.

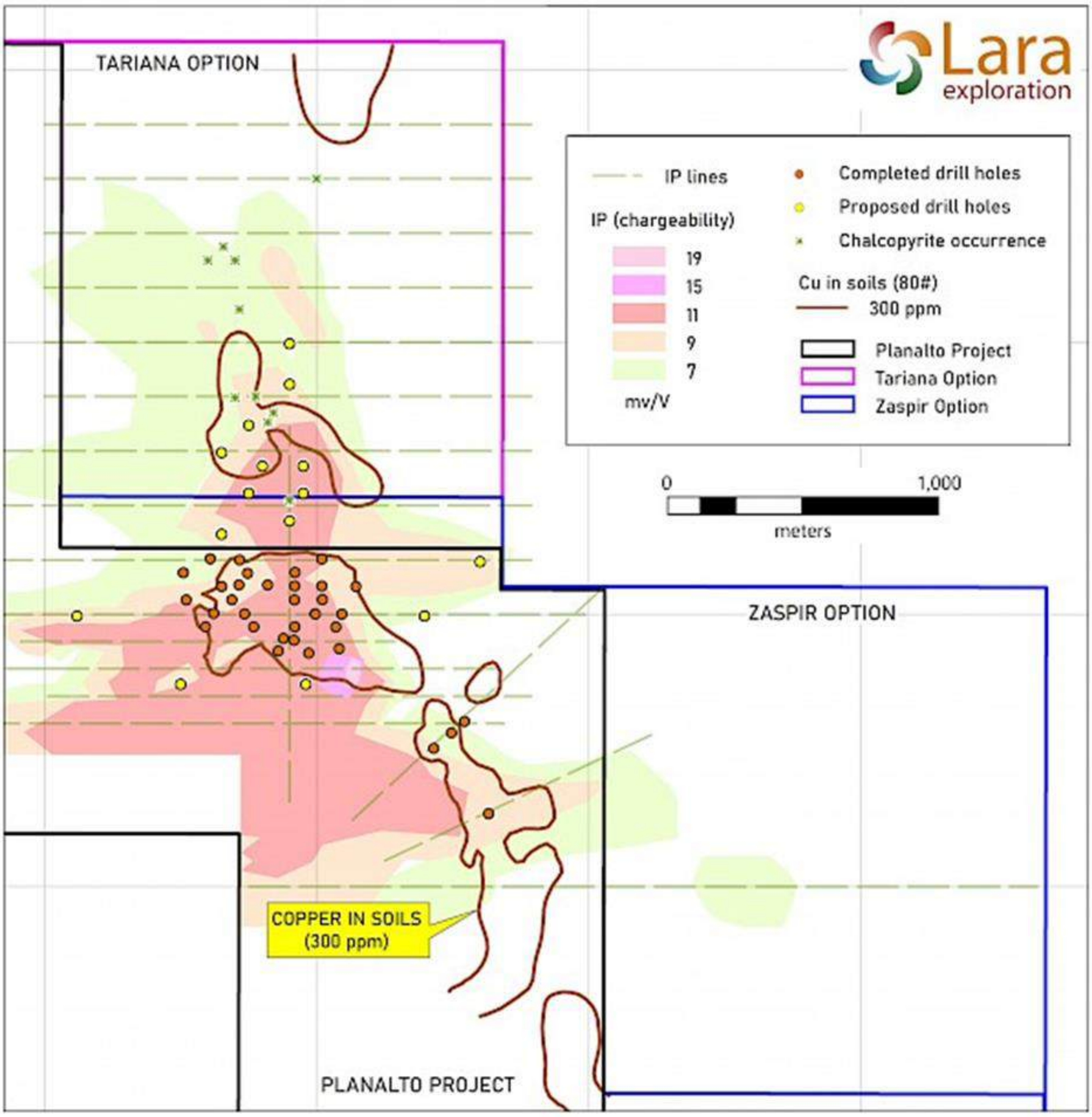


Figure 9-13: Location of the IP survey lines and horizontal plan of the chargeability response.
Source: Planalto Mineração, 2022.

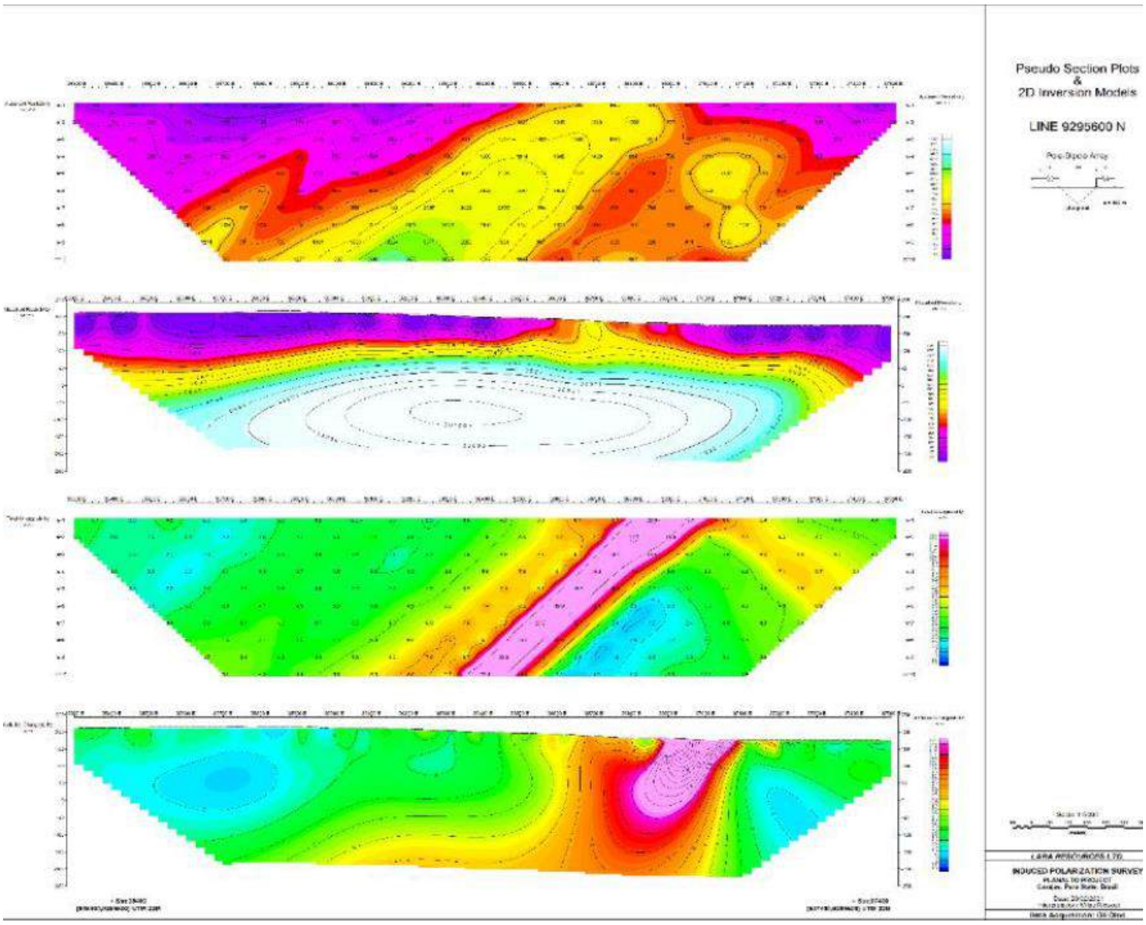


Figure 9-14: Resistivity and Chargeability profiles Line 9295600N across the Cupuzeiro mineralization. Top two profiles are the survey data and inversion of the resistivity data, and the bottom two profiles for area the field data and the inversion of the chargeability
Source: Planalto Mineração, 2022.

9.5 Channel sampling of mafic saprolite exposures

The channel sample program in 2016 and 2017 focussed on sampling of exposure of saprolite in the road cuts crossing the anomalous soil geochemical copper zones. 17 channels, with combined length of over 450m, were cut across volcanic saprolite along roads and on fresh rock exposures in the creeks in the Homestead and Silica Cap targets (Figure 9-15 and **Figure** 9-16).

Significant copper intersections were obtained in both targets and indicated potential for chalcopyrite mineralization in the underlying fresh rock (Table 9-1).

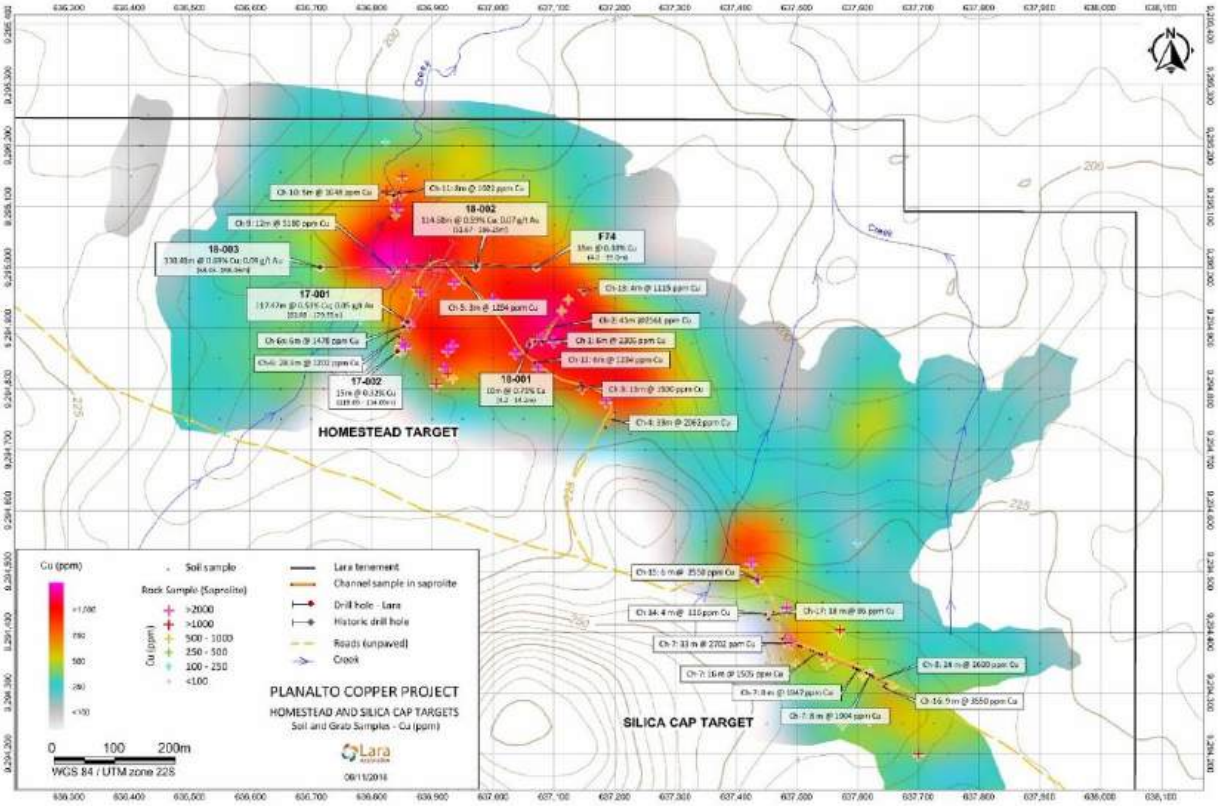


Figure 9-15: Channel sampling on Homestead and Silica Cap copper trends.
Source: Planalto Mineração, 2018.

Table 9-1: Channel sampling in volcanic saprolite and granite - Copper intersections > 1000 ppm Cu.

TARGET	Channel Sample ID	Intervals > 1000 ppm Cu		COMMENTS
		m	Cu-ppm	
HOMESTEAD	Ch-1	6	2306	
	Ch-2	45	2561	
	Ch-3	13	1500	
	Ch-4	33	2062	In volcanics at granite contact
	Ch-5	3	1292	
	Ch-6	28.5	1202	
	Ch-6a	6	1478	
	Ch-9	12	5280	In area west of historic drilling
	Ch-10	5	1048	Fresh volcanics outcrop
	Ch-11	8	1021	Fresh volcanics outcrop
	Ch-12	6	1234	
	Ch-13	4	1115	
SILICA CAP	Ch-7	33	2702	In volcanics at granite contact
		16	1505	
		8	1947	
		8	1904	
	Ch-8	24	2600	
	Ch-14	No significant interval		Sheeted quartz veins in albite granite
	Ch-15	6	2550	In volcanics at granite contact
	Ch-16	9	3550	Sheeted quartz veins in albite granite
	Ch-17	No significant interval		

Figure 9-16: Channel sampling in volcanic saprolite exposed in the roadbed on the Silica Cap copper trend.

Source: Planalto Mineração, 2018.

9.6 Petrography

Petrographic studies have been carried out on thin sections from samples of drill core and outcrops from the Homestead and Cupuzeiro sectors of the Planalto deposit. The main goal was to characterize the host rock, the alteration zones and copper mineralization, as well as to present a paragenetic sequence of the hydrothermal minerals resulting from the alteration processes and the relationship with the copper mineralization.

Polished section work using reflected light has only been undertaken on samples from the Homestead part of the deposit and should be made in the future for the Cupuzeiro part of the deposit.

9.6.1 Petrography of Homestead and Cupuzeiro mineralized sectors.

Geologist Renato Cantão Goncalves, from the University of East and Southeast Para in Marabá, and the University of Para in Belem, described samples in 2019 and 2023 from drill core from both the Homestead and Cupuzeiro mineralized zones, as well as samples from outcrops on the mineralized trend along the margins of the Cupuzeiro creek.

Mr. Goncalves' studies recognize the host rocks protoliths as being derived mostly from fine grained aphanitic and porphyritic andesites, with some rocks in the Cupuzeiro sector described as gabbro and diabase. The porphyritic rocks have phenocrysts of pyroxenes, plagioclase, K-feldspar, quartz or hornblende. The phenocrysts can be strongly embayed and corroded. All rocks are intensely hydrothermally altered and only relicts or strongly corroded mineral grains of the primary minerals are seen in thin sections. The main primary minerals recognized are ortho- and clinopyroxene, often with features of cumulate textures, plagioclase and hornblende. Pyrite and magnetite are the accessory minerals described.

Plagioclase phenocrysts and smaller grains are replaced by K-feldspar or are altered to sericite, epidote and clay minerals. Hornblende and augite are altered to biotite, and this makes up a significant proportion of most rocks. Pyroxenes are altered to amphiboles. Amphiboles and biotite are altered to chlorite during the late propylitic alteration event with chlorite making up more than 15% of the altered volcanic rocks. The chlorite varies from pale green in Homestead to black in Cupuzeiro and is reflected by the distinct change of colour of the drill core between the two mineralized zones.

9.6.2 Paragenetic studies for the central Homestead sector.

Dr Daniel Liz at the University of Aracaju, Sergipe State, described, in 2019, the lithologies and sulphide mineralization for samples of drill core from the main mineralized zone and from the hanging and footwall zones in the drill hole PDH-18-003 from the central zone of the Homestead part of the Planalto deposit.

Dr Liz's concluded that the host rocks to the copper mineralization are dominantly sheared meta-andesite in a pile of lava flows that could be correlated to the Parauapebas Formation of the Carajás Basin sequence. The andesites were subjected to strong metasomatic and hydrothermal alteration, that includes an early sodic alteration characterized by albite + scapolite ± tourmaline ± magnetite, that was subsequently overprinted by a potassic alteration represented by K-feldspar + biotite ± quartz ± apatite ± magnetite.

The earlier alteration assemblages were overprinted by a later propylitic alteration, characterized mainly by chlorite, epidote and calcite, which took place under more brittle conditions. The mineralized zones occur associated with propylitic alteration and comprise veinlet and disseminated sulfides associated with magnetite. The copper mineralization paragenesis comprises mainly chalcopyrite + magnetite ± pyrite.

Dr Liz developed the paragenetic model for the sequence of mineral formation events and for the sulphide formation. Several phases of chalcopyrite deposition are recognized, all associated with the late stage propylitic alteration event (Figure 9-17).

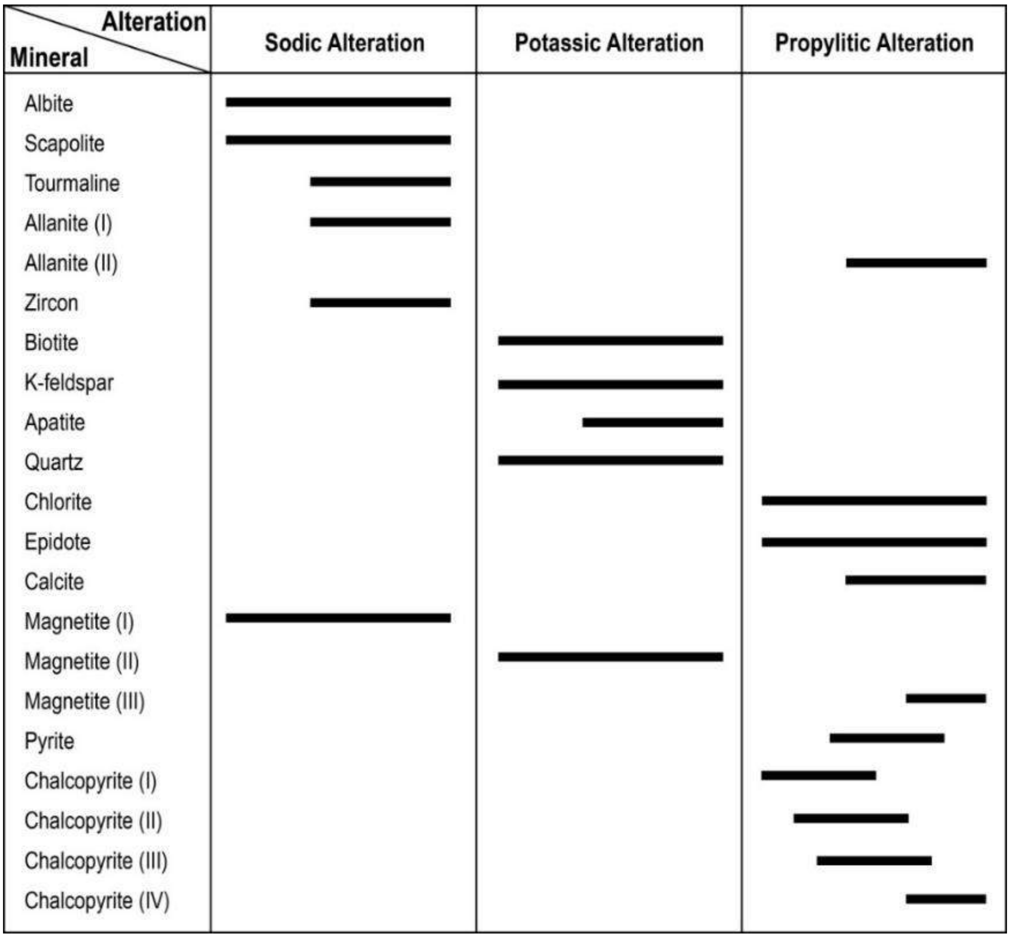


Figure 9-17: Paragenetic sequence of hydrothermal alteration and sulphide mineralization at the Homestead deposit

Source: Planalto Mineração, 2019.

Photomicrographs of thin section studies are shown in Figure 9-18. Reflected light studies on polished sections indicated that the sulphide-rich zones show a strong association of chalcopyrite and magnetite as can be seen in the photomicrographs of Figure 9-19.

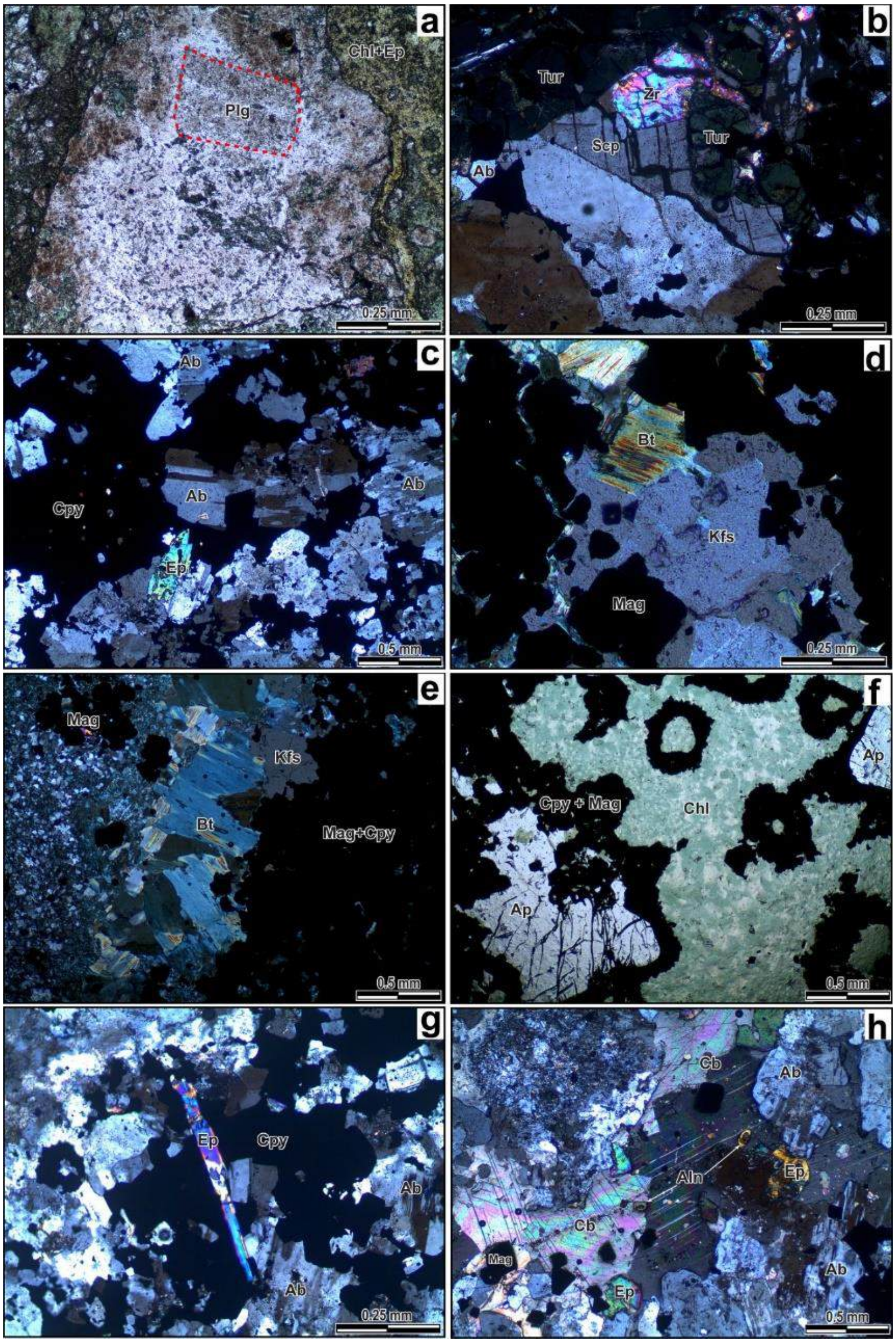


Figure 9-18: Photomicrographs of the meta-andesite showing the hydrothermal alteration and mineralization in transmitted light.
Source: Planalto Mineração, 2019.

(a) Lithic clast cut by veinlets of chlorite + epidote, showing plagioclase phenocrysts relics (demarcated by red dashed line) involved by altered microcrystalline matrix (PPL). (b) Sodic alteration showing scapolite associated with tourmaline, albite and zircon (XPL). (c) Albitization involved by chalcopyrite with twinning deformed albite crystals (XPL). (d) Potassic alteration marked by K-feldspars intergrowth with chloritized biotite and magnetite (II) (XPL). (e) Biotite aggregates, partially replaced by chlorite, cut by chalcopyrite + magnetite veinlet. (f) Irregular veinlet infilled by chalcopyrite + magnetite massive and xenoblastic apatite, cutting intensely altered zone composed by aggregates of fine-grained chlorite crystals. (g) Albite surrounding chalcopyrite-filled veinlet with intergrown epidote. (h) Calcite with allanite and epidote inclusions in veinlet cross-cutting albite rich zone. Abbreviations: Plg: plagioclase; Chl: chlorite; Ep: epidote; Cb: calcite; Cpy: chalcopyrite, Kfs: K-feldspar; Tur: tourmaline; Mag: magnetite; Ab: albite; Scp: scapolite; Bt: biotite; Zr: zircon; Aln: alanite; XPL: crossed polars; PPL: plane polarized light.

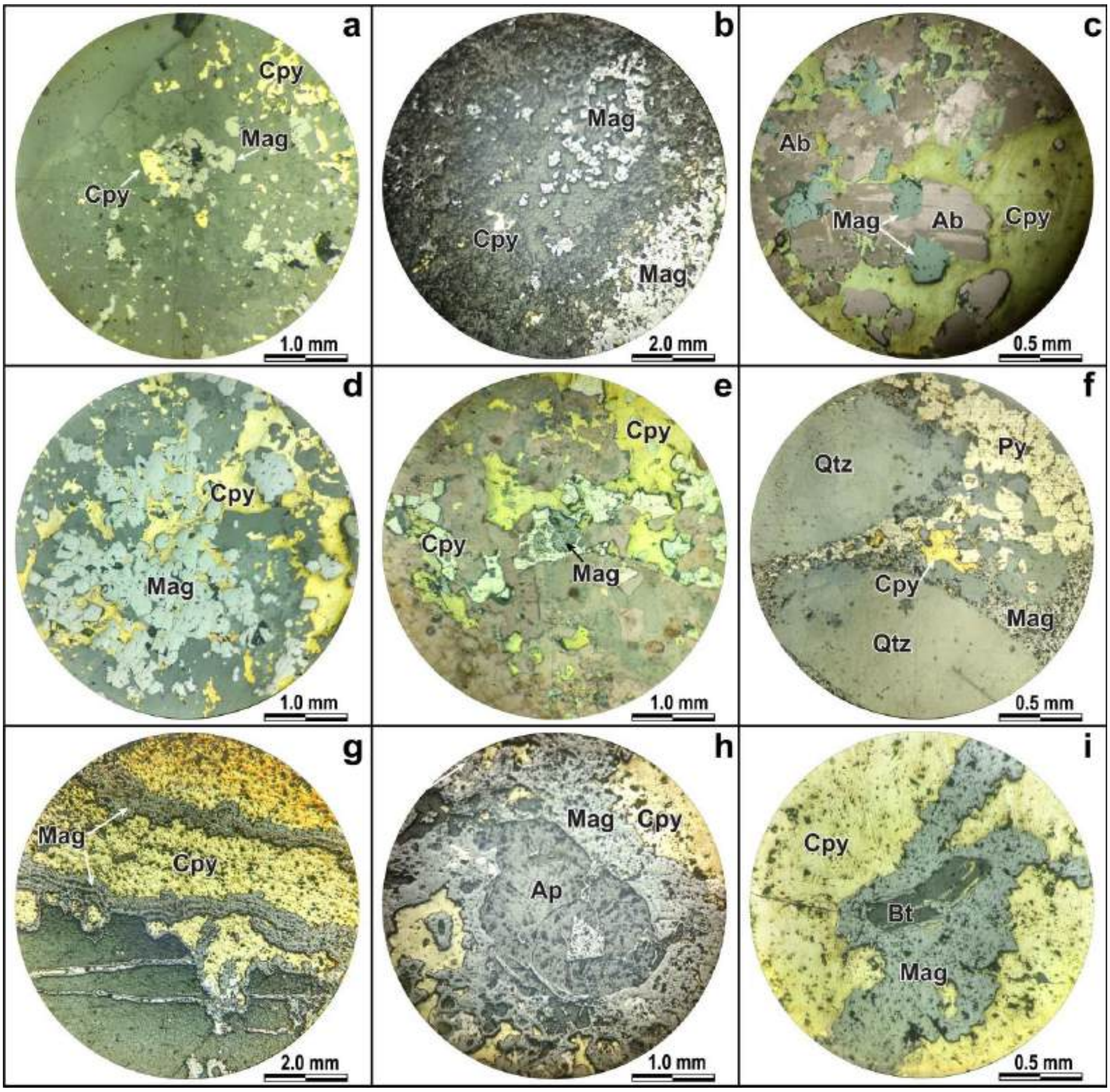


Figure 9-19: Photomicrographs of Copper mineralization from hole PDH18-003 in reflected light.
Source: Planalto Mineração, 2019.

(a) Dissemination of xenoblastic crystals of chalcopyrite (I) associated with subidioblastic magnetite crystals (RL-XPL). (b) Magnetite disseminated in matrix with locally chalcopyrite (I) crystal (RL-XPL). (c) Albite overgrown on magnetite involved by massive chalcopyrite (II) in a pocket (RL+TL XPL). (d) Granular magnetite surrounded by massive chalcopyrite (RL-PPL). (e) Xenoblastic pyrite being replaced by massive chalcopyrite (III) (RL-PPL). (f) Pyrite aggregate with portion replaced by chalcopyrite (III) (RL-PPL). (g) Veinlet filled by massive chalcopyrite (IV) cut by two thin veinlets of massive magnetite (RL-XPL). (h) Subidioblastic apatite crystal crosscut by fractures filled with magnetite (RL-XPL). (i) Detail of biotite surrounding by massive magnetite in thin veinlet cross-cutting massive chalcopyrite (IV) (RL-XPL). Abbreviations: Cpy: chalcopyrite, Mag: magnetite; Py: pyrite; Ab: albite; Ap: apatite; Bt: biotite; RL-XPL: reflected light in cross-polarized light; RL-PPL: reflected light in plane polarized light; RL+TL XPL: reflected and transmitted light in crossed polars.

10 DRILLING

10.1 Introduction

Approximately 25,838m in 85 diamond drill holes has been completed on the Property since 2017 by Lara Exploration and the Lara-Capstone joint venture (Table 10-2 and Figure 10-2). Two historical diamond drill holes, for a total of 591.42 m, were completed in 2003 by Anglo American Brasil Ltda.

Table 10-1: Drilling campaigns on the Planalto Project (including historic drilling)

YEAR	HOLES	METERAGE	CONTRACTOR	PROJECT
2003	2	591.42	Not Known	Anglo American
2017	2	639.65	Mega Sondas Sondagem e Pesquisa	Lara
2018	3	696.55	Mega Sondas Sondagem e Pesquisas	Lara
2019	35	5669.88	Servdrill / Energold / Pronorte	Lara / Capstone JV
2021	5	1976.25	Rock Sondas	Lara / Capstone JV
2022	16	7682.80	Rock Sondas / Servdrill	Lara / Capstone JV
2023	24	9173.57	Major Drilling / Layne	Capstone Copper
Total	87	26,430.12		

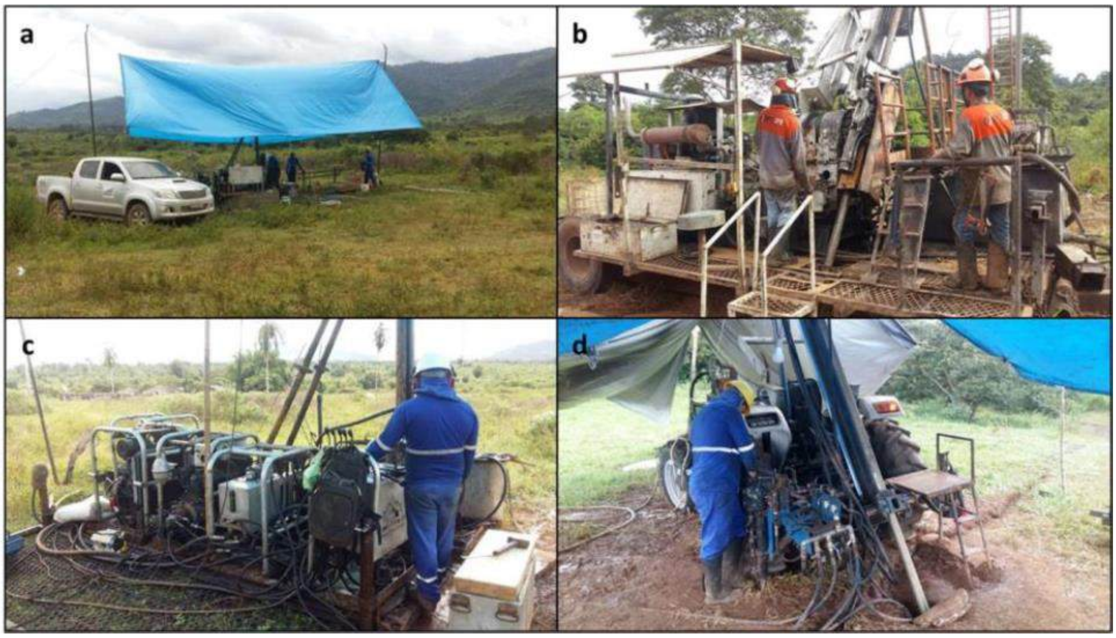


Figure 10-1: Drill rigs operating on the Homestead drill program in Q2-2019. (a and b) Servdrill, (c) Energold and (d) Pronorte
Source: Planalto Mineração, 2019.

74 holes for 24,942.95m have been completed on the Homestead-Cupuzeiro target in the eastern part of the project area. On the Silica Cap target, located 500m southeast of Homestead, 1,001.14m in 7 exploration holes have been completed. A further 6 exploration holes have been drilled on other exploration targets elsewhere in the project area as indicated in **Table** 10-2 and **Figure** 10-3.

Table 10-2: Summary of drilling on exploration targets in the Planalto Project.

	N° HOLES	METERAGE	YEARS
Homestead	41	10,681.71	2017-2023
Zaspir Option	6	2070.64	2023
Cupuzeiro-Tariana Option	27	12,190.60	2021-2023
Silica Cap	7	1001.14	2019-2023
Divisa	1	78	2019
Sodre	3	284.09	2019
Highway	2	123.94	2019
Total holes	**87**	**26430.12**	

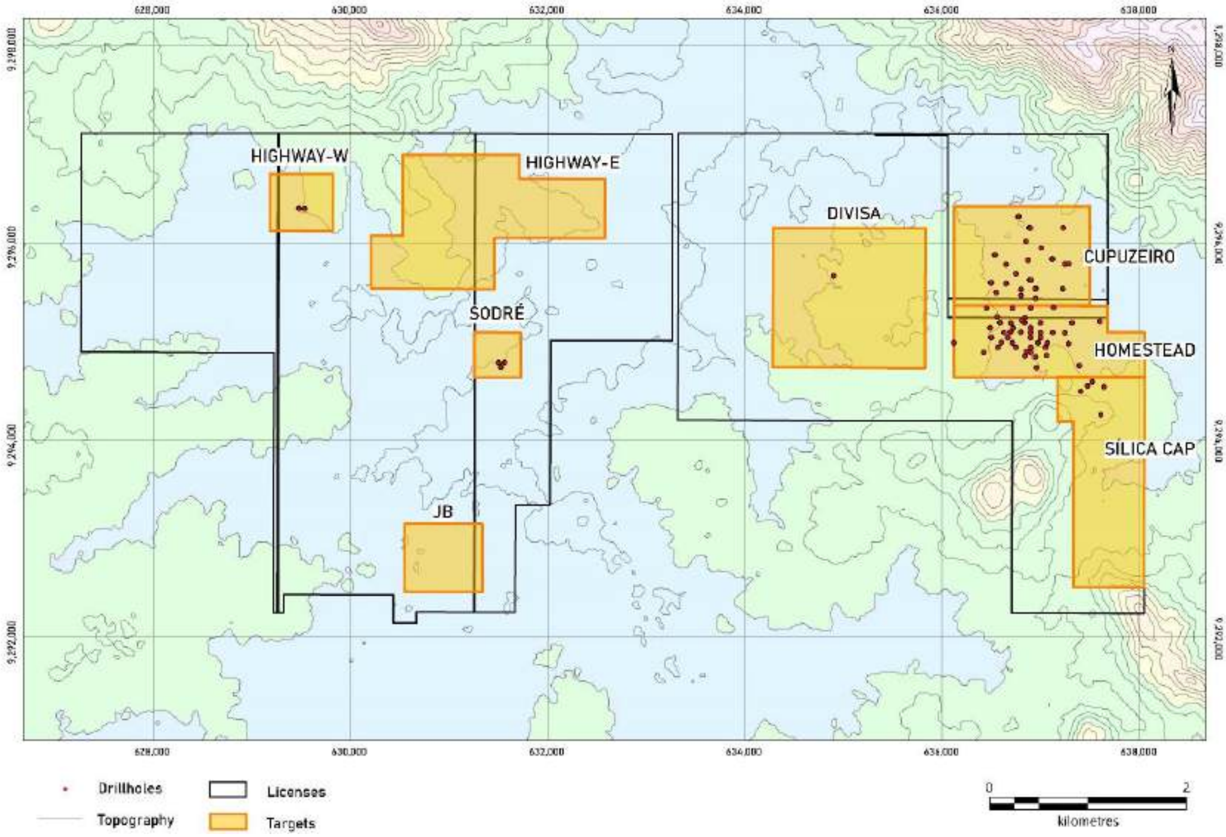


Figure 10-2: Copper targets in the Planalto Project and location of diamond drilling.
Source: Planalto Mineração, 2024.

The drill collar positions for the holes on the Homestead-Cupuzeiro copper deposit and the Silica Cap deposit are shown on the google image Figure 10-3. Figure 10-4 and 10-5 show a cross-section and long-section, respectively, with all the drill holes plotted for the Homestead-Cupuzeiro and Silica Cap deposits separated by drilling campaign.

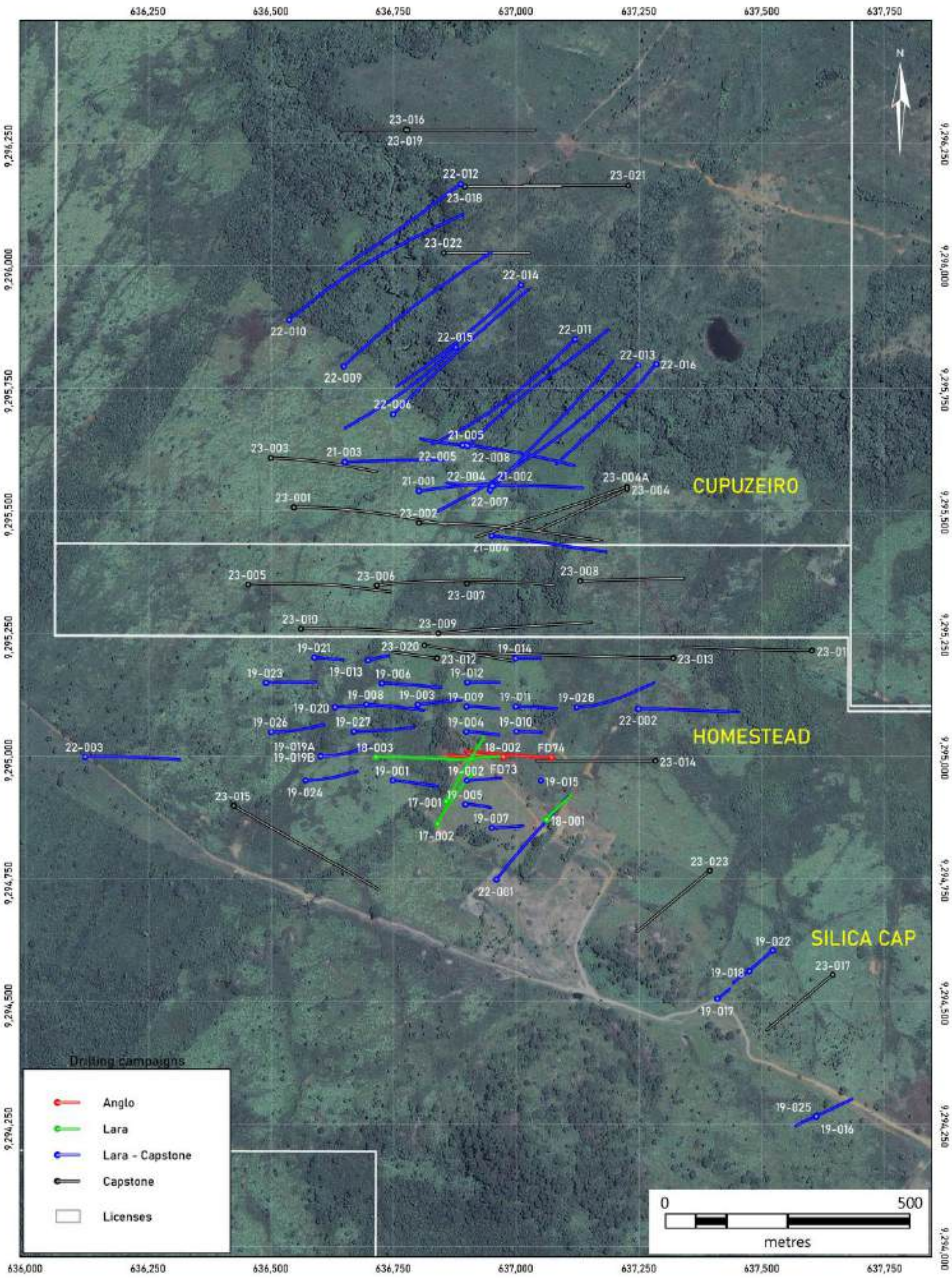


Figure 10-3: Homestead-Cupuzeiro and Silica Cap drilling campaigns in plan view.
Source: Planalto Mineração, 2024.

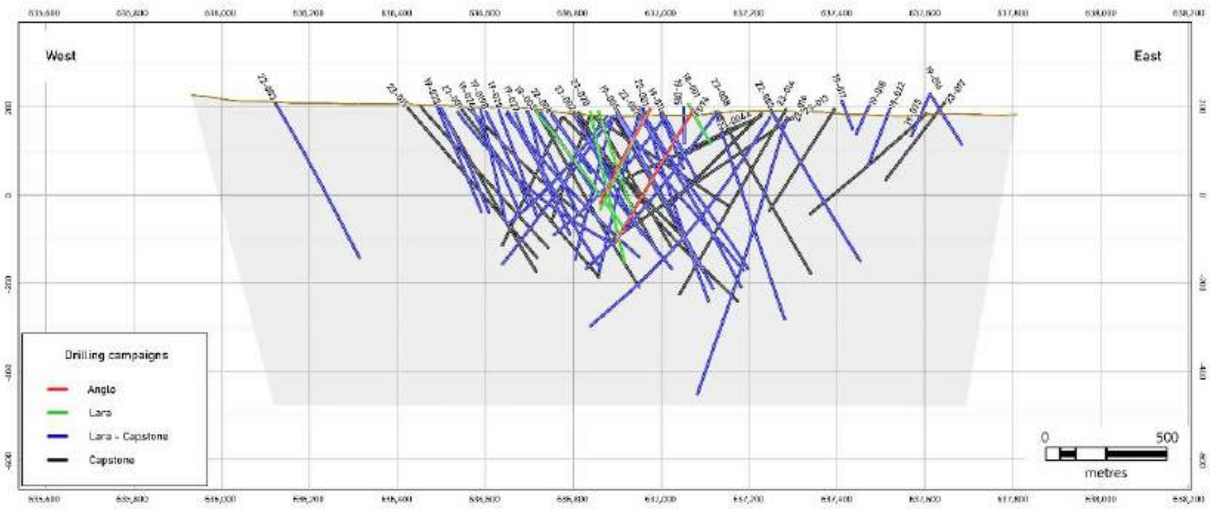


Figure 10-4: Homestead-Cupuzeiro and Silica Cap drilling campaigns in North view (West-East Section).

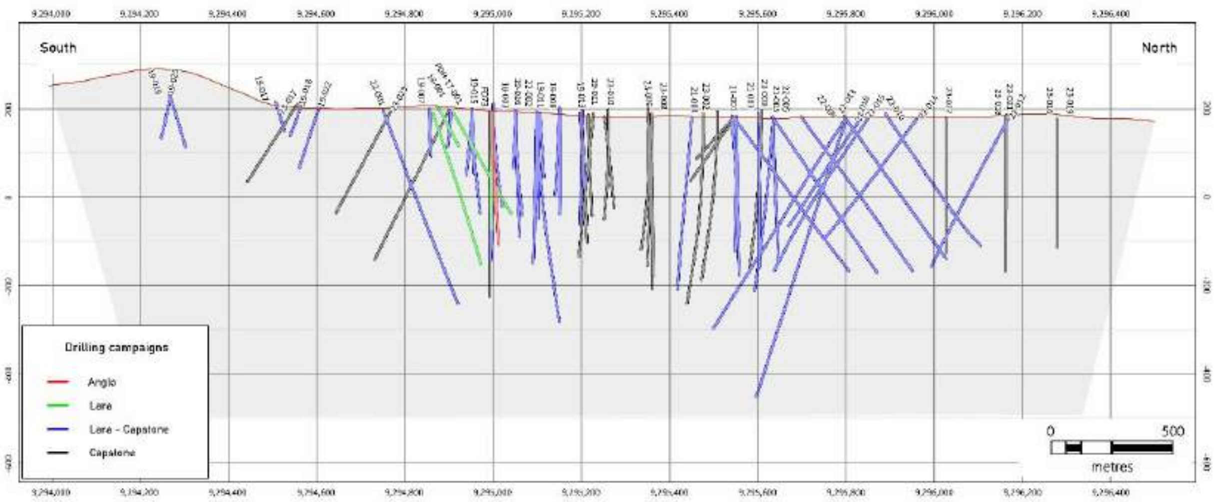


Figure 10-5: Homestead-Cupuzeiro and Silica Cap drilling campaigns in West view (South-North Section).
Source: Planalto Mineração, 2024.

10.2 Historical Drilling by Anglo American do Brasil Ltda

The two historical drill holes of Anglo American have been incorporated into the data base. Collar positions for both holes are well preserved by cement block markers and were surveyed. The down hole survey database was made available for both holes. Twinning of historic hole FD-73 by Lara hole PDH-18-002 indicated that the assay data for historic holes FD-73 and FD-74 is reliable.

10.3 Lara and Lara-Capstone JV Drill programs

10.3.1 Homestead-Cupuzeiro & Silica Cap trends

10.3.1.1 Lara Drill program 2017- 2018

In 2017 and 2018 Lara carried out five drill holes for a total of 1,336.20m in a scout diamond drilling program to verify the anomalous copper intersections reported for the two historical holes by Anglo and to try and determine the attitude of the copper mineralization. Four of these holes were in the same general area as the historic Anglo American drill holes, and included hole PDH18-002, a twin hole of historic hole FD-73.

Although the holes indicated there was extension of similar grade copper mineralization for at least 70m south from the historical drill section the attitude of the mineralized zones or structures remained unknown. The fifth hole of the program, PDH-18-003, was collared about 300m to the west of FD-73 on the same section UTM 9295000 N and was drilled back to the east to test a strong copper soil anomaly that was not adequately tested by the earlier drilling. This hole intersected a significant interval of copper mineralization of 284.71m @ 0.48% Cu from the surface and included a zone of 3.13m @ 1.06% Cu from 56.76m and a zone of 113.73m @ 0.67% Cu from 84.73m down hole. It was concluded from the interpretation of the newly constructed cross-section for this section 9295000 N that the geological units and main mineralized zone was tabular in shape with a shallow west dip (Figure 10-6). The main mineralized body was estimated to be about 100m thick and extend from surface to about 350m down the dip direction.

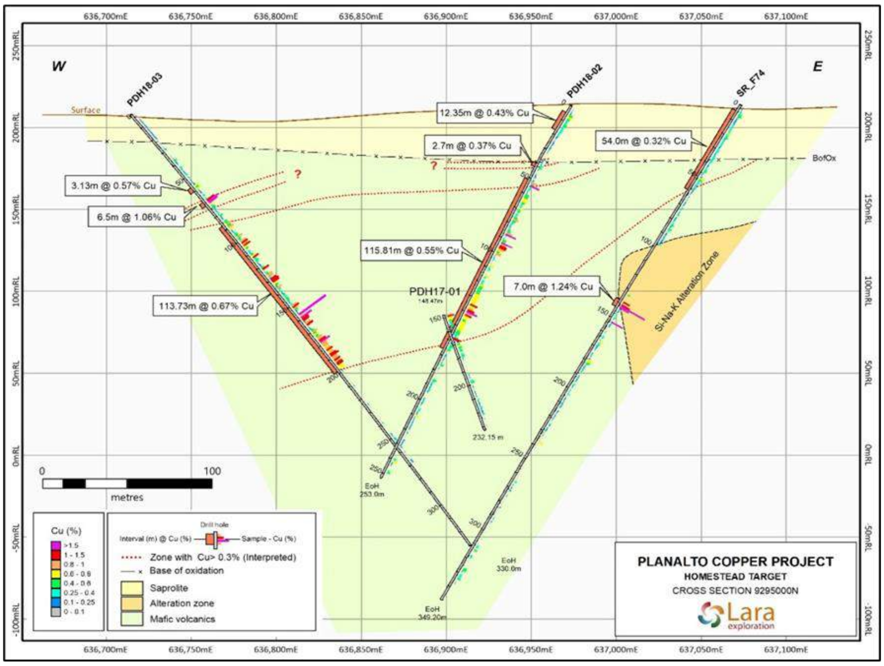


Figure 10-6: Drill section 9295000 N with anomalous grade copper intersections in Lara holes PDH18-002 and PDH18-003.
Source: Planalto Mineração, 2018.

10.3.1.2 Lara-Capstone Drill Program

In 2019, following the establishment of the Lara-Capstone JV, more systematic grid diamond drilling on the Homestead target was conducted with 24 drill holes for 4,636.67m. Drilling was on E-W-orientated fences at every 50m between 9294800 N and 9295200 N, with holes spaced at about 100m intervals.

The drilling confirmed the mineralization is hosted in highly hydrothermally altered mafic volcanics across a north-south-elongated area of 450m by 350m and was still open to the north from the most northern drill section. The depth of mineralization in the central part of Homestead was shown to be down to about 150m vertical, but out on the eastern side multi-zones of mineralization were confirmed in mafic volcanics to at least 400m vertically below the surface.

Five exploration holes for a total of 546.75m drilled on the Silica Cap target indicated a zone of copper mineralization from 10m to 15m wide and grades of 0.5% to 1% Cu along a strike trend of over 400m within mafic volcanics at or close to the underlying metasomatized granite contact (Figure 10-7). The attitude of this mineralized body was interpreted to be tabular with a moderate east dip.

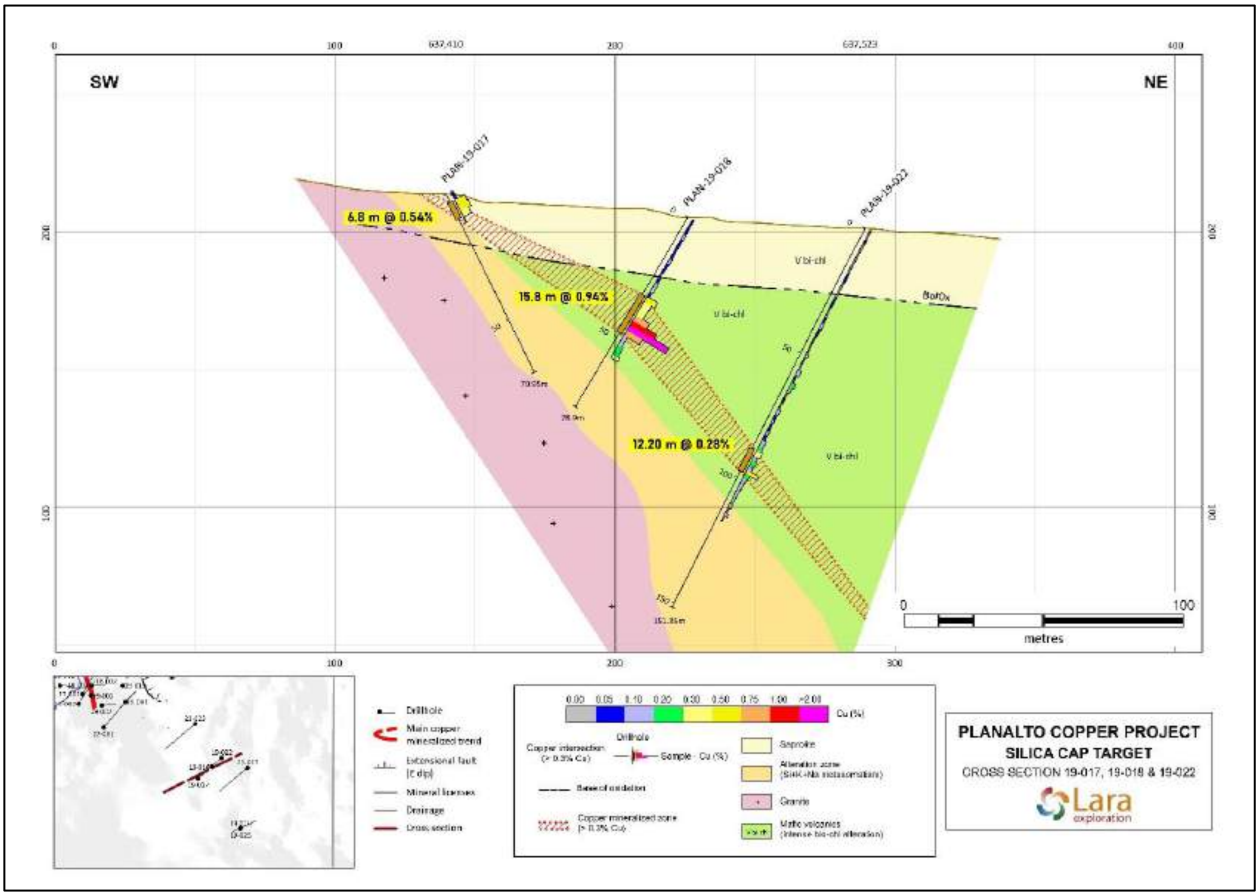


Figure 10-7: Silica Cap target section PLAN-19-017/ PLAN-19-018 / PLAN-19-022.
Source: Planalto Mineração, 2019.

Some scout diamond drilling was also conducted on exploration targets elsewhere in the project area including one hole for 78m at the Divisa target located about 500m west of Homestead; three (3) holes for 284.09m at the Sodre target in license 850537/2012, and two holes for 123.79m at the Highway-West target in license 850536/2012. Location of these targets are shown on Figure 10.1.

After acquiring option agreements on the two mineral properties along the projected trend of the mineralization to the north from the Homestead deposit, drilling was initiated in the Tariana Option in 2021 with five holes for a total of 1,976,75m. This led to the discovery of the near surface high-grade copper mineralization of the Cupuzeiro target.

By the end of 2022 the Lara-Capstone joint-venture completed a further 3 holes for 1,293.02m at the Homestead target and a further 13 holes for 5,434.61m testing for northern extensions for the Cupuzeiro target.

The drill grid for the central part of the Cupuzeiro target was on E-W-orientated sections at 100m spacings but to the north of the high-grade copper zone drill sections with a NE-SW-orientation were preferred because drill access was hindered by the presence of environmental preservation areas along the edges of the Cupuzeiro creek.

10.3.1.3 Capstone drill program 2023

Core drilling managed by Capstone in 2023 included 9,173.57m in 24 diamond holes testing for extensions of mineralization of the Cupuzeiro, Homestead and Silica Cap targets. 10 holes for a total of 3,823.79m on the Tariana Option extended the Cupuzeiro mineralization to the north and defined the outer limits of copper mineralization to the east and west (Figure 10-8).

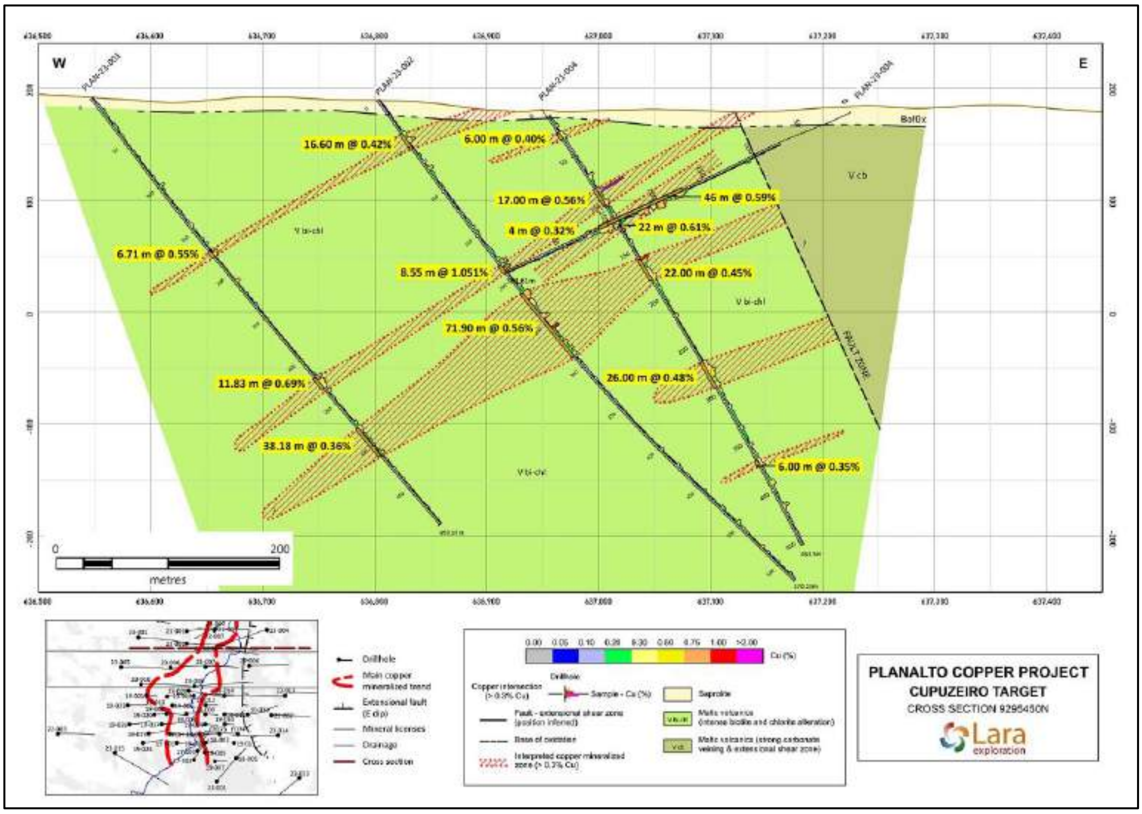


Figure 10-8: Cupuzeiro target section PLAN-23-001/ PLAN-23-002 / PLAN-21-004 / PLAN-23=004.
Source: Planalto Mineração, 2019.

One of these holes, PLAN-23-04A, was a redrill from 72m in the hole PLAN-23-004 that had reached 220.41m but was abandoned with loss of drill equipment and was not surveyed. The drill core was logged but not sampled.

6 holes for 2,461.81m tested the outer limits to the Homestead mineralization with exploration holes in the northwest, east and southwest, and three more holes on the most northern section of the Homestead drill grid (Section 9295200N) which only had 3 very wide-spaced holes, all drilled in 2019.

A further 2 holes (547.67 m) were completed on the Silica Cap target. One of these holes, PLAN-23-017, drilled between the earlier two drill fences intersected the high-grade mineralized zone of 15.36m at 1.013% Cu near the granite contact giving evidence for the lateral continuity of this mineralized structure. The other hole, located about 300m to the north, also intersected a zone of narrower copper mineralization close to the granite contact. Additional drilling is required to improve the understanding of this mineralized trend.

The initial drilling on the Zaspir Option included 6 holes for a total of 2,431.80m on two drill fences (9295250 N and 9295350 N). Holes on both drill fences provide evidence for the continuity of the mineralized structures between the Homestead and Cupuzeiro deposits.

10.3.2 Other Exploration Targets

10.3.2.1 Divisa Target

One exploration hole (Div-19-001) was drilled to 78m depth in the northwest of the soil copper geochemical anomaly. Samples of saprolite rock assayed anomalous copper values to 700 ppm Cu.

The hole intersected porphyritic andesite without hydrothermal alteration or copper mineralization. More exploration work is still required to determine the cause of this large copper in soil geochemical anomaly.

10.3.2.2 Sodre Target

Three diamond drill holes, for a total of 284.09 m, tested this geochemical soil anomaly associated with a 300m long, NNW-trending, semi-massive magnetite body filling a fault structure hosted in granodiorite. The magnetite body varies from about 2m to 20m wide and dips steeply to the west.

One hole, SOD19-002, intersected 6.5m @ 0.38% Cu from the surface in the weathered saprolite on the western margin of the magnetite body. The extension of this oxide mineralization into the underlying fresh bedrock is still not tested. Some shallow vertical auger holes, with maximum depth of 6m, were drilled adjacent to this mineralized zone and indicated that the strike extension to the north and south is most likely limited to a few tens of meters either side of the drill section.

10.3.2.3 Highway Target

Two diamond drill holes, for a total of 123.74m, were drilled on the same section (9296360N) across a geochemical soil copper anomaly located over granodiorite at this target. Narrow intersections, from one to four meters wide, with copper values of in range of 0.1% Cu to 0.3% Cu are present in both the saprolite and the fresh rock in each of the holes. Chalcopyrite is associated zones of hydrothermal silicification and chloritization in the granodiorite.

10.3.3 Drill Collar Survey

All drill hole collars, including the two historical holes, have been surveyed by a contractor, Mr. Claumir Fernandes, a civil engineer and INCRA-accredited surveyor based in Canaã dos Carajás. The equipment used included the GPS Geodesic Navcon models RTK, NAVSF30340 and HIPER SR instruments. The survey Datum used has been WGS-840 (SIRGAS 2000).

All holes were marked by PVC pipes in cement blocks on termination of each hole. Recent regrowth vegetation clearing activities made at the request of the farm owner have resulted in some collar blocks being displaced in some parts of the farms. Additionally, it is noted that some of the metal tags with the drill hole information which were attached to the collar blocks have been removed by unknown persons.

10.3.4 Downhole Survey

Downhole deviation surveys were carried out in all drill holes on the Planalto Project.

The equipment deployed has enabled readings at intervals mostly at 10m intervals down hole, but some surveys have used 3m sampling, and a few holes were sampled at 30m down hole intervals. The surveying was mostly supervised by the drill contractors who used the services of the contractor DIPCORE S.A., a Belo Horizonte-based company specializing in down-hole surveying. The instruments used during the different drill programs include the Reflex Maxibor 11, EZETRAC and the Gyro Path NSG.

Holes in the 2021 and 2022 drill campaigns were surveyed by Planalto employees. DIPCORE rented the Gyro Path equipment to Planalto Mineração and provided on-site training because DIPCORE did not have a local Canaã dos Carajás-based technician in the post Covid 19 period.

The deviation surveys were mostly conducted after completion of each hole, but in some holes, surveys were conducted at various stages of the progress of the hole. Several repeat surveys were conducted as a check on the quality of the Planalto survey work.

10.3.5 Core transport

All drill core has been securely transported from the site to the dedicated core shed facilities of Lara and later Planalto Mineração in the center of Canaã dos Carajás. This transport has been undertaken by both the drill contractors, usually at the end of each drill shift, and by employees of Lara and Planalto Mineração Ltda. The boxes were always transported securely tied and covered.

10.3.6 Core Logging

After drill core boxes are received in the core shed, the core boxes are placed on racks and each core run is checked for depth, run length and recovery information. The drill core was photographed both dry and wet and images stored in the database. The core was then examined to determine suitable hardness (R) and weathering (W) factors, and the quality of the rock mass was determined by recording the RQD factor measurement for each core run.

Where core orientation markings were available for each core run the drill core was rearranged in the core boxes to have a line traced along the top of the core which would also serve as the orientation for the core cutting. Both the rudimentary bottom-weighted spear and the REFLEX ACT core orientation methods have been applied.

Structural readings such as fractures, veins, shear zone orientations are measured with respect to the core axis and the Alpha and Beta angle readings entered the data base. For some pieces of orientated core, direct structural readings of vein and shear zone (mylonites) orientations were measured using a purpose-built core mounting stand. Review of the structural data indicates that there is no specific orientation for the most common K-feldspar-epidote, quartz or magnetite veining or mylonite zones, or for the veins and fractures hosting the chalcopyrite.

Magnetic Susceptibility readings were made using a hand-held magnetic susceptibility meter KT-10 device on the core as standard practice up to 2021, with readings taken at 50cm intervals down the core. After a review of the data and procedure, it was determined that the data collection interval was too sporadic at 0.5m and 1m intervals, and this method was discontinued. It was found that more representative down hole magnetic susceptibility readings could be obtained by magnetic susceptibility reading of the drill core assay sample pulps and the coarse crushed core rejects returned by laboratories.

In the geological drill hole log description, the following information is collected: granulation, texture, color, mineralogy, magnetism, geological contacts, lithology, geological structures (fractures, faults, veins and crenulations).

A template of rock types was devised to identify the different volcanic rock units, which has relied heavily on the textural characteristics of the rocks, because the original lithologies, except for a few porphyritic andesites, are intensely metasomatically and hydrothermally altered in that the original protoliths are not discernable in hand specimen. Much of the core has textures more akin to cemented fragmental tuffs or feldspar-phenocryst-rich tuffs.

The content of alteration minerals such as biotite chlorite, K-feldspar, epidote magnetite -hematite were estimated on a basis of 1 (weak) to 5 (very strong). Visual estimates of percentage of pyrite and chalcopyrite were entered into logging sheet. Other mineral occurrences such as fluorite, molybdenite, tourmaline, hematite are also logged into the logging sheet. The data was subsequently transferred into a digital data base.

Some examples of drill core indicating the competent nature and with easily recognizable pink K-feldspar alteration and veining are shown in Figure 10-9.

Figure 10-9: Photograph of very competent section of core in a chalcopyrite mineralized section of porphyritic andesite core with pinkish K-Feldspar-epidote veining and visible chalcopyrite mineralization (cp markings).
Source: Planalto Mineração, 2023.

10.4 Twin Holes

Lara drilled one twin hole (PDH18-002) to check the sample assay data for the historic hole FD-73 as the drill core for both Anglo American historic drill holes (SR_FD73 and SR_FD74) could not be located for relogging or resampling. Significant chalcopyrite mineralization was encountered in the fresh rock starting from 40.3m down hole and persisted to 216.8 m. The weighted average grade for this intersection was 176.5m @ 0.45% Cu. The equivalent intersection according to the historic assay and drill log data is 174m @ 0.39% Cu from 43m down hole.

Copper grades between the holes show reasonable agreement especially at the top of each hole, but as the holes deviated from one another at depth, both in dip angle and azimuth, there are some discrepancies as can be noted in Figure 10-10. The separation of the two holes is estimated at over 10m at the 200m mark in each hole. The QP believes the deviation of copper grades between the twin holes is acceptable so that the historic drill holes (SR_FD73 and SR_FD74) assay grades can be incorporated in the resource estimation database.

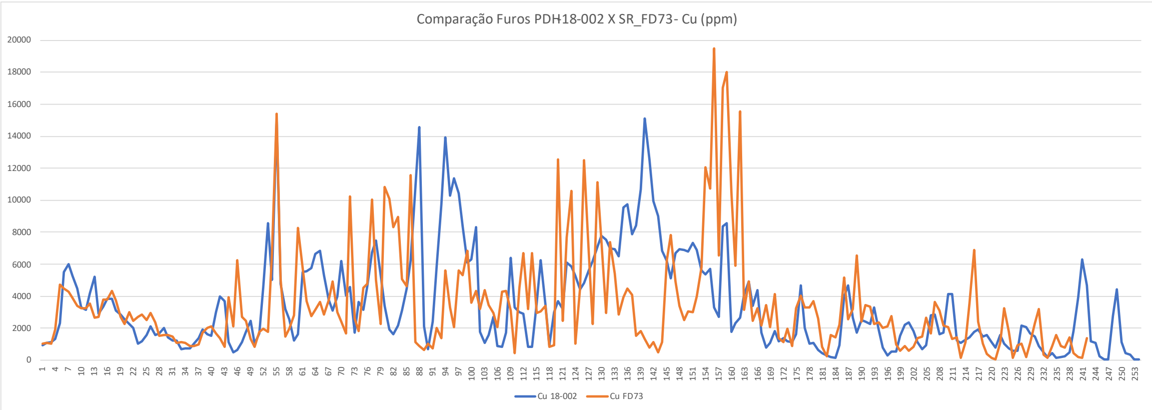


Figure 10-10: Down hole assay profiles for the twin holes FD-73 and PDH-18-002
Source: Planalto Mineração, 2024.

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 Sampling

Samples have been prepared predominantly from NQ diameter drill cores (47.6mm core diameter). In drillhole FD73 the drill core diameter was reduced from NQ to BQ diameter (36.5mm) for operational reasons. The sample selection of drill core intervals for analysis is close to 2.00 meters, with a minimum of 1.00m, taking account of changes in mineralization style, lithology, alteration and structure. Samples were selected outside the identified mineralization zones. On occasion samples less than 1m and more than 2m have been taken. The minimum and maximum sample lengths taken were 0.3m and 5.1m respectively.

The sample selection and collection procedures adopted by Planalto Mineração are described below:

- Drill core is brought in by the drilling contractor team from the drill rig to core shed.
- The alignment and orientation of core in boxes are checked, and the depth lengths are marked.
- Core boxes are photographed (three boxes per picture) and logged.
- Sample intervals are marked with a pencil in the core box.
- Before sampling, the drill core is marked by a line drawn along the core at high angles to the foliation to orient the saw cut. The right side of the core, looking down the hole, is taken as the assay sample. The other half of the core is retained in the core box for future reference.
- When drill core has been marked with a down hole core orientation mark, the core is realigned and a line denoting the top of the core is drawn. This line is used to orientate the saw cut.
- Sample numbers are marked to the core box at the end of each sample.
- The core is cut lengthwise along the core axis. A geologist defines the position of the cut, and a Geological Technician performs the cutting.
- For weathered material, a spatula or a machete is used to split the sample into two subsamples along the drilling direction.
- Fresh rock cores are cut in half using a diamond saw flushed with water during sawing operation.
- Sample tags are inserted in the bags only after samples are bagged.
- After the samples are tagged and bagged, they are weighted.
- Batches are assembled, including QAQC samples, and sent to the laboratory.

The standard batch size is 150 samples.

11.2 Sample Security and Chain of Custody

Drill core samples were prepared and analyzed at independent commercial laboratories, SGS Geosol, ALS and Intertek. At all times, samples are in the custody and control of the Company's representatives until delivery to the laboratory, where samples are held in a secure enclosure until processing. The laboratories send a confirmation e-mail with details of samples received. The chain of custody of the batches is carefully maintained by the company staff from collection at the drill rig to delivery at the laboratory to prevent accidental contamination or mixing of samples.

All samples received at the laboratories are inventoried and weighed before processing.

11.3 Density Measurements

Density tests were undertaken on selected drill core samples to build a density database related to lithology and copper mineralized zones across the Homestead and Cupuzeiro deposits. Samples selected for density tests were identified by the geologist responsible for the drillhole and subsequently prepared by the technician who performed the test in-house or dispatched the samples to the contracted laboratory. Following receipt of the density data this was entered into the project's database.

For the determination of specific density of samples, Planalto Mineração used the hydrostatic density method (Archimedes' method) for the determination of density in saprolite core. All the fresh drill core samples had density determinations made at the Intertek Laboratory in Parauapebas. The Intertek laboratory determined density on a total of 626 fresh rock samples.

Lara technical staff made 627 density determinations by the water displacement method on sections of half drill core from all the drill holes from the 2017–2018 drill campaign in the central zone of the Homestead deposit. Sample intervals varied between 15 and 25cm and samples were collected at approximately every 3m down the drill holes. The sample intervals for the drill holes PDH18-002 and PDH18-003 (total of 266 samples) had density determined also by the hydrostatic method. The hydrostatic method shows slightly higher density determinations than the water displacement method by 2-3%, because of the difficulty to exactly estimate the water volume displaced on the 25ml graduated scale on the measuring cylinder.

Intertek laboratories carried out 305 hydrostatic density determinations in 2019 on drill core samples from drill holes across the Homestead deposit (holes PLAN-19-002 through PLAN-19-006). The total assay sample was used for the determinations. Intertek also made a further 143 fresh rock determinations on half core samples from four drill holes in central part of the Cupuzeiro deposit (holes PLAN-21-002, PLAN-21-004, PLAN-22-004 and PLAN-22-007). Sample intervals varied between 20 and 50cm in length and were collected approximately every 10m down each of the drill holes.

In 2023, a further 178 fresh rock density determinations were made at Intertek on half core samples from drill holes collared between, and peripheral to, the Homestead and Cupuzeiro deposits. Sample intervals varied between 15 and 25cm and collected approximately every 10m down the holes.

The procedure used to undertake the hydrostatic density measurements for the saprolite samples is as follows. The whole or half core sample is selected from the drill core, dried in an oven at 105°C for one hour, then weighed in an appropriate container, The dry weight of the sample (*Ps*) is recorded. The dry sample is then waterproofed with thin plastic film. The weight of the submerged sample (*Pa*) is recorded by weighing the sample immersed in the water (density of water *Df* is considered as 1.0g/cm^3) (Figure 11-1).

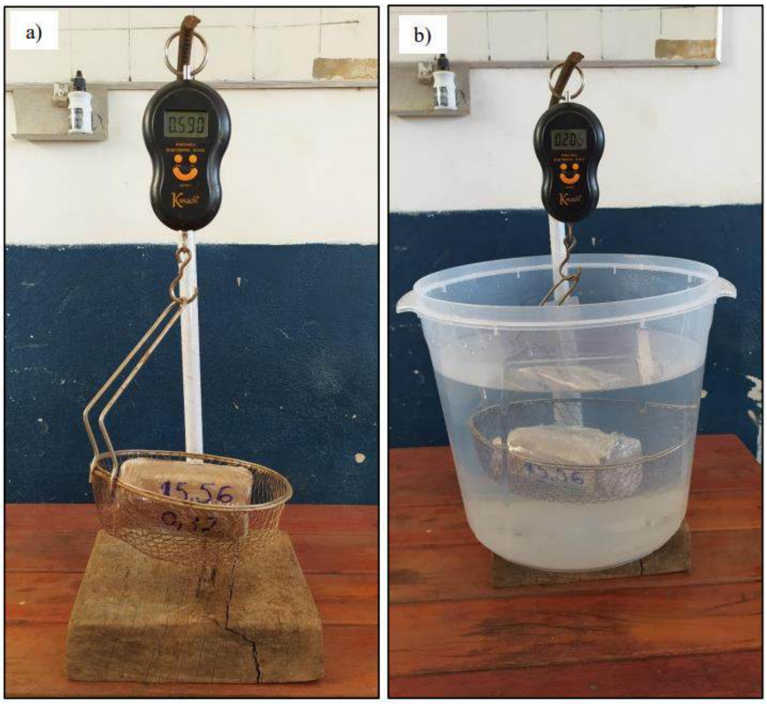


Figure 11-1: Samples being weighed dry (a) and submerged (b).
Source: Planalto Mineração, 2023.

The value of the specific density of the sample (DP) is determined, in g/cm³ from weight measurements and water density applied in the equation below:

$$Dp = \frac{(Df\ x\ Ps)}{(Ps - Pa)}$$

11.4 Sample Preparation

Drill core samples are prepared at commercial laboratory Parauapebas-PA and sample pulps analyzed by one of the following commercial laboratories, ALS laboratories (Lima, Peru) or SGS Geosol Laboratórios Ltd (Vespasiano-MG, Brazil) and Intertek do Brasil Inspeções

(Parauapebas, PA, Brazil).

The ALS procedures for sample preparation include the following: received sample weighing, sample login with bar code, crushing QC test, pulverizing QC test, fine crushing with 70% <2mm, split sample in riffle splitter, pulverizing up to 250g 85% <75um, pulp login with bar code, and splitting for chemical analysis.

The SGS sample preparation procedures are: received sample weighing, sample login with bar code, drying in sieve at 105°C, fine crushing with 75% <3mm, split sample in Jones riffle splitter, pulverizing up to 250g and pulverizing up to 150 mesh 95%

The Intertek lab procedures for sample preparation include: drying, crushing, split sample in Jones riffle splitter, and pulverizing at 150 mesh (95% passing 0.105mm) as presented at flowchart of Figure 11-2.

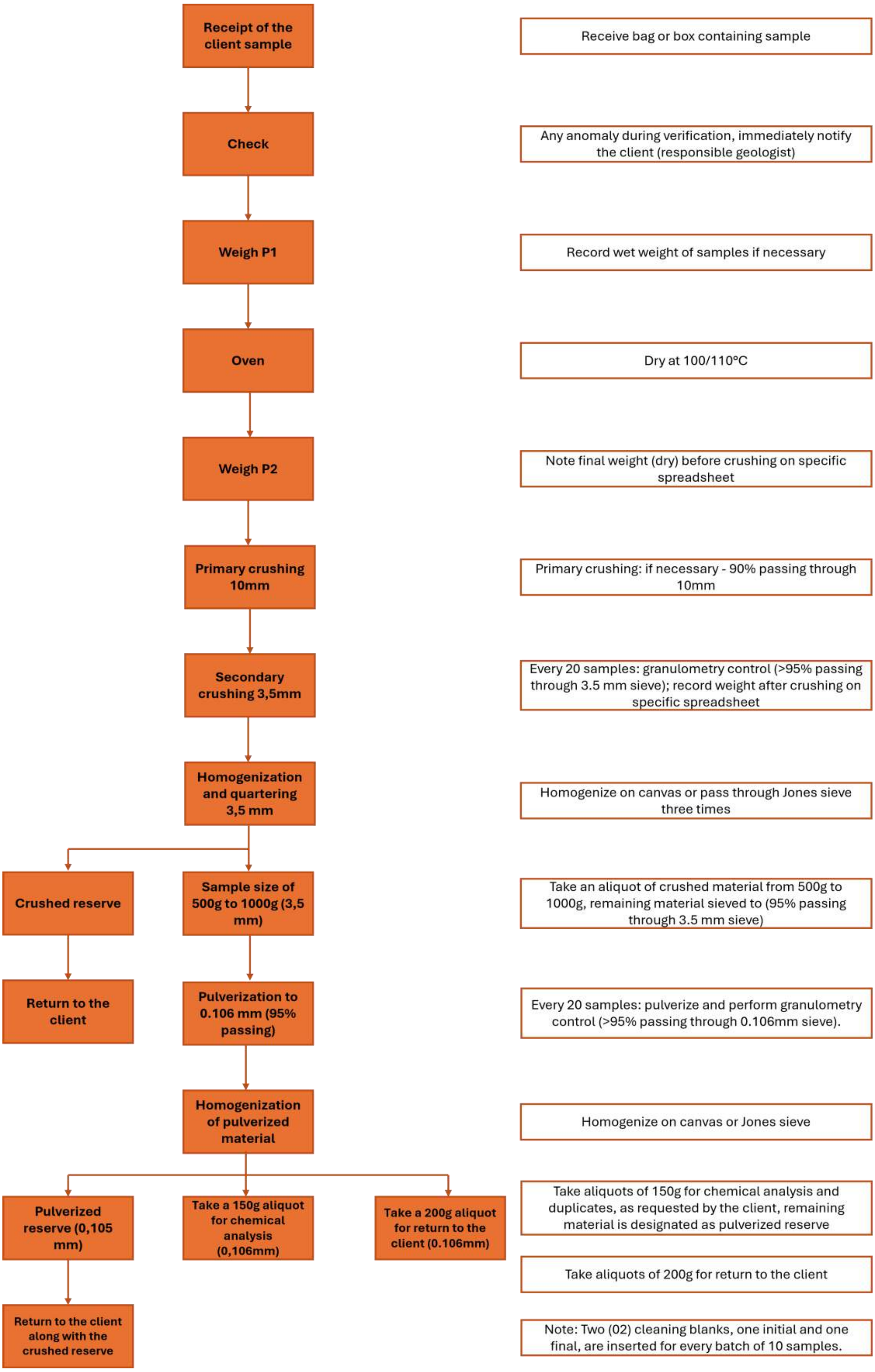


Figure 11-2 - Flowchart illustrating the sample preparation procedure used at Intertek Laboratory.
Source: Planalto Mineração, 2023.

11.5 Sample Analysis

After the sample preparation, the pulp samples were analyzed by SGS Geosol, ALS and Intertek laboratories. Table 11-1 below presents a summary of the analytical methods used in the three laboratories employed by Planalto Mineração.

Table 11-1 – Laboratories and Methods used by Planalto Mineração

Laboratory	***Methods Used***	***LAB Certification***
SGS Geosol	• AAS41B: Determination of elements by semi-total digestion — AAS — 0.25 g / 100 mL. • FAA505: Determination of Au by Fire Assay - AAS - 50 g Fusion • ICM40B: Determination by Multi-acid Digestion - ICP OES / ICP MS LD Cu – 0.5 ppm	• ISO 9001:2015 for Geological Samples certified by ABS Quality Evaluation INC, Texas (USA)
ALS	• ME-OG62: Ore Grade Elements - Four Acid ICP-AES LD Cu- 0.2 ppm • Cu-OG62: Ore Grade Cu - Four Acid • Au-ICP21: Au 30g FA ICP-AES Finish • ME-MS61: 48 elements four acid ICP-MS	• ISO 9001:2008 for Geological Samples certified by BSI Brasil
INTERTEK	• GA01: Determination of Cu by Acid Digestion / Atomic Absorption. LD 0.01%. • FA50Au: Determination of Au by Fire Assay / Atomic Absorption. LD 5 ppb.	• ISO 9001:2015 certified by INMETRO Brasil

All the analyses undertaken by SGS Geosol, ALS and Intertek laboratories were reported to Planalto Mineração on PDF format certificates, which were also accompanied by an MS Excel digital file. Figure 11-3 illustrates the sample assay in the SGS Lab.

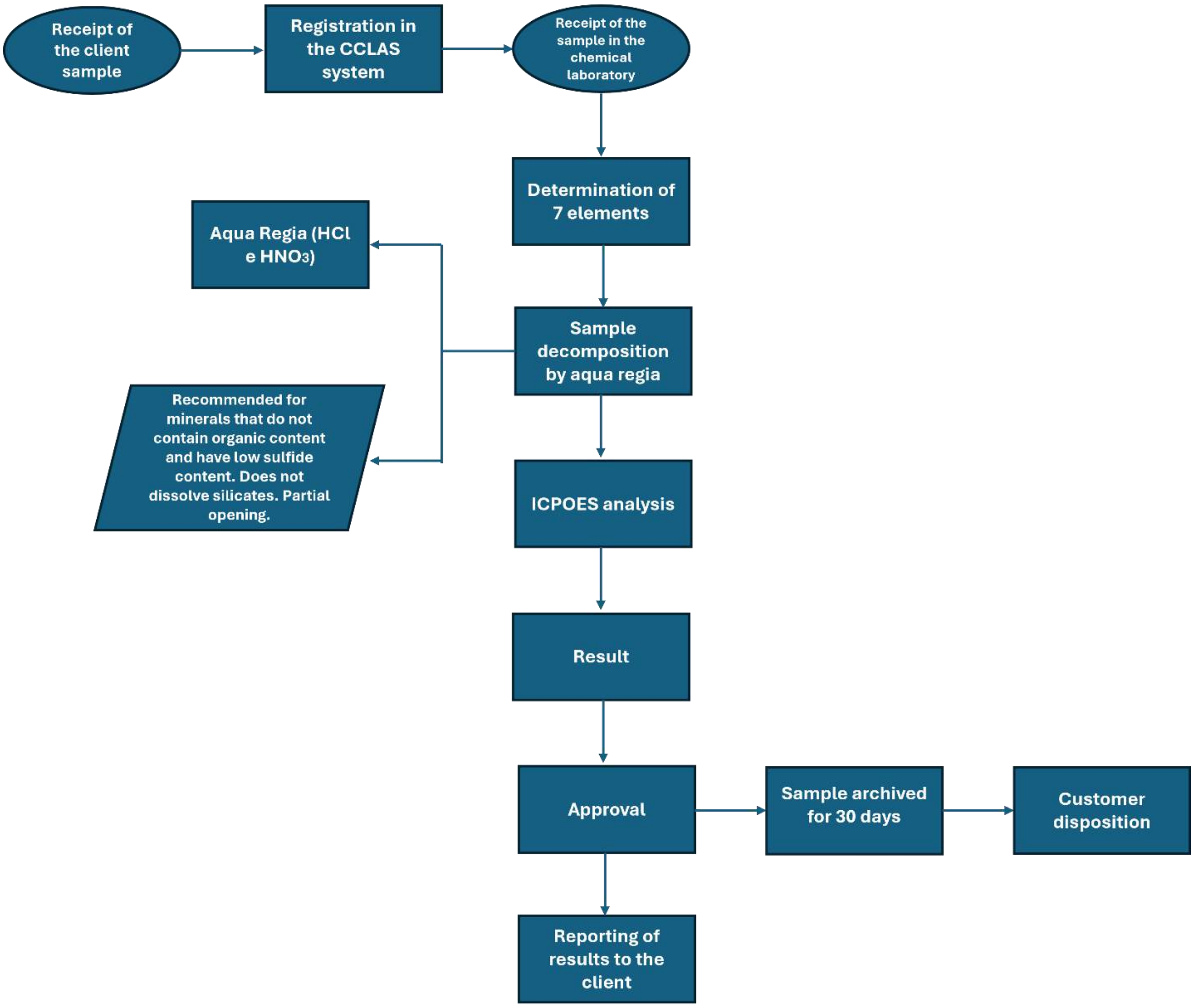


Figure 11-3 - Simplified flowchart of the sample preparation and analysis procedure used at SGS Geosol Laboratory for the ICPOES method

Source: Planalto Mineração, 2023.

11.6 Quality Assurance and Quality Control (QA/QC)

The QAQC program was applied to chemical analysis performed on samples with the aim of promoting procedures for controlling and guaranteeing the quality and reliability of the samples that are prepared and of the chemical analytical results that are obtained in the laboratory. The analysis of the QAQC data results generated in the period from 2017 to 2023 is presented in this section. The QAQC program includes blanks, standard reference materials, pulp duplicates and half-core duplicate samples (from diamond drill cores). Planalto Mineração QA/QC program represented 14.19% (1971 samples) of the total sample database and included 575 certified reference material samples, 566 blank samples and 830 duplicate samples, including pulp (423 samples) and half-core (423 samples) inserted in the batches (Table 11-2).

Table 11-2 - Planalto Mining QAQC Program - 2017 to 2023

Summary of QAQC - Planalto Mining		
QAQC Program	Number of samples	Planalto QAQC Samples x Planalto Drilling Database
Standards "CRM"	*575 samples*	4.14%
Preparation Blank	*566 samples*	4.07%
Duplicate (Pulp and halfcore)	*830 samples*	5.98%
Total Planalto QAQC Samples	**1971**	**14.19%**

Planalto Mineração inserted the QA/QC samples (blank, Standard Reference Material, half-core duplicate and pulp duplicate) individually at a rate of 1 of each sample for every 20 drill core samples submitted.

11.6.1 Preparation Blank

Blank material was inserted into the QA/QC sample stream in order to detect cross-contamination between samples during sample preparation. Over time there appears to be at least three different blank materials or a change in analysis method where the results show a very low quantity of results over the upper limit of 0.005% Cu (Figure 11-4). The results are considered inside acceptance limits for Mineral Resource classification purposes by the QP.

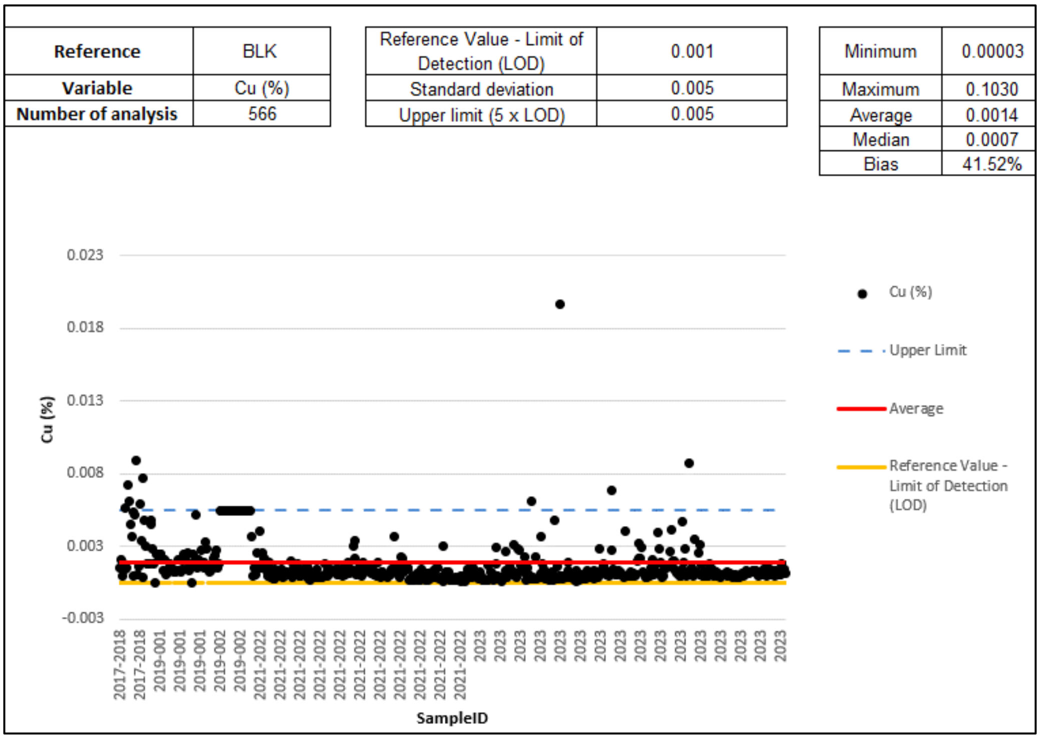


Figure 11-4: Blank Sample Results
Source: GE21, 2024.

11.6.2 *Certified/Standard Reference Material – CRM*

CRM samples used to support the 2017 to 2023 diamond drilling samples and the re-assayed samples from the historical drill holes were purchased from *Instituto de Tecnologia August Kekulé Ltda (ITAK)*, and Ore Research & Exploration P/L(OREAS) (Table 11-3).

Table 11-3 - ITAK and OREAS CRM Samples Used in QAQC Program – Cu and Au Analysis

CRM ID	***Expected Cu (%)***		***CRM ID***	***Expected Au (ppb)***
ITAK 821	0.3622		ITAK 607	248
ITAK 823	0.874		ITAK 649	264
ITAK 843	0.796		ITAK 653	1032
ITAK 844	0.323		OREAS111	2.37
OREAS 151a	0.166		OREAS151a	43
OREAS 506	0.444		OREAS 506	364
OREAS 507	0.622		OREAS 507	176
OREAS 520	0.293		OREAS 520	176
OREAS 524	2.53		OREAS 524	1540

- CRM results were verified upon receipt of laboratory test results. An CRM is considered to have failed the quality control testing if one CRM outcome surpasses triple the standard deviation, or
- Successive CRM samples exceed double the standard deviation

The laboratory should be contacted to determine the possible cause of the failure. In some cases, the samples before and after the CRM failure should be reanalyzed. The selection should extend halfway back and forward to the previous and successive CRM samples, respectively.

11.6.2.1 ITAK 821

Thirty-two CRMs ITAK 821 were used to support the Cu values from the samples submitted for analysis during 2017 to 2019. Thirty samples returned values of Cu within the acceptable range. Two assay results for copper were slightly outside of the acceptable limits (Figure 11-5).

Reference	ITAK 821
Variable	Cu (%)
Number of analysis	32

Reference Value	**0.3622**
Standard desviation	**0.0064**
Upper limit (+3SD)	0.3814
Lower limit (-3SD)	0.3430

Minimum	0.33
Maximum	0.38
Average	0.36
Median	0.36
Bias	-1.35%

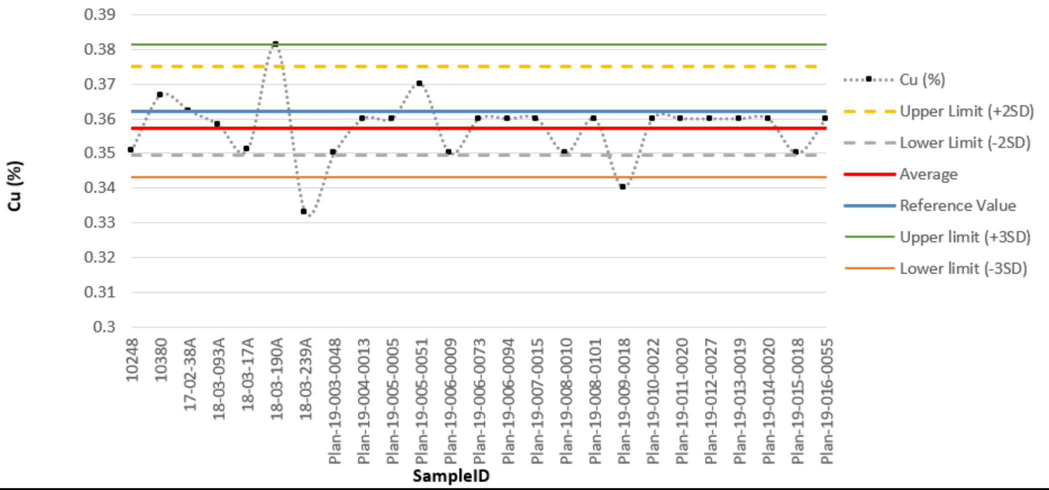


Figure 11-5: CRM Results for ITAK 821
Source: GE21, 2024.

11.6.2.2 ITAK 823

Forty-three CRMs ITAK 823 were used to support the Cu values from the samples submitted for analysis during 2017 to 2019. Forty-two samples returned values of Cu within the acceptable range. Only one result for copper was outside of the acceptable limits (Figure-11-6).

Reference	ITAK 823
Variable	Cu (%)
Number of analysis	43

Reference Value	**0.874**
Standard desviation	**0.025**
Upper limit (+3SD)	0.949
Lower limit (-3SD)	0.799

Minimum	0.82
Maximum	0.99
Average	0.90
Median	0.90
Bias	3.09%

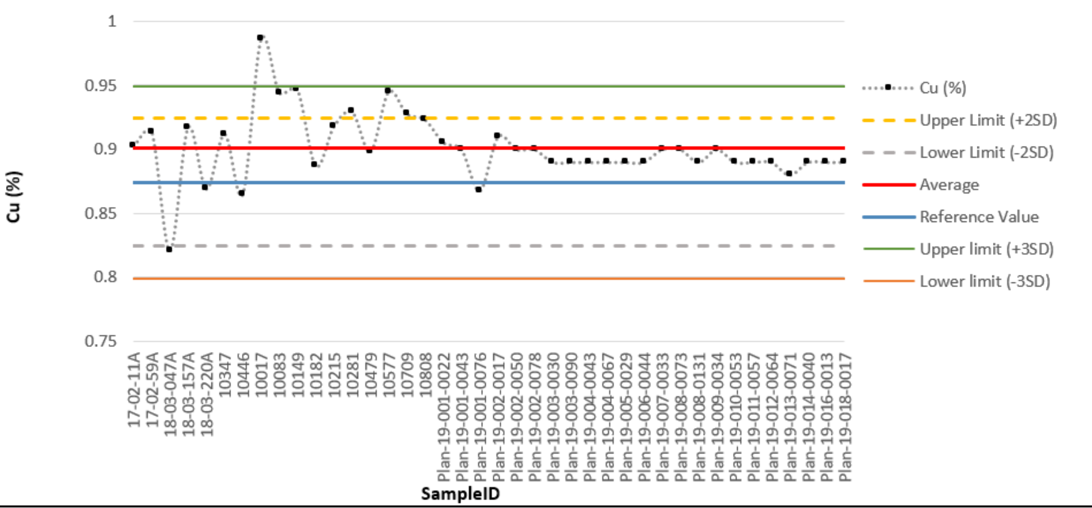


Figure-11-6: CRM Results for ITAK 823
Source: GE21, 2024.

11.6.2.3 ITAK 843

Six CRMs ITAK 843 samples were used to support the copper values from the samples submitted for analysis during 2019. Two assay results for Cu were outside of the acceptable limits (Figure 11-7). Overall, CRM ITAK-843 displays a slight tendency to overestimate the copper values. This issue could be caused by sample swaps, equipment calibration, or some other reasons that should be investigated. The quantity of these CRM inserted in the QA/QC program is not significant considering the number of samples contained in the database (6 samples) and compared to other CRM in the same grade range.

Reference	ITAK 843
Variable	Cu (%)
Number of analysis	6

Reference Value	0.796
Standard desviation	0.019
Upper limit (+3SD)	0.853
Lower limit (-3SD)	0.739

Minimum	0.81
Maximum	0.88
Average	0.85
Median	0.84
Bias	6.73%

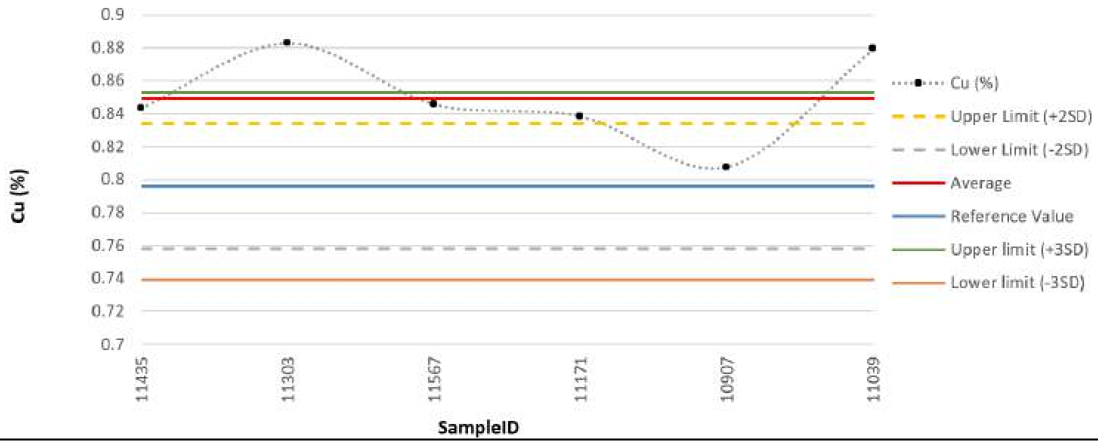


Figure 11-7: CRM Results for ITAK 843
Source: GE21, 2024.

11.6.2.4 ITAK 844

Five CRMs ITAK 844 were used to support the copper values from the samples submitted for analysis during 2019. Two assay results for Cu were outside of the acceptable limits (Figure 11-8). CRM ITAK-844 displays a slight tendency to overestimate the copper values. This issue could be caused by sample swapping, equipment calibration, among other reasons that must be investigated. The quantity of these CRM inserted in the QA/QC program is not significant for the database (5 samples), compared to other CRM in the same grade range.

Reference	ITAK 844
Variable	Cu (%)
Number of analysis	5

Reference Value	**0.323**
Standard desviation	**0.012**
Upper limit (+3SD)	0.359
Lower limit (-3SD)	0.287

Minimum	0.35
Maximum	0.36
Average	0.35
Median	0.36
Bias	9.84%

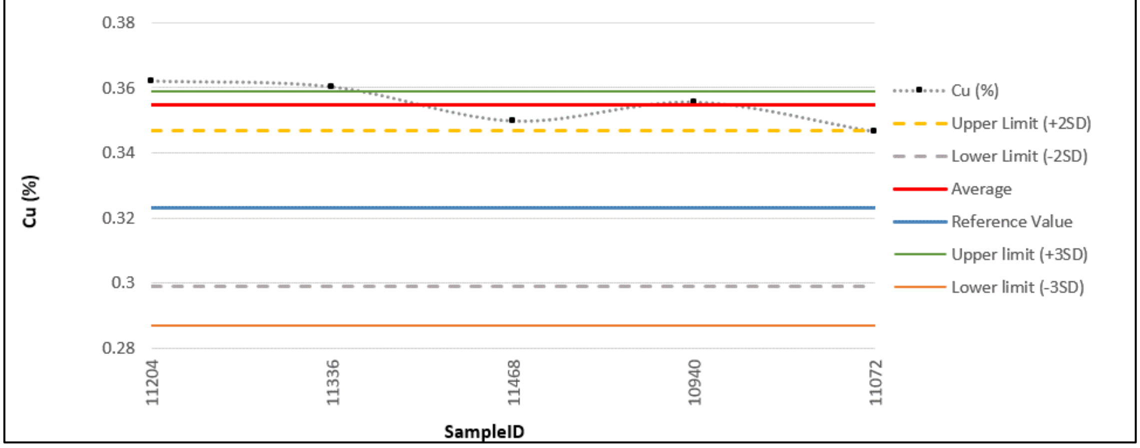


Figure 11-8: CRM Results for ITAK 844
Source: GE21, 2024.

11.6.2.5 OREAS 111

Fifty-two CRMs OREAS 111 were used to support the Cu values from the samples submitted for analysis during 2023. Considering the standard deviation of this CRM, all of the samples were considered within the acceptable limits (Figure 11-9). The reference standard deviation for this CRM sample is considered intermediate, with a 4.5% coefficient of variation. Based on the considerations above, the QP considers the results inside acceptance limits for Mineral Resource estimate.

Reference	OREAS 111
Variable	Cu (%)
Number of analysis	52

Reference Value	2.37
Standard desviation	0.11
Upper limit (+3SD)	2.70
Lower limit (-3SD)	2.04

Minimum	2.08
Maximum	2.51
Average	2.35
Median	2.36
Bias	-0.92%

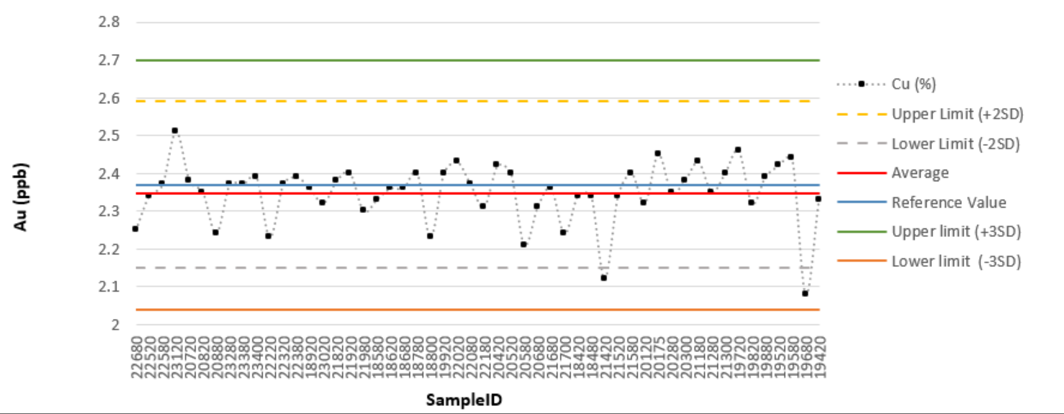


Figure 11-9: CRM Results for OREAS 111
Source: GE21, 2024.

11.6.2.6 OREAS 151a

One hundred and six CRMs OREAS 151a were used to support the Cu and Au values from the samples submitted for analysis during 2021 to 2023. All samples returned values of Au within the acceptable range (Figure 11-10).

Reference	OREAS 151a
Variable	Cu (%)
Number of analysis	106

Reference Value	0.166
Standard desviation	0.005
Upper limit (+2SD)	0.181
Lower limit (-2SD)	0.151

Minimum	0.15
Maximum	0.18
Average	0.17
Median	0.17
Bias	0.61%

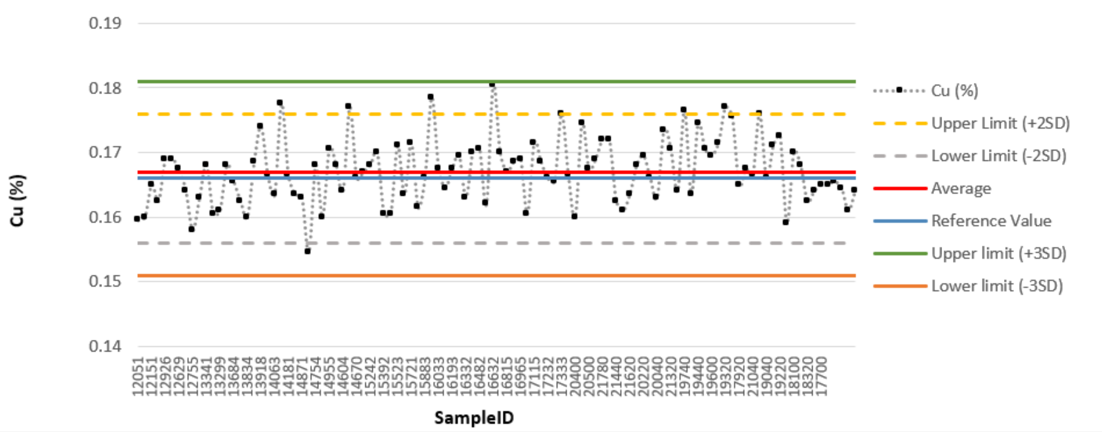


Figure 11-10: CRM Results for OREAS 151a – Cu
Source: GE21, 2024.

Reference	OREAS 151a
Variable	Au (ppb)
Number of analysis	106

Reference Value	43
Standard desviation	2
Upper limit (+3SD)	49
Lower limit (-3SD)	37

Minimum	35
Maximum	44
Average	41
Median	41
Bias	-5.53%

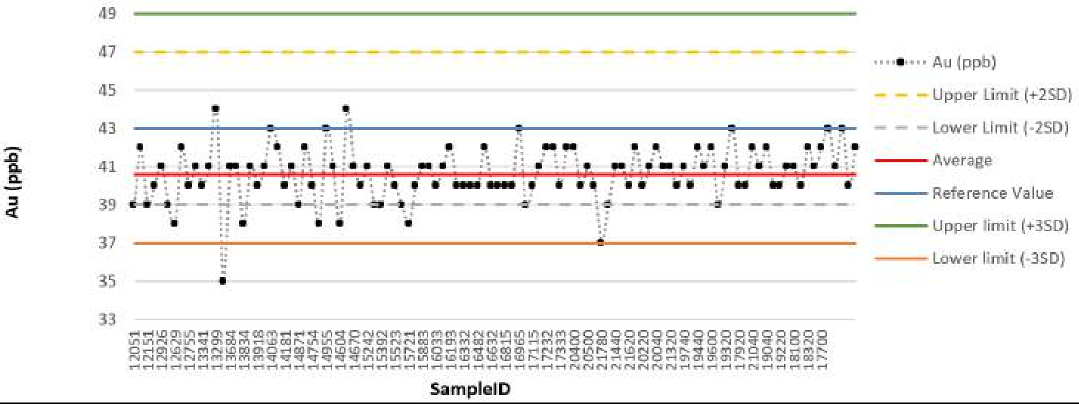


Figure 11-11: CRM Results for OREAS 151a – Au
Source: GE21, 2024.

11.6.2.7 OREAS 506

One hundred and twenty-four CRMs OREAS 506 were used to support the Cu and Au values from the samples submitted for analysis during 2021 to 2023. Three assay results for Cu exceed the acceptable limits (Figure 11-12). Only one gold sample exceeds the acceptable limits (Figure 11-13).

Reference	OREAS 506
Variable	Cu (%)
Number of analysis	124

Reference Value	0.444
Standard desviation	0.0100
Upper limit (+3SD)	0.474
Lower limit (-3SD)	0.414

Minimum	0.41
Maximum	0.48
Average	0.44
Median	0.44
Bias	-0.72%

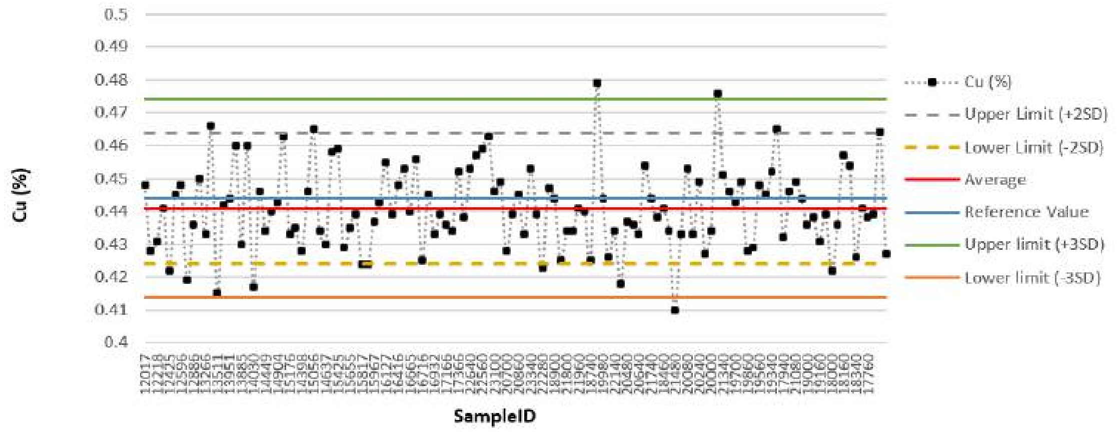


Figure 11-12: CRM Results for OREAS 506 – Cu
Source: GE21, 2024.

Reference	OREAS 506
Variable	Au (ppb)
Number of analysis	124

Reference Value	364
Standard desviation	10
Upper limit (+3SD)	394
Lower limit (-3SD)	334

Minimum	332
Maximum	385
Average	355
Median	355
Bias	-2.44%

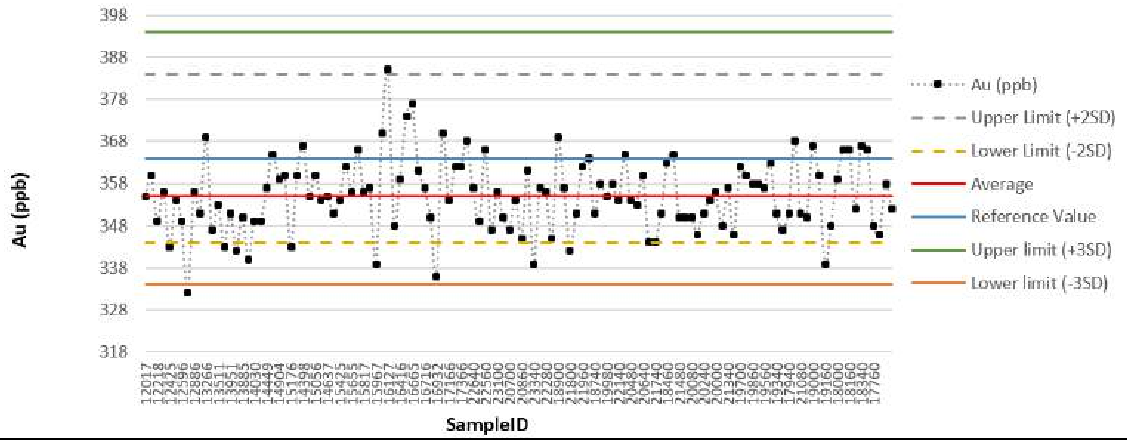


Figure 11-13: CRM Results for OREAS 506 – Au
Source: GE21, 2024.

11.6.2.8 OREAS 507

One hundred and twelve CRMs OREAS 507 were used to support the Cu and Au values from the samples submitted for analysis during 2021 to 2023. One hundred and nine samples returned values of Cu within the acceptable range. Two results for Cu were outside of the acceptable limits (Figure 11-14). All of the assay results for Au were within the acceptable limits (Figure 11-15).

Reference	OREAS 507
Variable	Cu (%)
Number of analysis	112

Reference Value	0.622
Standard desviation	0.013
Upper limit (+3SD)	0.661
Lower limit (-3SD)	0.583

Minimum	0.58
Maximum	0.68
Average	0.62
Median	0.62
Bias	-0.51%

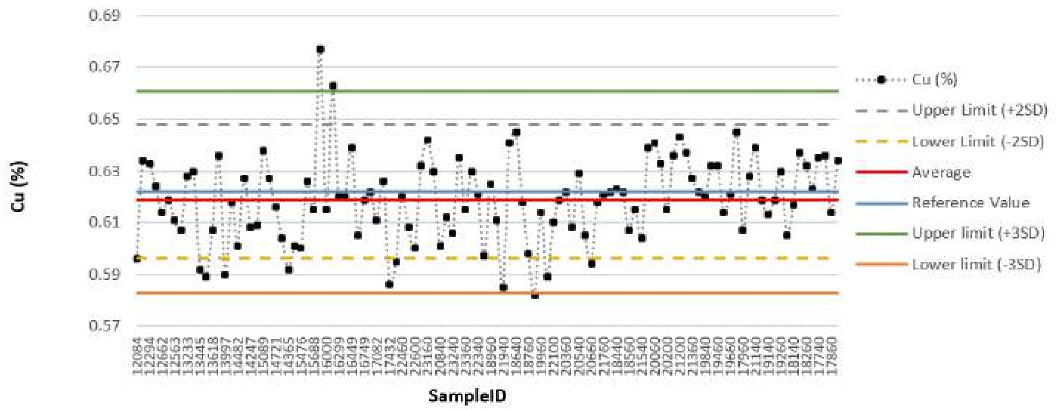


Figure 11-14: CRM Results for OREAS 507 – Cu
Source: GE21, 2024.

Reference	OREAS 507
Variable	Au (ppb)
Number of analysis	112

Reference Value	176
Standard desviation	6
Upper limit (+3SD)	194
Lower limit (-3SD)	158

Minimum	157
Maximum	185
Average	171
Median	171
Bias	-2.73%

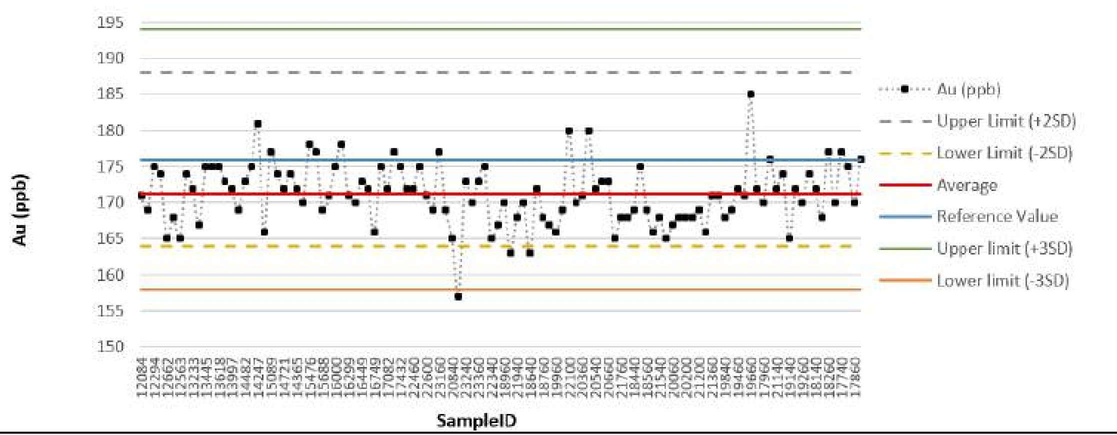


Figure 11-15: CRM Results for OREAS 507 – Au
Source: GE21, 2024.

11.6.2.9 OREAS 520

Twenty-six CRMs OREAS 520 were used to support the Cu and Au values from the samples submitted for analysis during 2023. All of the assay results for Cu and Au were within the acceptable limits (Figure 11-16 and Figure 11-17).

Reference	OREAS 520
Variable	Cu (%)
Number of analysis	26

Reference Value	0.293
Standard desviation	0.008
Upper limit (+2SD)	0.317
Lower limit (-2SD)	0.269

Minimum	0.28
Maximum	0.31
Average	0.30
Median	0.30
Bias	1.30%

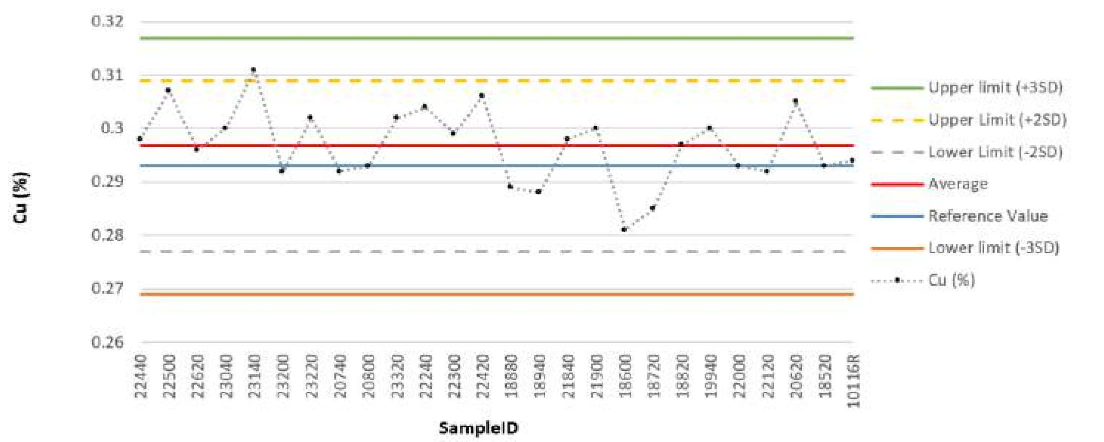


Figure 11-16: CRM Results for OREAS 520 – Cu
Source: GE21, 2024.

Reference	OREAS 520
Variable	Au (ppb)
Number of analysis	26

Reference Value	176
Standard desviation	8
Upper limit (+3SD)	200
Lower limit (-3SD)	152

Minimum	162
Maximum	181
Average	168
Median	168
Bias	-4.66%

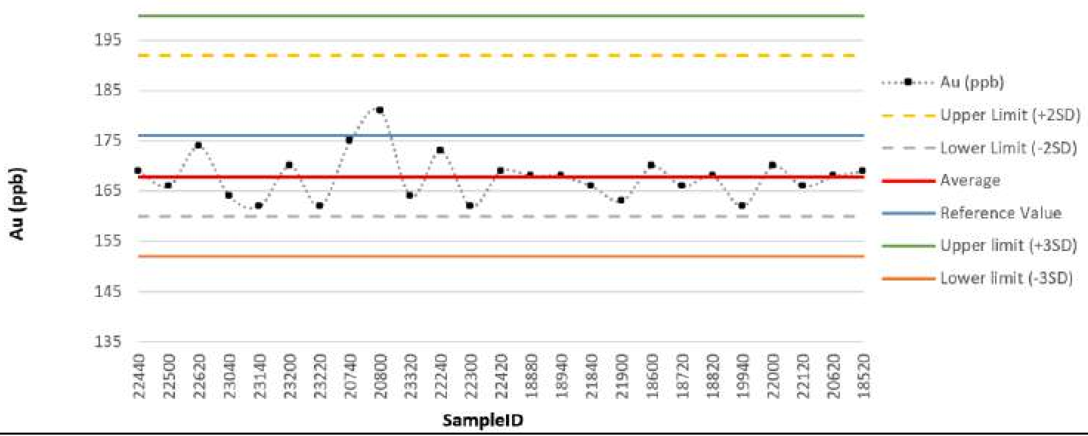


Figure 11-17: CRM Results for OREAS 520 – Au
Source: GE21, 2024.

11.6.2.10 OREAS 524

Thirty-five CRMs OREAS 520 were used to support the Cu and Au values from the samples submitted for analysis during 2021 to 2023. All samples returned values of Cu within the acceptable range. (Figure 11-18). Also, all of samples returned values of Au within the acceptable range. (Figure 11-19).

Reference	OREAS 524
Variable	Cu (%)
Number of analysis	35

Reference Value	2.53
Standard desviation	0.0440
Upper limit (+3SD)	2.662
Lower limit (-3SD)	2.398

Minimum	2.43
Maximum	2.63
Average	2.53
Median	2.55
Bias	0.05%

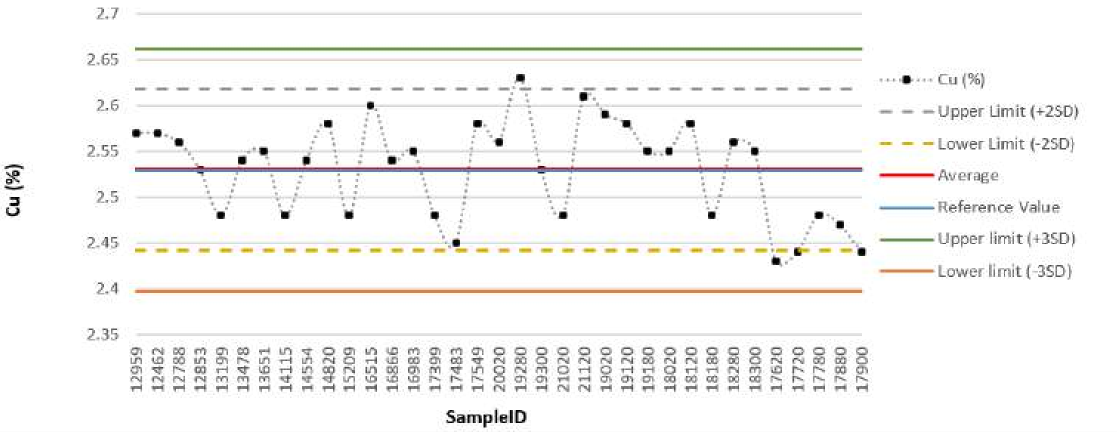


Figure 11-18: CRM Results for OREAS 524 – Cu
Source: GE21, 2024.

Reference	OREAS 524
Variable	Au (ppb)
Number of analysis	35

Reference Value	1540
Standard desviation	46
Upper limit (+3SD)	1678
Lower limit (-3SD)	1402

Minimum	1460
Maximum	1615
Average	1544
Median	1540
Bias	0.29%

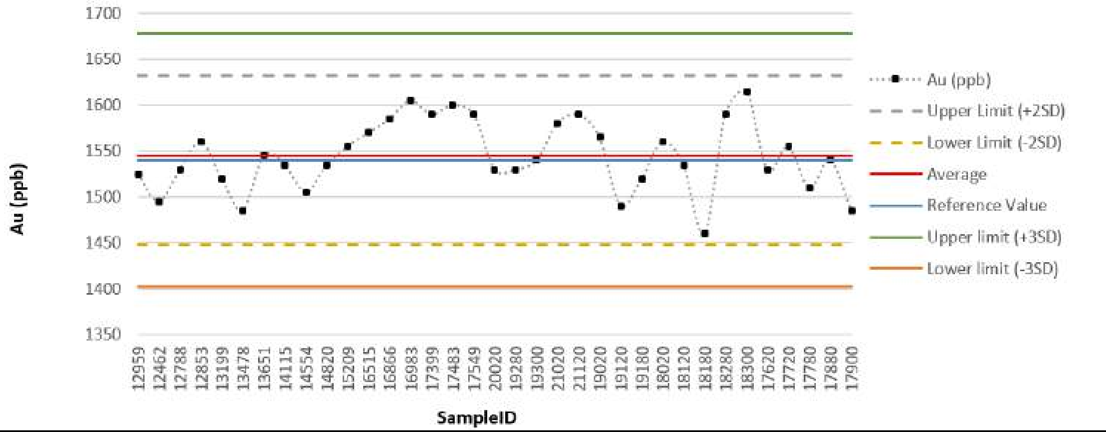


Figure 11-19: CRM Results for OREAS 524 – Au
Source: GE21, 2024.

11.6.2.11 ITAK 607

Nineteen CRMs ITAK 607 were used to support the Au values from the samples submitted for analysis during 2017 to 2019. Eighteen samples returned values of Au within the acceptable range. Only one assay result for Au was slightly outside of the acceptable limits (Figure 11-20).

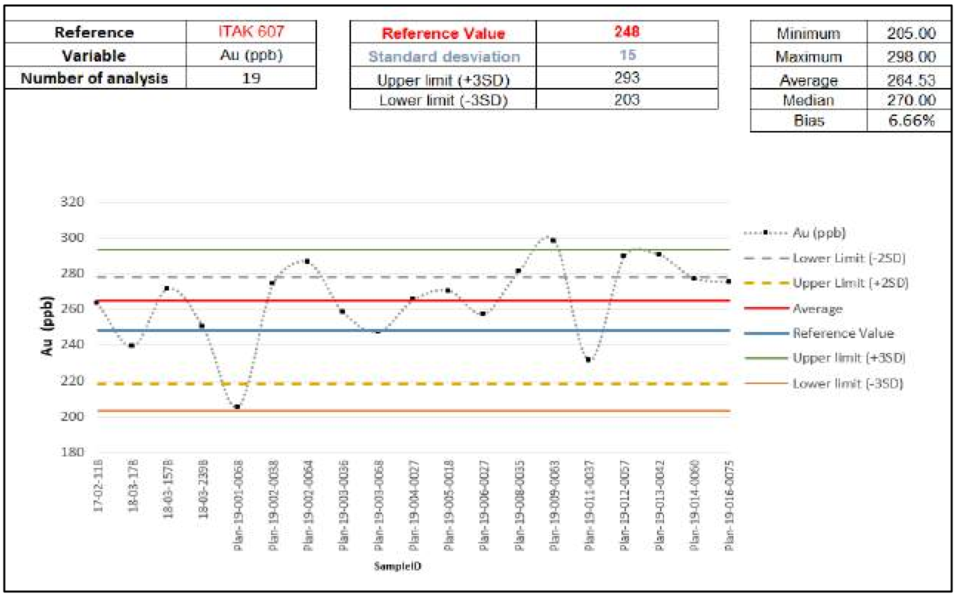


Figure 11-20: CRM Results for ITAK 607
Source: GE21, 2024.

11.6.2.12 ITAK 649

Ten ITAK 649 CRMs were used to support the drill hole samples submitted for analysis during 2019. All samples returned values of Au within the acceptable range (Figure 11-21).

Reference	ITAK 649	Reference Value	264	Minimum	251.00
Variable	Au (ppb)	Standard desviation	12	Maximum	281.00
Number of analysis	10	Upper limit (+3SD)	300	Average	263.40
		Lower limit (-3SD)	228	Median	261.00
				Bias	-0.23%

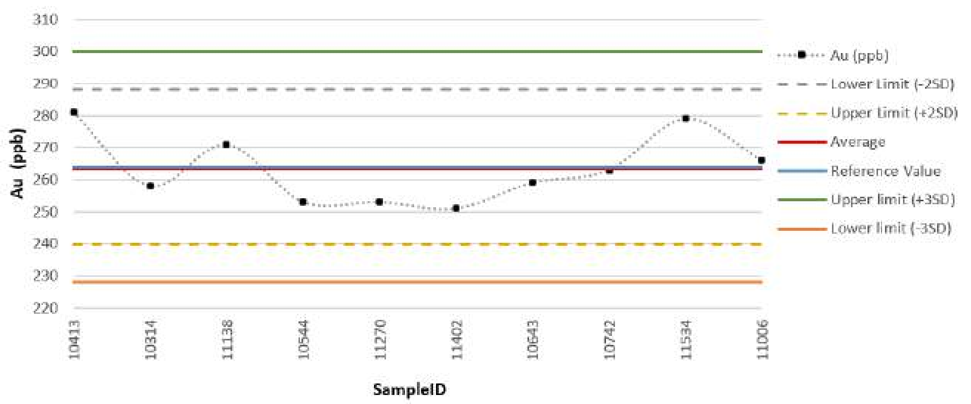


Figure 11-21: CRM Results for ITAK 649
Source: GE21, 2024.

11.6.2.13 ITAK 653

Five ITAK 653 CRMs were used to support the drill hole samples submitted for analysis during 2019. All samples returned values of Au within the acceptable range (Figure 11-22).

Reference	ITAK 653	Reference Value	1032	Minimum	1047
Variable	Au (ppb)	Standard desviation	36	Maximum	1130
Number of analysis	5	Upper limit (+3SD)	1140	Average	1095.4
		Lower limit (-3SD)	924	Median	1109
				Bias	6.14%

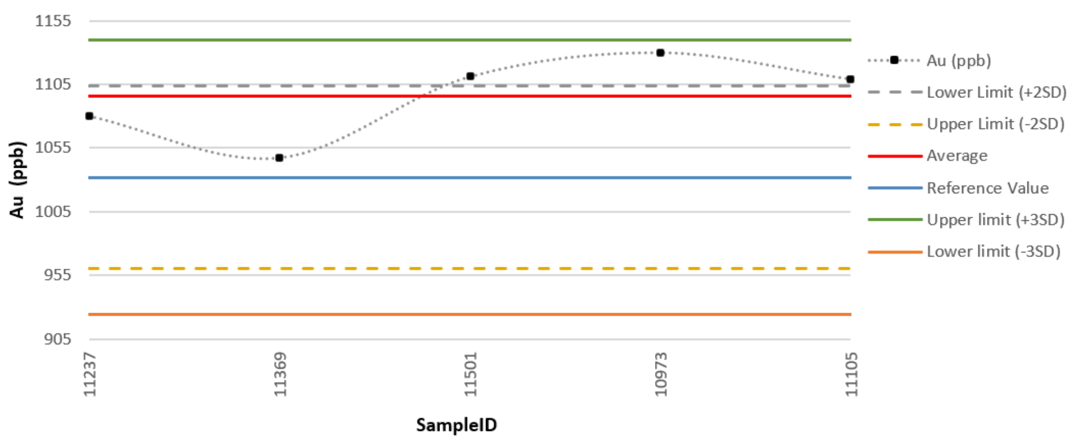


Figure 11-22: CRM Results for ITAK 653
Source: GE21, 2024.

11.6.3 Pulp Duplicates

The duplicate analysis objective is to control the effect of variance in the processes of sample preparation and chemical analysis, to evaluate analytical and sampling precision and identify possible sample changes. The typical QAQC program implemented at Planalto involves sending pulp duplicate samples to be assayed by SGS Geosol Laboratory, ALS Laboratory, and Intertek Laboratory.

The analysis of results of pulp duplicate samples applied an acceptance limit of 5% of the half of relative difference. The pulp duplicate results appear to be reasonably well correlated, for the duplicate analysis results for Cu. Some minor outliers are present (Figure 11-23). 85.3% of sample results are within acceptance limits.

Variable	Cu
Accuracy limit	5%
Number of pairs	423

	SAMPLE	DUPLICATE
Minimum	0.00	0.00
Maximum	2.02	2.06
Average	0.28	0.28
Median	0.17	0.17
Within the precision limit	85.34%	

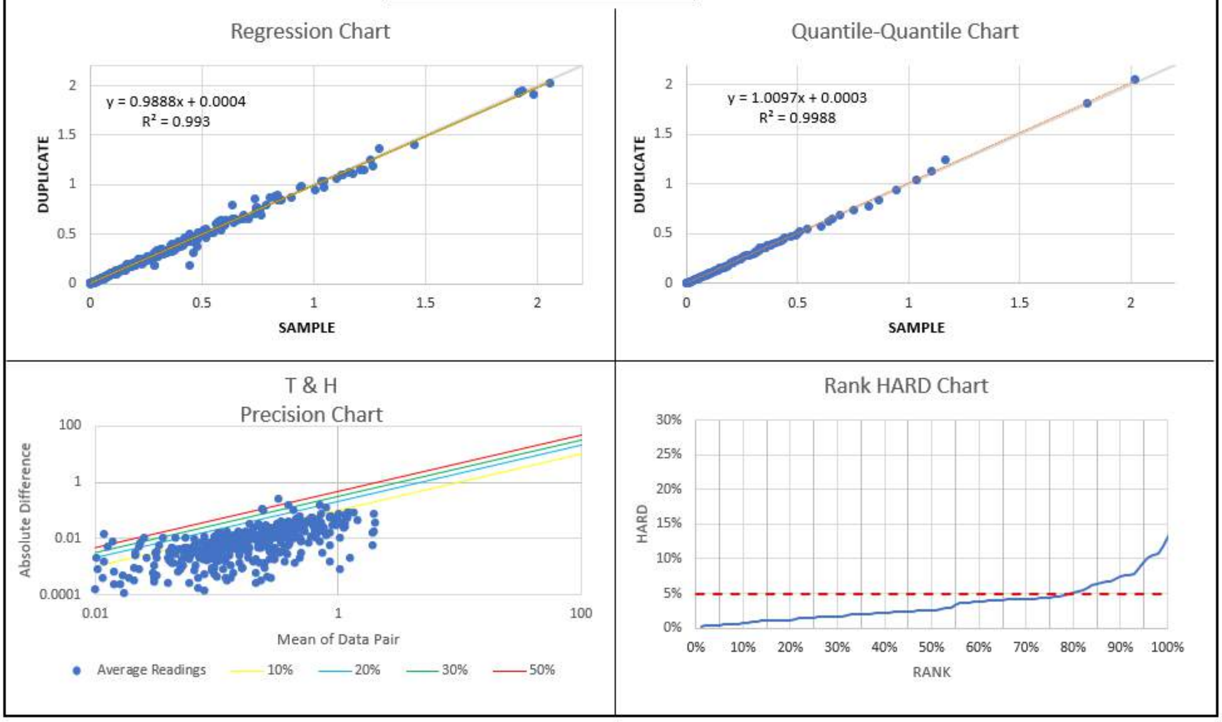


Figure 11-23: Results of the analysis of Cu for Pulp Duplicate
Source: GE21, 2024.

11.6.4 Half-core Duplicates

The remaining core (half-core) after splitting is re-split (quarter-core) and submitted as a duplicate sample to the laboratory. The typical QAQC program implemented at Planalto involves sending pulp duplicate samples to be assayed by SGS Geosol Laboratory, ALS Laboratory, and Intertek Laboratory.

The analysis of results of half-core duplicate samples considered an acceptance limit of 15% of the relative difference as a limit of acceptability. 100% of sample results are within acceptance limits (Figure 11-24).

Variable	Cu
Accuracy limit	15%
Number of pairs	407

	SAMPLE	DUPLICATE
Minimum	0.00	0.00
Maximum	2.35	1.89
Average	0.14	0.14
Median	0.07	0.07
Within the precision limit	100.00%	

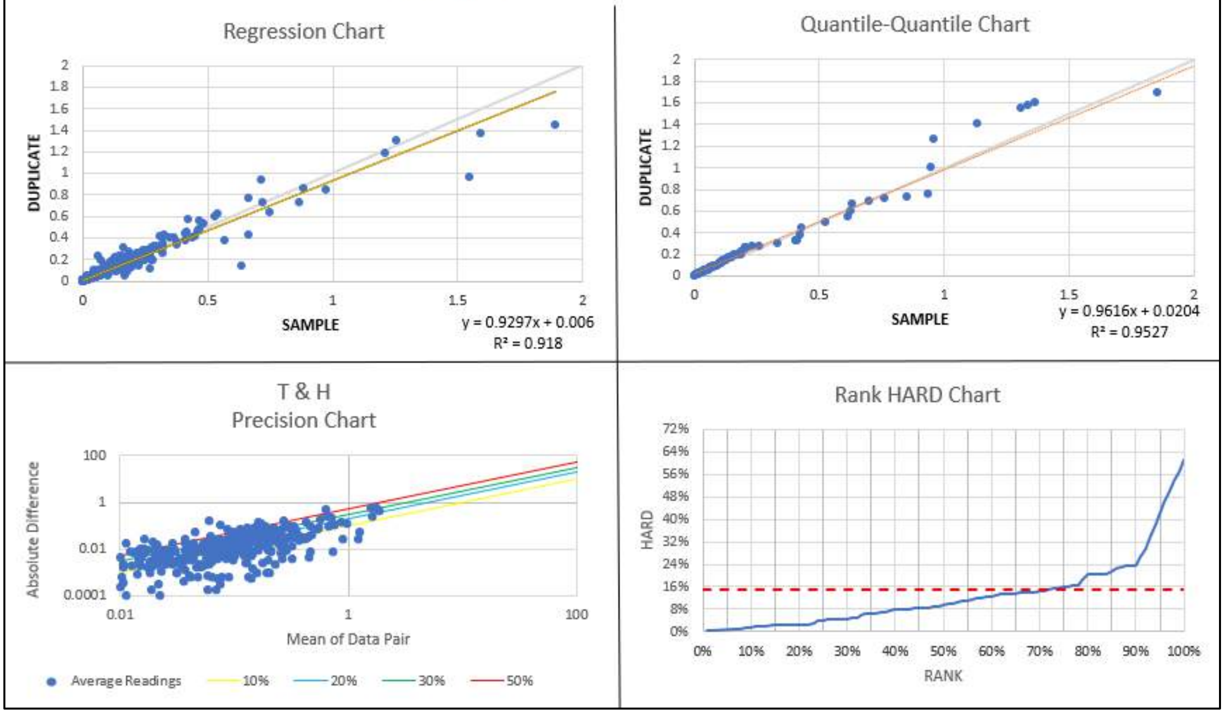


Figure 11-24: Results of the analysis of Cu for half core Duplicate
Source: GE21, 2024.

11.7 QP Opinion

The analysis results of CRM samples show a good level of accuracy at all grade ranges. CRM ITAK-843 and ITAK-844 are exceptions, but the quantity of these CRM inserted in the QA/QC program is not significant for the database (5 and 6 samples each one), compared to other CRM in the same grade range, and the QP considers the QAQC program results for CRM samples inside acceptance limits.

The Qualified Person considers that the sampling, sample preparation, security and analysis procedures applied, and results presented by Planalto Mineração and contracted companies are suitable for a Mineral Resource Estimation study. Quality Assurance procedures follow the industry's best practices, and Quality Control results are within industry standards and inside acceptance limits for quality of the assay information for Mineral Resource estimates.

12 DATA VERIFICATION

This section covers the data verification of the Planalto project's drilling, sampling, assay and survey procedures and quality control with results stored in database used for the Mineral Resource Estimate.

Data verification by the QP responsible for this section of the Technical Report, Leonardo de Moraes Soares who is a senior geologist from GE21, included one site visit between the 25th and 26th of April 2024. Planalto Mineração allowed unrestricted access to the Company's facilities and geological staff during this time. During the site visit, QP field checked mineralized outcrops, drillhole collar markers and visited the core shed, as well as a review of information about exploration results, sampling procedures, sampling preparation, chemical analysis, topographic and drillhole deviation surveys. Discussions were held in relation to geological and mineralization model interpretation. Data from selected drill holes (sample custody, assays, QA/QC program, downhole surveys, lithologies, alteration and structures) was also checked and discussed with Planalto Mineração technical team.

12.1 Planalto Mineração drilling

The exploration data was maintained and validated at the project site by the Planalto Mineração team. Physical copies of all the drill hole information and core boxes are managed and stored by the Planalto Mineração Team at the core shed and project office which is located at the same address in Canaã dos Carajás Town (Figure 12-1).

Rejects of crushed and pulverized samples returned from assay labs are also stored in the core shed (Figure 12-1 and Figure 12-2).

Figure 12-1: Drill core boxes in Canaã dos Carajás core shed. Rejects of crushed samples returned from assay labs are also stored in the core shed
Source: GE21, 2024.

Figure 12-2: Pulverized drillhole samples returned from assay labs stored in the core shed
Source: GE21, 2024.

12.2 Drillhole Logging

The geological logging of drill cores is carried out by the responsible geologists using a paper logging table and the subsequent data input into the official database by the same geologist.

Firstly, drill hole ID, target, date of logging and core diameter were recorded. Then the geologist describes the lithological types with delimiting intervals that are representative of lithological contacts, alteration structural information weathering condition and rock quality designation (RQD) at the logging time (Figure 12-3). A sampling plan is then generated from the database, including the QAQC samples to be inserted in the sample numbering sequence. Lithological contacts were marked on the core box with a blue or black pen, on the left side of the core.

Figure 12-3: Drillhole core box on logging bench

Source: GE21, 2024.

The style of mineralization and mineralogical characterization observed in drill cores was discussed by the QP and the Planalto Mineração technical team, the conceptual geological interpretation of the mineralization zones is considered as reliable for mineral resource estimate purposes.

In the opinion of Qualified Person, the geological logging is considered within the best practices of mineral industry, and it is appropriate to be utilized for geological modeling for Mineral Resources estimates.

Figure 12-4: Mineralized zones in drill core. High Copper grade zone (left image); and Metasomatite with local occurrence of chalcopyrite (right image).
Source: GE21, 2024.

12.3 Drilling Methods and procedures

A drill rig was not operating during site visit, the last drilling campaign was completed in 2023. Drilling methods and sampling procedures were verified with the Planalto Mineração technical team and are considered compliant with best mineral industry practices. Drill core boxes are correctly identified by aluminum plates with hole number, depth interval and box number. Runs are also well identified by aluminum plates with registered depth, run length and core recovery (Figure 12-5).

Drill core in fresh rock was half-split using a core saw (Figure 12-6). The left side of the dill core looking down downhole was stored in core box and the other half used for sampling.

Figure 12-5: Drill core box with aluminum plates with drill core box identification and run markers.
Source: GE21, 2024.

Figure 12-6: Photograph of drill core saw.
Source: GE21, 2024.

12.4 Style of Mineralization

The QP undertook a site visit to the Planalto project area to review outcropping mineralization, drill pads and collar locations. Field checks on Silica Cap Target zone outcrop and inspection of drill hole intercepts at the core shed were carried out by QP. It was possible to certify that the interpretation of mineralization model is compliant with the style of mineralization described on geological inspection (Figure 12-7). Fresh outcrops of the Homestead and Cupuzeiro targets are rare and were not found during site visit.

Figure 12-7: Outcrop of Silica Cap Target zone at Southern area of the project (left image) and granitic host rock (right image).
Source: GE21, 2024.

12.5 Collar Location Validation

All Planalto drill hole collar locations were surveyed using a GPS Geodetic method. The drill hole collar surveying measurements was undertaken by third party registered surveyors who were monitored and audited by Planalto Mineração geologists.

The QP inspected selected drill hole collar locations in the field. Coordinates registered on aluminum plates were compared with GPS coordinates and located on drillhole location map (Figure 12-8 and Figure 12-9). No discrepancies were identified by the QP.

Figure 12-8: Collar Location Validation – Drillhole PLAN-23-002.
Source: GE21, 2024.

Figure 12-9: Collar Location Validation – Drillhole PLAN-23-005.
Source: GE21, 2024.

12.6 Analytical Validations

The QP verified QA/QC sample storage at the Planalto core shed in Canaã dos Carajás. Internally prepared blank samples and externally prepared certified reference material samples used in the last drilling campaign were observed at the core shed that correspond to those used in the last drilling campaign at Planalto. (Figure 12-10 Figure 12-11).

Figure 12-10: Repository of Blank sample of quartz vein.
Source: GE21, 2024.

Figure 12-11: Standard samples – OREAS 506 and OREAS 520.
Source: GE21, 2024.

The QP selected two samples from drillhole PLAN-22-008 during the site visit for QP independent verification duplicate analysis. Samples of NQ diameter half core were selected and sawn in half to create quarter core samples in the presence of the QP. The Quarter core samples were inserted in a sample batch containing a blank sample and a standard sample by the QP and delivered personally to ALS lab in Parauapebas for analysis. Figure 12-12 shows the batch including selected samples, CRM sample and blank. Results of chemical analysis are presented on Table 12-1. Results are inside acceptance limits.

Table 12-1: QP check assay results for samples in drill hole PLAN-22-008.

BHID	FROM	TO	SAMPLEID	CU_PRC	AU_PPM	Sample_ID_Check	Cu_Check	Au_Check
	(m)	(m)		(%)	(g/t)		(%)	(g/t)
Plan-22-008	92.52	94.52	14372	**0.433**	**0.038**	20954	**0.392**	**0.037**
CRM OREAS 520				**0.293**	**0.176**	20955	**0.302**	**0.179**
Plan-22-008	94.52	96.45	14373	**0.603**	**0.06**	20956	**0.649**	**0.053**
Blank Sample						20957	**0.001**	**<0.001**

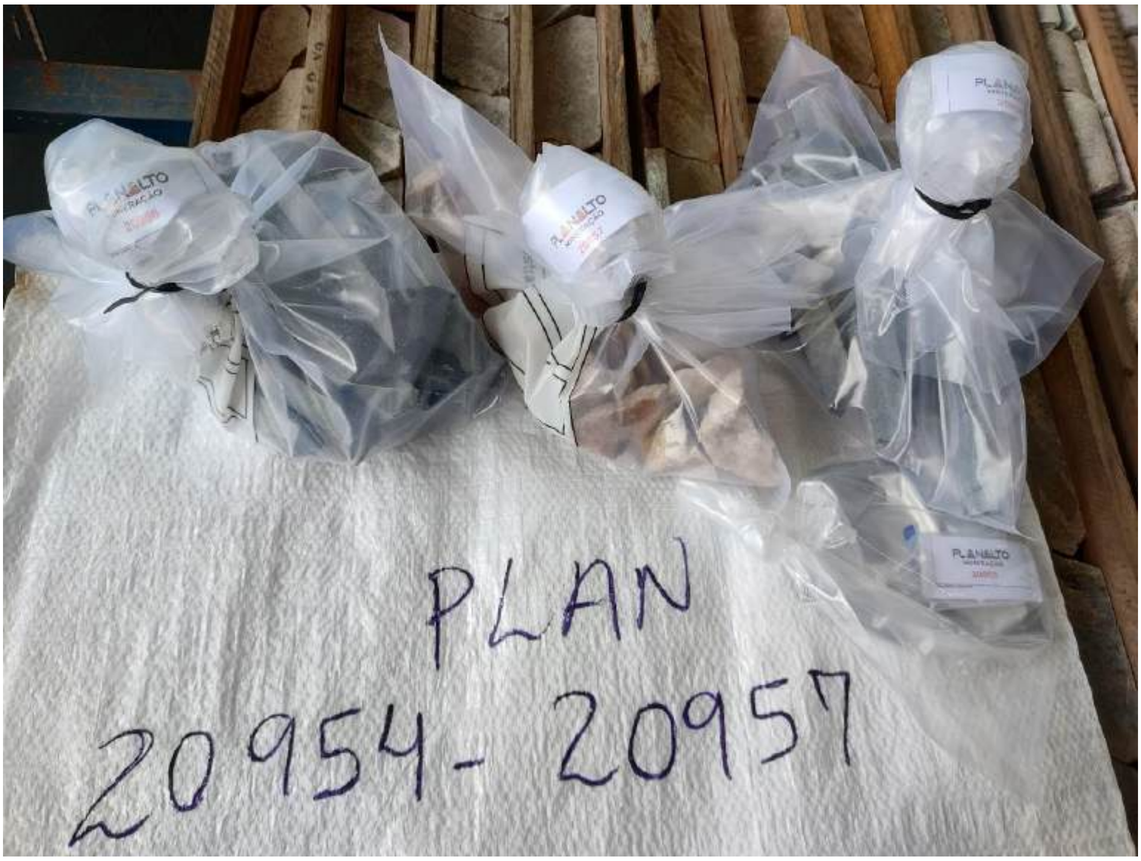


Figure 12-12: Two samples selected by QP for duplicate checking during site visit.
Source: GE21, 2024.

Analytical validations, including the QAQC program and analysis of results presented in Chapter 11 of this report were discussed with the Planalto Mineração technical team during the technical visit. All the QAQC procedures are considered to be best industry practices, and the results are considered within acceptance limits by the QP.

12.7 Qualified Person's Opinion

The QP has reviewed the adequacy of the exploration information and the visual, physical, and geological characteristics of the property and has found no significant issues or inconsistencies that would cause one to question the validity of the data. The QP is satisfied to include the exploration data including the drilling, drill litho-logs, and sample assays for the purpose of resource modelling, evaluation and estimations as presented in this report.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Metallurgical testwork was performed by Blue Coast Research Ltd. Vancouver Island, BC, Canada. BlueCoast executed a preliminary metallurgical program on three sample composites from the Homestead deposit in 2020-2021 and late in 2023 on two composites from the Cupuzeiro deposit. The purpose of this preliminary testwork was to characterize the mineralogy and to determine if a commercial grade copper concentrate can be produced via a conventional flotation process.

The northing coordinate of 9295400N was defined as the divide between the two deposits for the purposes of this metallurgical testwork.

13.2 Homestead deposit Composites

13.2.1 Sampling for Chemical and Mineralogical Characterization

Drillhole samples spanning the mineralized zone were selected and composited by levels, excluding the top layer of saprolite. Figure 13-1 illustrates a long section view of the Planalto Homestead drillhole samples. Colors identify samples at the same level

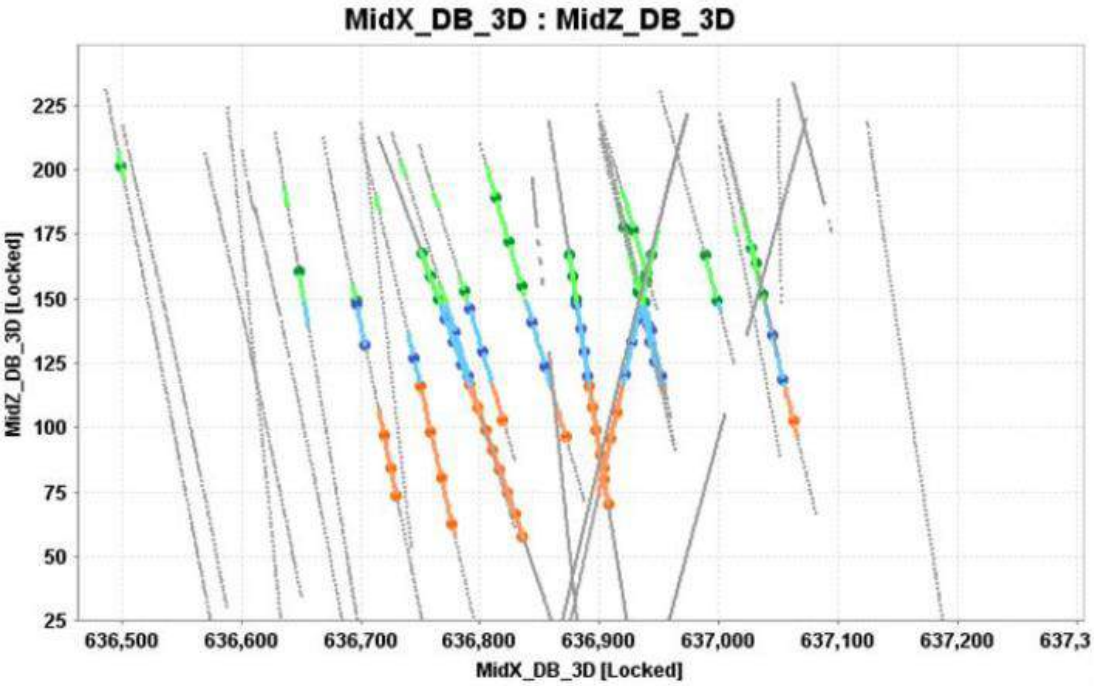


Figure 13-1: Long section view of the Planalto Homestead drillhole samples
Source: Lara Internal Report, 2023.

The head assays for the master composite and three elevation composites tested in this program are summarized in Table 13-1.

Table 13-1: Chemical analysis results for sample composites .

Composite ID	Assays				
	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)	S (%)
PL-3MC Comp	0.04	0.4	0.51	7.50	0.57
PL-3U Comp			0.50	8.67	0.54
PL-3M Comp			0.46	7.38	0.52
PL-3L Comp			0.58	7.33	0.70

Modal mineralogy showed that the predominant sulfide mineral contained in the Homestead composites was chalcopyrite (1.5% to 2.2%), with minor amounts of pyrite, and trace amounts of galena and sphalerite. Most of the non-sulphide gangue was comprised of quartz, feldspar, biotite, and chlorite. Figure 13-2 shows the modal mineralogy for Homestead master composite.

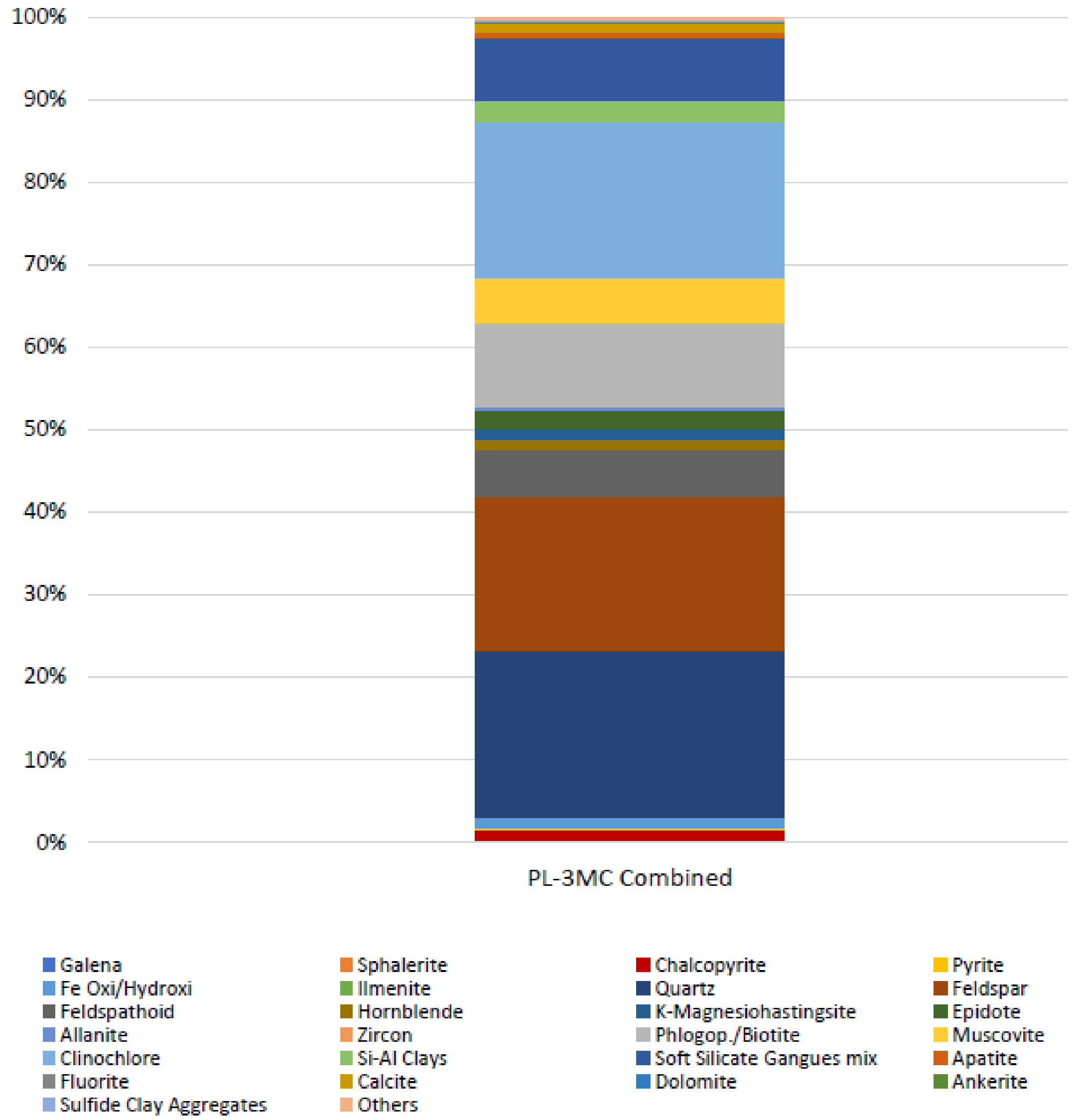


Figure 13-2: Modal mineralogy for Homestead composites.
Source: Lara Internal Report, 2023.

Mineral liberation indicates that at 90% passing in 107µm, 55% of the chalcopyrite is liberated, at

90% of mineral exposure. It is recommended a primary grind size of 80% passing 75µm and 20µm for regrinding. In the Figure 13-3, an indication of the particle liberation for each size.

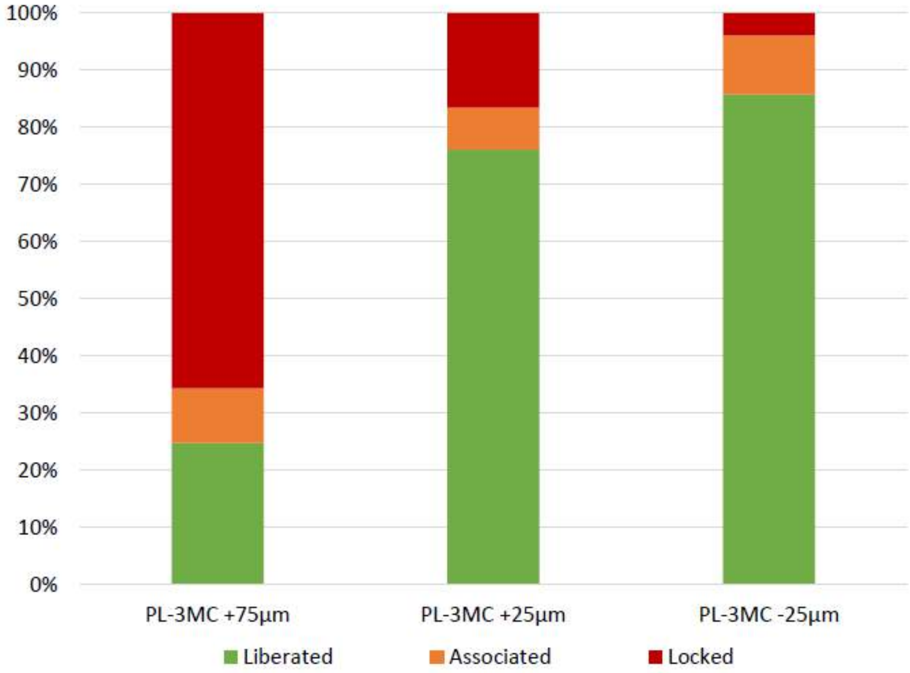


Figure 13-3: Chalcopyrite by grind size.
Source: Lara Internal Report, 2023.

Comminution test work carried out in the three composites indicates that material is hard, with BWi ranging from 18.5 kWh/t to 20.0 kWh/t, at a closing screen size of 106μm. Table 13-2 summarizes the results.

Table 13-2: Homestead Bond Work Index

Sample ID	F_{80} (µm)	P_{80} (µm)	Grams per Revolution	BWI (kWh/t metric)	Category
PL-3U	1973	83	1.03	18.7	Hard
PL-3M	1827	82	0.96	20.0	Hard
PL-3L	2171	83	1.03	18.5	Hard

13.2.2 Concentration Test Work

A total of eight (8) batch flotation tests and one (1) Locked-cycle test (LCT) were conducted in this program. The flotation program can be divided into three major parts: master composite optimization, elevation composite verification, and locked-cycle testing. A simple flowsheet was tested throughout this flotation program. The process route for flotation test works is presented in the simplified diagram flowsheet in Figure 13-4.

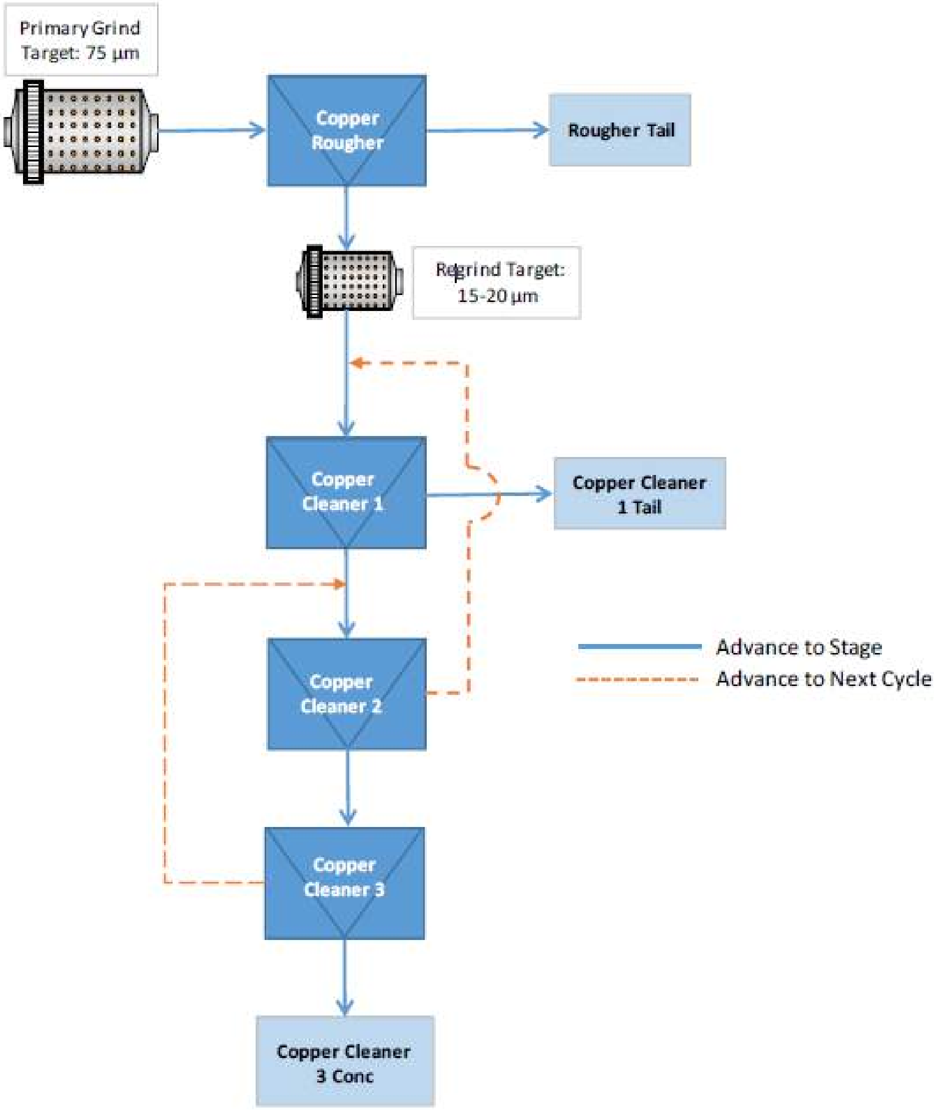


Figure 13-4: Simplified flowsheet for flotation test work for Homestead.
Source: Lara Internal Report, 2023.

Table 13-3 summarizes the results of the tests.

Table 13-3: Flotation test work flowsheet.

Product	Weight		Assays					% Distribution				
	g	%	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)	S (%)	Au	Ag	Cu	Fe	S
Cu Cleaner 3 Conc	91.2	1.52	1.79	27	28.9	28.4	32.4	43.8	95.2	90.6	5.36	87.3
Cu Cleaner 1 Tail	700.9	11.6	0.04	0.2	0.10	8.52	0.25	6.97	4.8	2.44	12.4	5.25
Cu Rougher Tail	5225.5	86.8	0.03	0.0	0.04	7.59	0.05	49.2	0.0	6.99	82.3	7.46
Calculated Head	6017.6	100.0	0.06	0.4	0.48	8.01	0.56	100.0	100.0	100.0	100.0	100.0

From the tests, it is possible to assume that a concentrate with a saleable copper content of over

26% is feasible, with a copper recovery of 90%. The main opportunities for improvement to be investigated are:

- Reducing the primary grind size from 80% passing ~106µm to 80% passing ~75µm which increased the copper rougher recovery by ~3.5% (from 90% to 93.5%).
- A regrind size of approximately 15µm produced final copper concentrate grades ranging from 27 – 30%.
- The composites by level achieved very similar metallurgical performance to the master composite in batch testing, showing repeatability in the flowsheet and in the material.
- The Locked-Cycle test (LCT) conducted on the Homestead master composite (PL-3MC) was successful in achieving 90% copper recovery to a final concentrate grading approximately 29%.

A super panner test was conducted on the final copper concentrate of LCT-1 to assess its amenability to gravity upgrade. The super panner tip recovered approximately 22% of the gold and upgraded it from 1.79 g/t to 139 g/t.

13.2.3 Recommendations

The following recommendations are made for future consideration:

- Conduct an expanded variability flotation program to explore the relationship between gold and copper recovery versus head grade, mass pull, liberation.
- Explore a wider variety of collectors for copper flotation.
- Conduct an expanded grindability program to better determine ore variance with regards to power consumption and equipment wear.
- Evaluate variability samples in closed circuit (Locked-Cycle) testing.
- Further explore gravity concentration in the copper concentrate for opportunities to upgrade gold to a higher payable stream.

13.3 Cupuzeiro Deposit Composites

13.3.1 Samples for Chemical and Mineralogical Characterization

One Master Composite and two grade composites were prepared for testing in this program. Head assays are summarized in Table 13-4.

Table 13-4: Cupuzeiro composite head analysis

Composite ID	Assays			
	Au (g/t)	Cu (%)	Fe (%)	S_{tot} (%)
Master Composite	0.08	0.46	8.69	0.70
Low Grade Composite	0.04	0.34	8.49	0.43
High Grade Composite	0.09	0.85	9.29	1.52

Modal mineralogy showed that the predominant sulfide mineral contained in the Cupuzeiro composites was chalcopyrite (1.5% to 2.2%), with minor sulfide gangue of pyrite. Trace amounts of sphalerite and pyrrhotite were found. Most of the non-sulphide gangue was comprised of quartz, feldspar, biotite, and chlorite. Figure 13-5 shows the modal mineralogy for Cupuzeiro composite.

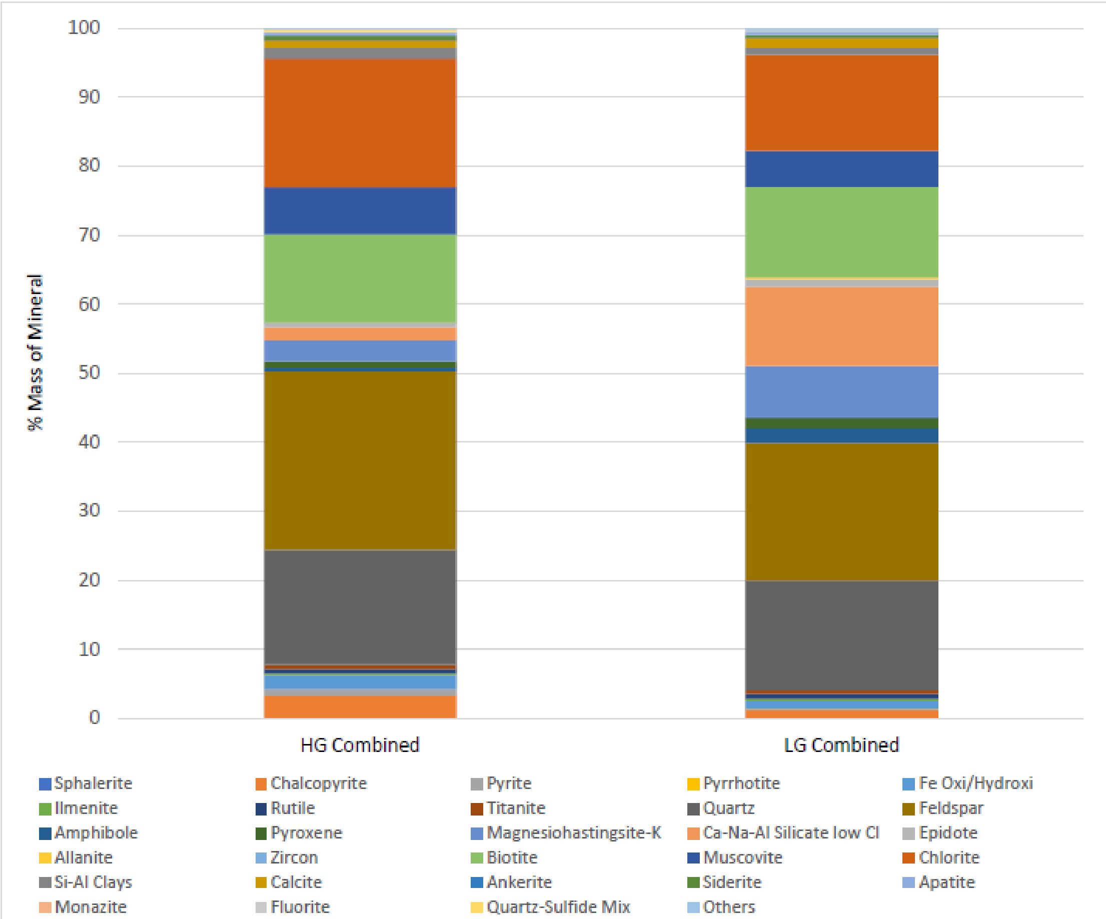


Figure 13-5: Modal mineralogy for Cupuzeiro composites
Source: Lara Internal Report, 2023.

Mineral liberation indicates that at 80% passing in 100µm, 60% of chalcopyrite is liberated, at 90% of mineral exposure. The chalcopyrite is moderately fine grained with a median particle size of 30µm. The non-liberated particles are associated with non-sulfide gangue. In the Figure 13-6, an indication of the particle liberation for each size.

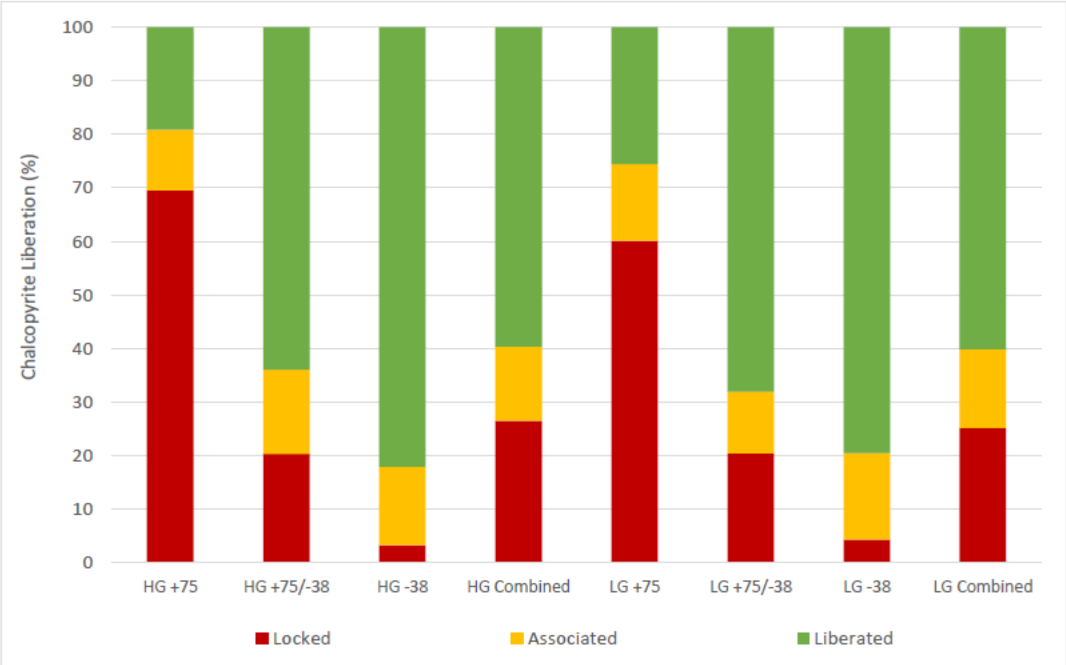


Figure 13-6: Size by size chalcopyrite liberation
Source: Lara Internal Report, 2023.

Comminution test work carried out in the three composites indicates that material is hard, with BWi averaging 19.0 kWh/t, at a closing screen size of 106μm. Table 13-5 summarizes the results.

Table 13-5: Bond Ball Work Index test results

Composite ID	Bulk Density (g/cm³)	F_{80} (µm)	P_{80} (µm)	Grams per Revolution	BWI (kWh/t metric)	Category
High Grade Composite	2.71	2128	80	0.97	19.1	Hard
Low Grade Composite	2.70	1956	79	0.99	18.8	Hard

13.3.2 Concentration Test Work Flotation tests

A total of fifteen (15) batch flotation tests and one (1) Locked-cycle test (LCT) and one (1) Full Kinetic Test (FKT) were conducted for this metallurgical program. The process route for flotation test works is presented in the simplified diagram flowsheet in Figure 13-7.

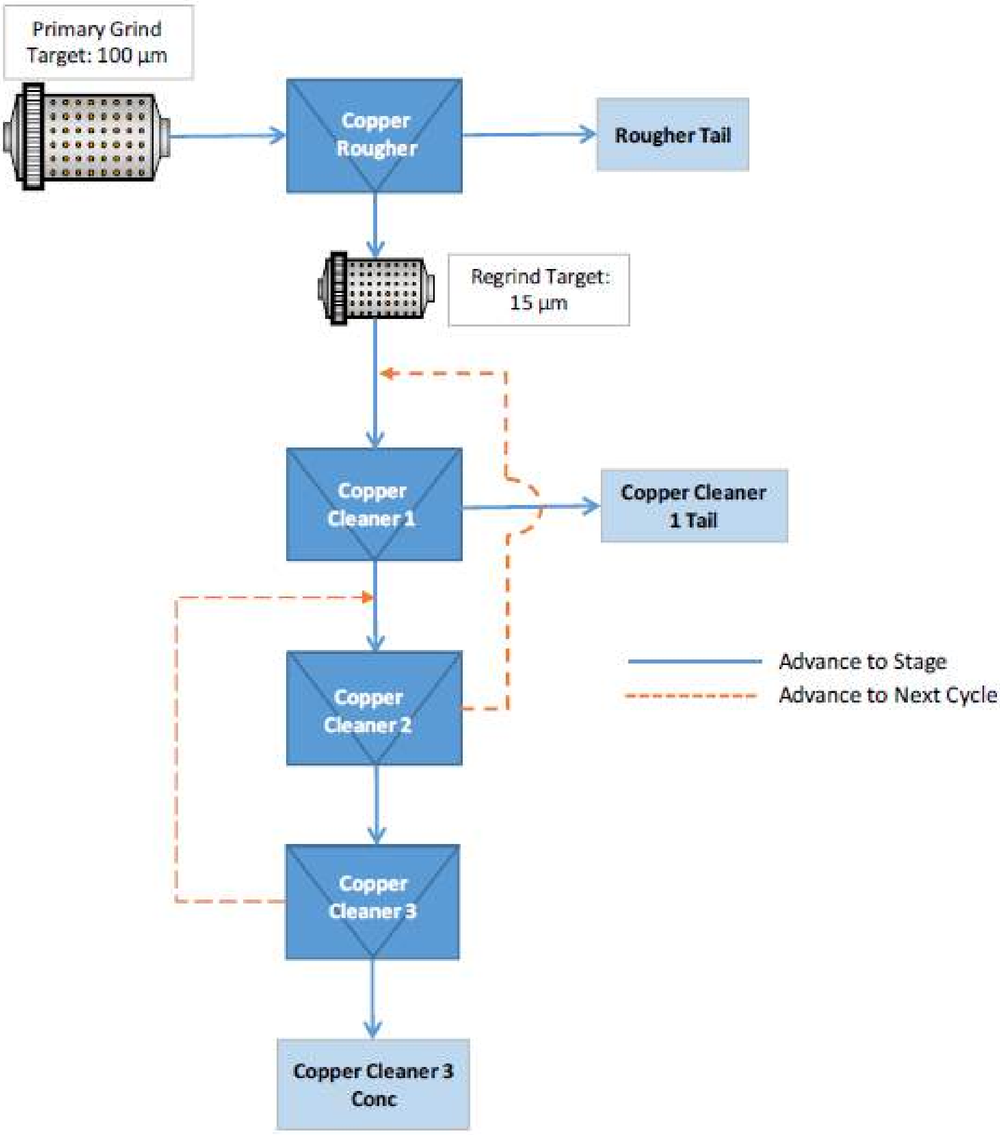


Figure 13-7: Simplified flowsheet for flotation test works.
Source: Lara Internal Report, 2023.

Table 13-6 summarizes the results of the tests.

Table 13-6: Flotation locked cycle test results - Cycles 4-6.

Product	Weight		Assays				% Distribution			
	g	%	Au (g/t)	Cu (%)	Fe (%)	S (%)	Au	Cu	Fe	S
Cu Cleaner 3 Conc	92.6	1.54	2.59	26.2	27.5	30.7	68.1	84.6	4.6	67.4
Cu Cleaner 1 Tail	396.6	6.6	0.11	0.37	10.4	2.42	12.5	5.1	7.5	22.8
Cu Rougher Tail	5533.5	91.9	0.01	0.05	8.81	0.07	19.4	10.3	87.9	9.8
Calculated Head	6022.7	100.0	0.06	0.48	9.20	0.70	100.0	100.0	100.0	100.0

From the tests, it is possible to assume that a concentrate with a saleable copper content of over 26% is feasible, with a copper recovery of around 85%. The main opportunities for improvements to be investigated are:

- Reducing the primary grind size from approximately 80% passing 100μm to 80% passing 60μm increased the copper rougher recovery by 4% (from 88% to 92%).
- A regrind size of approximately 15μm produced final copper concentrate grades greater than 25% copper.
- The High-Grade and Low-Grade composites achieved very similar metallurgical performance to the Master Composite in batch testing, showing repeatability in the flowsheet and in the material.
- The Locked-Cycle test (LCT) conducted on the Cupuzeiro Master Composite was successful in achieving 85% copper recovery to a final concentrate grading approximately 26% copper with 2.6g/t gold at 68% gold recovery.

14 MINERAL RESOURCE ESTIMATES

Geological interpretation and modelling of copper and gold mineralization was undertaken by the Planalto Mineração technical team. Initial modeling of the mineralization using drill hole data was undertaken on east-west oriented sections to define mineralization continuity within and between sections, while taking account of structure, alteration and lithology. A 0.3% copper grade shell for modelling purposes was identified as providing a good level of continuity of mineralization within and between sections and was also a visual threshold of a generalized change to a lower grade copper mineralization in down hole drill hole samples. The Planalto Mineração technical team developed a three-dimensional mineralization model using a 0.3% copper cut-off grade using Datamine mining software. A number of discrete mineralization domains were modelled, which have a south to north orientation, dipping to the east at 18-40 degrees. Mineralization style differs between the south (the Homestead Target) and the north (the Cupuzeiro Target) of the Planalto deposit, the north is characterized by elevated levels of chlorite (darker rocks) with slightly finer grained mineralization and more elevated pyrite mineralization. In the southeast of the Planalto deposit the Silica Cap Target mineralization has been modelled as a separate domain with strike 340 NNE and 40° east dip.

There is extensive Saprolite mineralization throughout the Planalto deposit and a surface was modelled in 3D to represent the base of the oxidized weathered material.

GE21 undertook a review and validation of the Planalto Mineração 3D geological modeling. A Mineral Resource Estimate (MRE) of the Planalto project was undertaken which included statistical and geostatistical analysis and grade estimation. The Mineral Resource classification was based on the assessment of a number of factors, including, the density, and spacing of available data, interpreted mineralization controls, mineralization style, and quality of data. Geological model editing and grade estimate were performed by GE21 using Leapfrog 2023 and Isatis Neo software. All data in the Planalto project is presented in the UTM Projection – Zone 22 South, Datum: Sirgas2000 coordinate system.

14.1 Database

GE21 undertook a comprehensive visual validation of the drilling, sampling and analytical database, considering the projection of drill holes in 3D space, identifying gaps and overlaps, and ensuring the inclusion of all crucial information. Additionally, using Leapfrog Geo software, GE21 conducted validation checks on the Collar, Survey, Assay, and Lithology tables. Any significant errors or inconsistencies were identified, discussed with the Planalto Mineração technical team and corrected during this review.

The Planalto Mineral Resource Estimate was based on data derived from 81 drill holes totaling 25,337m in length and, incorporating lithology logs and assay results from drill core samples.

Table 14-1 summarizes the drilling database used in this project. The map shown in Figure 14-1 shows the spatial distribution of the holes used.

Table 14-1: Planalto Mineração Drill Hole summary.

Target	Lenght (m)	Number of drillholes	Number of Samples
Cupuzeiro	10,699.22	25	5,857
Homestead	14,455.55	50	9,765
Silica Cap	794.42	6	379
Other Targets	486.03	6	148
Total	**26,435.22**	**87**	**16,149**

A review was undertaken of the Planalto drill hole samples above an analytical assay cut-off grade of 0.3% Cu, using Leapfrog Geo software (Figure 14-2 and Figure 14-3) to guide and validate the geological modeling, to undertake subsequent statistical analysis, and resource estimation.

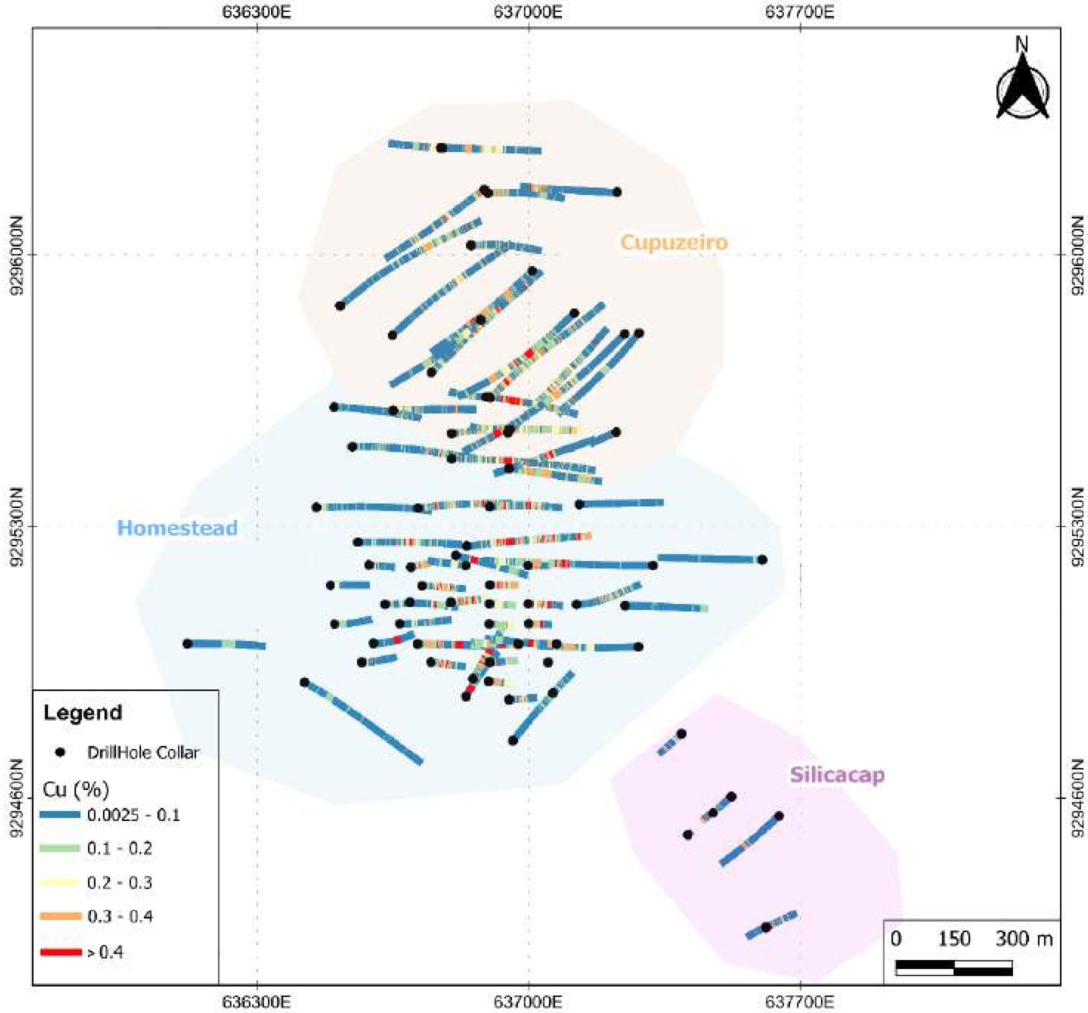


Figure 14-1: Planalto drilling Cu % assay. Plan view.
Source: GE21, 2024.

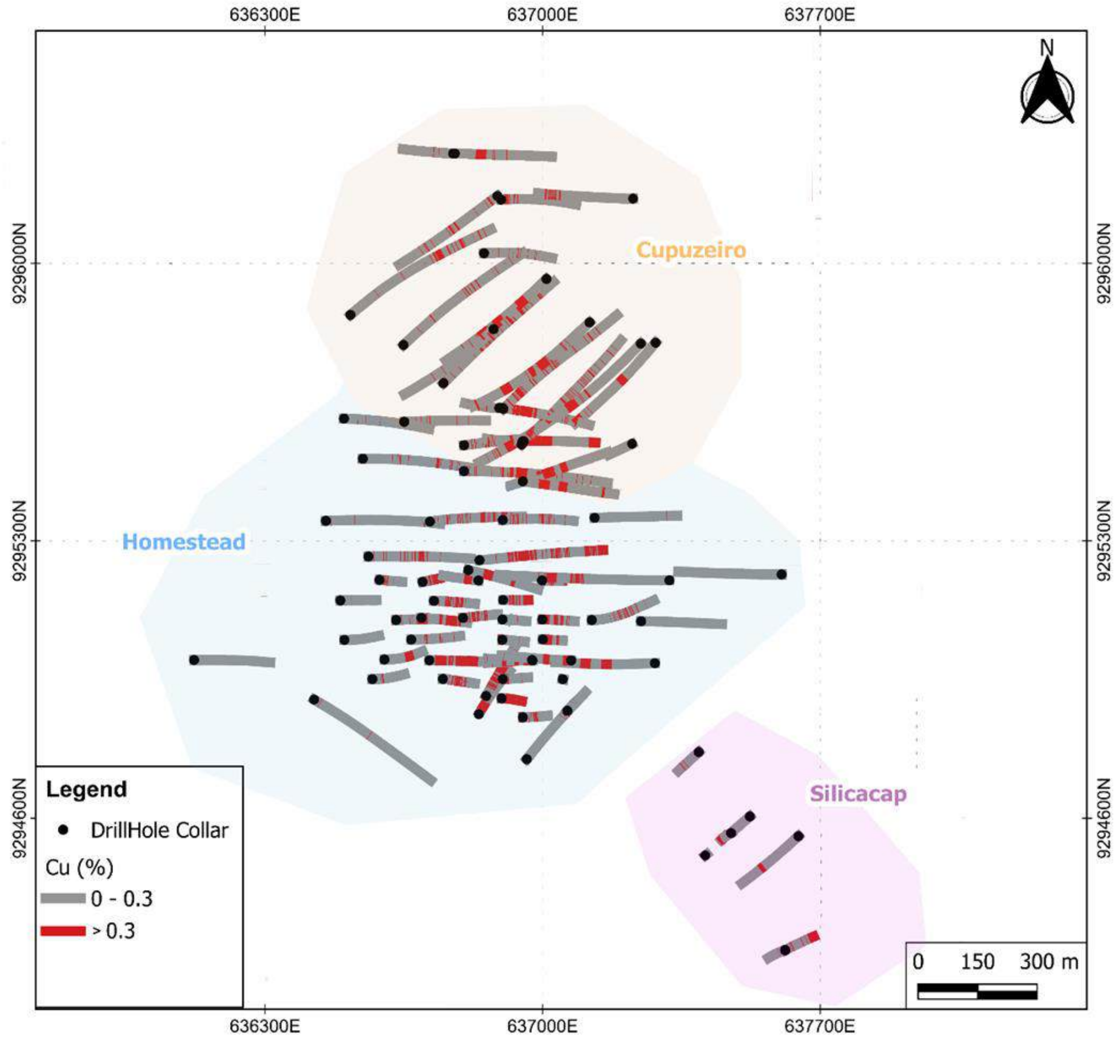


Figure 14-2: Planalto drilling with assay ≥ 0.3 Cu % in red. Plan view.
Source: GE21, 2024.

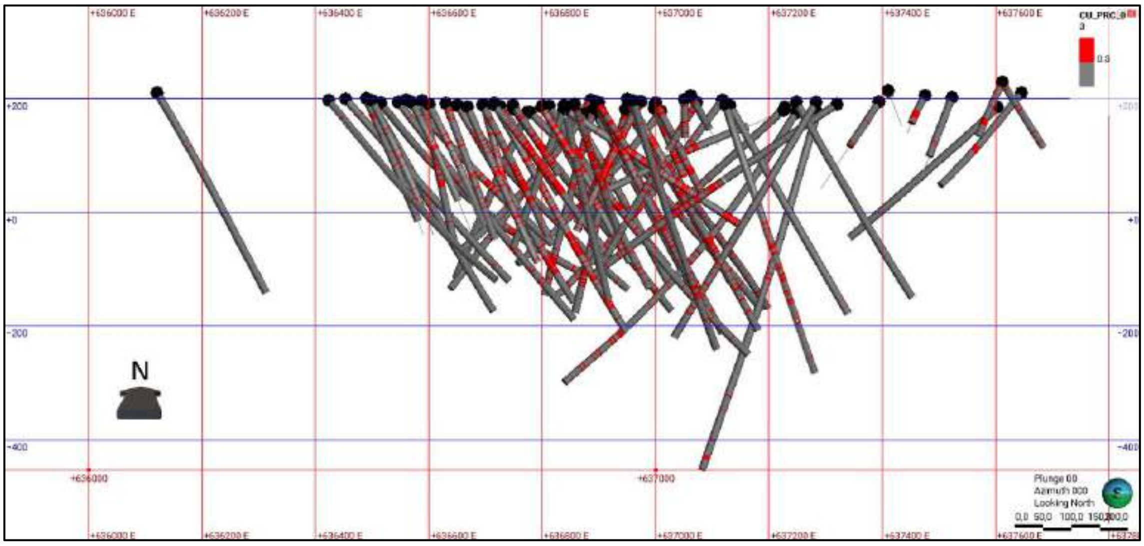


Figure 14-3: Planalto drilling with assay ≥ 0.3 Cu % in red. Section looking north.
Source: GE21, 2024.

14.2 Geological Modeling

The Planalto Mineração technical team developed a geological and mineralization interpretation initially using vertical geological sections throughout the deposit, including the area of the Mineral Resource Estimate. Figure 14-4 shows the original 3D mineralization model prepared by Planalto Mineração with mineralization domain zones modeled with in a cut-off grade of 0.3% Cu (%).

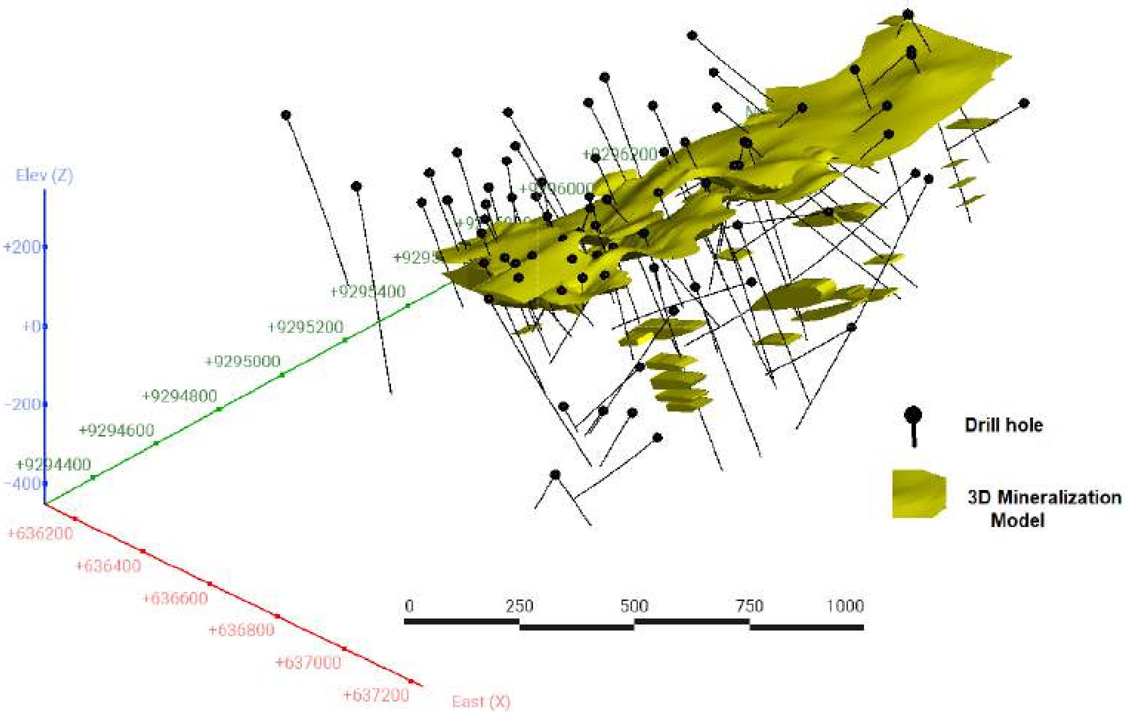


Figure 14-4: Planalto Mineração 3D mineralization model.
Source: GE21, 2024.

The sectional interpretations were modelled into a 3D mineralization model using Datamine software by the Planalto Mineração technical team. Subsequently, GE21 reviewed the explicit 3D model received from Planalto Mineração to validate the quality of the main mineralization zone model interpretation. GE21 edited and updated the model in a few areas to ensure intersections between drill hole samples and modelling wireframes were located correctly in 3D space and to reduce areas of internal waste, by excluding samples and model wireframe boundaries below the modeling cut-off grade of 0.3% Cu. The weathering zone was modelled by GE21 using weathering copper grade and drillhole logging information.

The mineralized model is categorized into 13 grade shell domains as follows. Main Mineralization (Domains- V1 to V6 and V8 to V10), Metosomatite (Domain- V7 and V7A), Silica Cap (Domain- SiCap), Host Rock low grade copper mineralization (Domain- Host Rock). Figure 14-2 to Figure

14-7 show the 3D model of mineralization domains and Table 14.2 identifies the principal orientations of these domains. Throughout the Planalto deposit, lower grade mineralization generally less than 0.3% Cu is identified between the Main Mineralization Domains. To ensure that this lower grade mineralization is accurately represented in the modelling and subsequent Resource Estimation, a Host Rock Domain was modelled using a 100m distance projection from the ≥0.3% Cu Main Mineralization modelled wireframe boundary.

Figure 14-5 to Figure 14-10 show the 3D mineralization model modeled used in the Mineral Resource estimation.

Table 14-2: Principal Dip directions for each domain.

Domain	Dip and Dip Direction
V1, V2, V3, V4, V5, V6, V7, V7_A, V8, V9 and part of V10	18º and 270º
Part of V10	23º and 210º
Silica Cap	40º and 070º

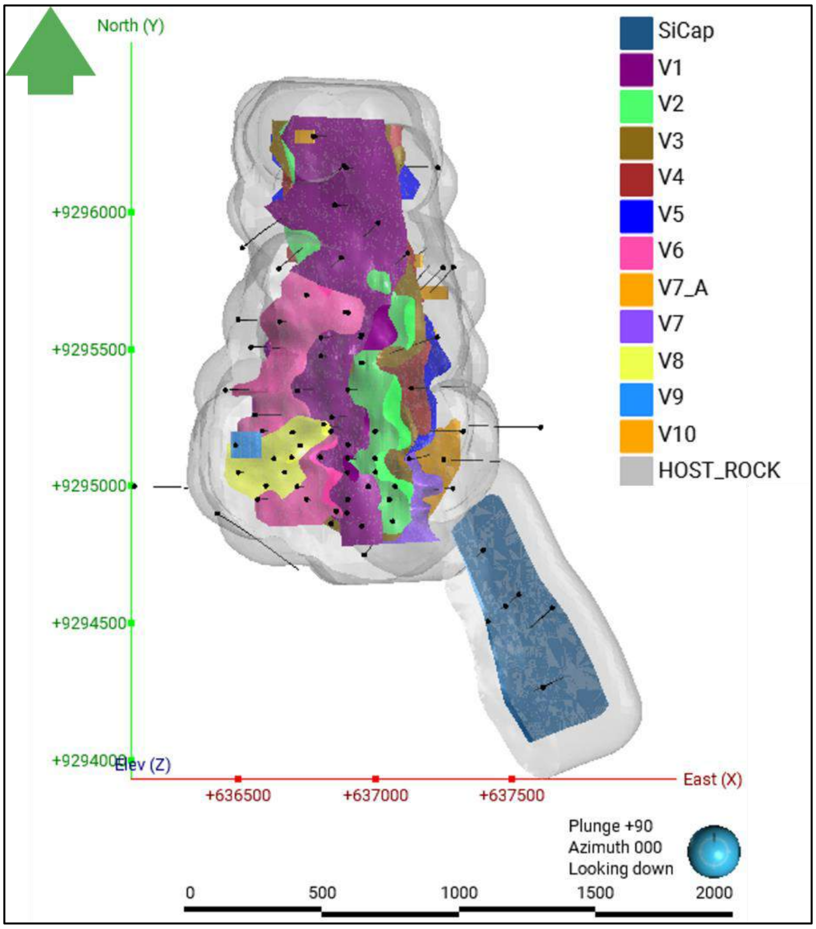


Figure 14-5: Plan view of mineralization zones.
Source: GE21, 2024.

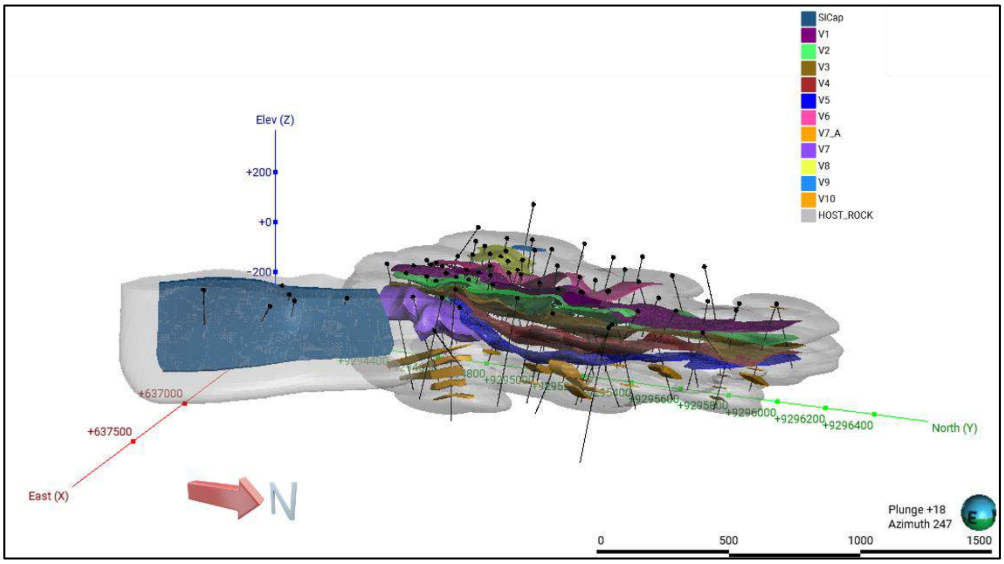


Figure 14-6: Qblique view of mineralization Zones -.
Source: GE21, 2024.

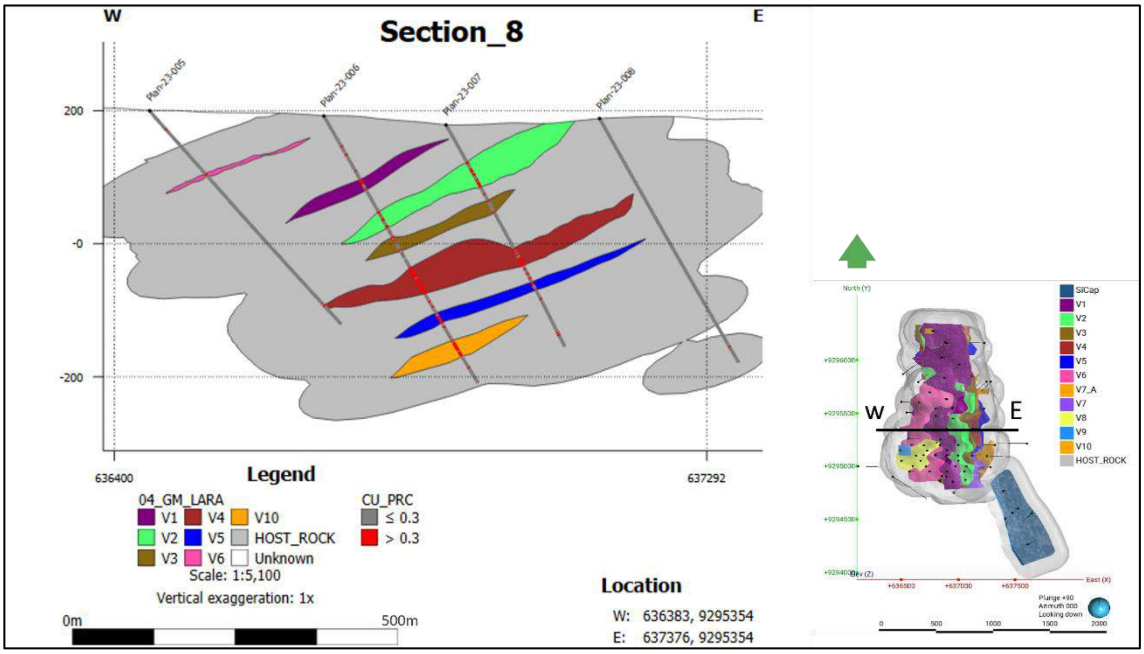


Figure 14-7: Domain model and mineralization on E-W cross-section in central part of Homestead deposit (looking to North).
Source: GE21, 2024.

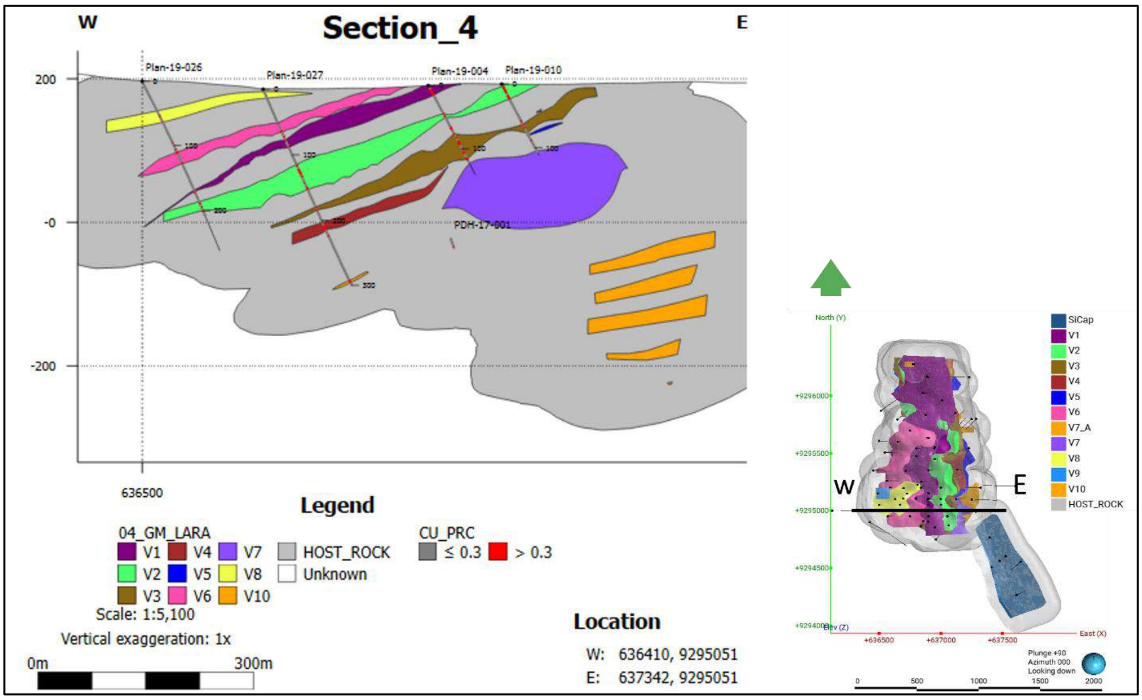


Figure 14-8: Domain model and mineralization on E-W cross-section in central part of Homestead deposit (looking to North).
Source: GE21, 2024.

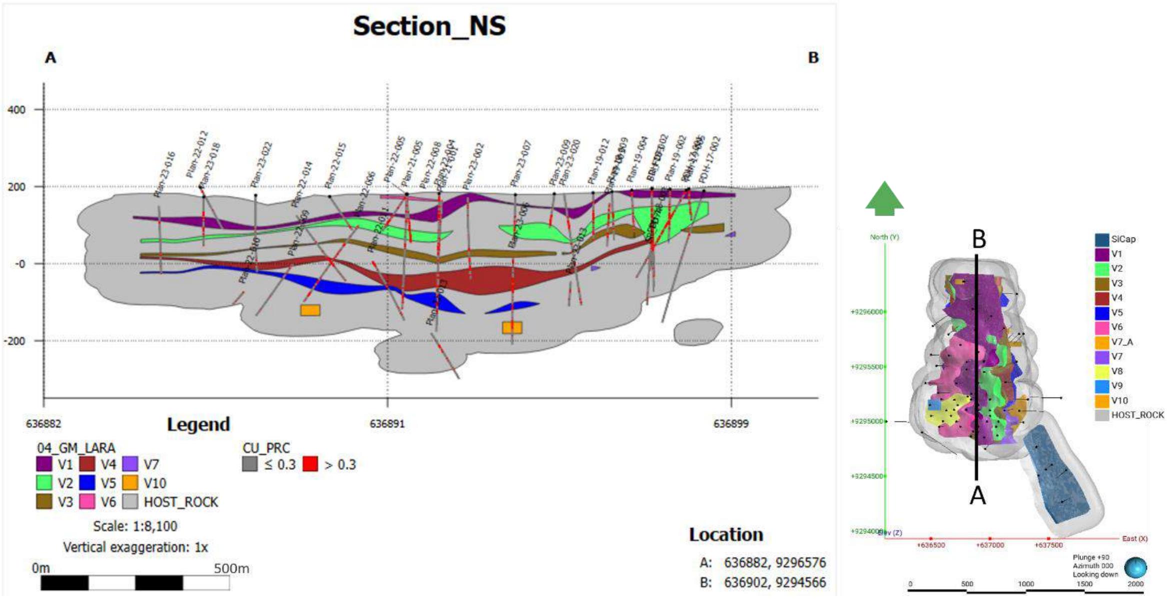


Figure 14-9: Domain model and mineralization on E-W long-section of Homestead-Cupuzeiro deposit (looking to West).
Source: GE21, 2024.

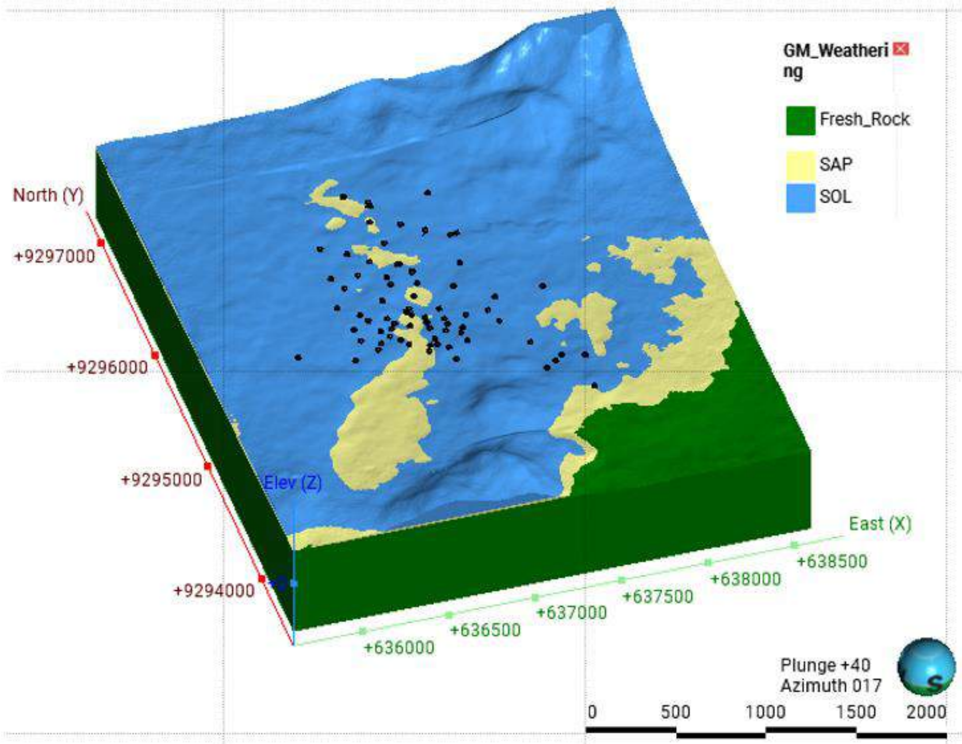


Figure 14-10: Oxidation Geological Model.
Source: GE21, 2024.

The Qualified Person considers that the geological interpretations and modelling are adequate for a Mineral Resource Estimation study.

14.3 Regularization of samples

The analysis of the sample lengths in the database showed that 58.3% of the drill core samples are between 2.00 meters to 2.05 meters. GE21 carried out the regularization of samples for the complementary studies of statistics using a nominal length of 2 meters within the domain boundaries and distributed equally any remaining residual samples with a length less than 1 meter. The minimum coverage chosen was 50%, a procedure whereby a value will be calculated for a composite interval only when there is data in at least 50% of the drillhole sample to be included in the composited interval (Figure 14-11). The 2.00m composite sample database was used for resource estimation.

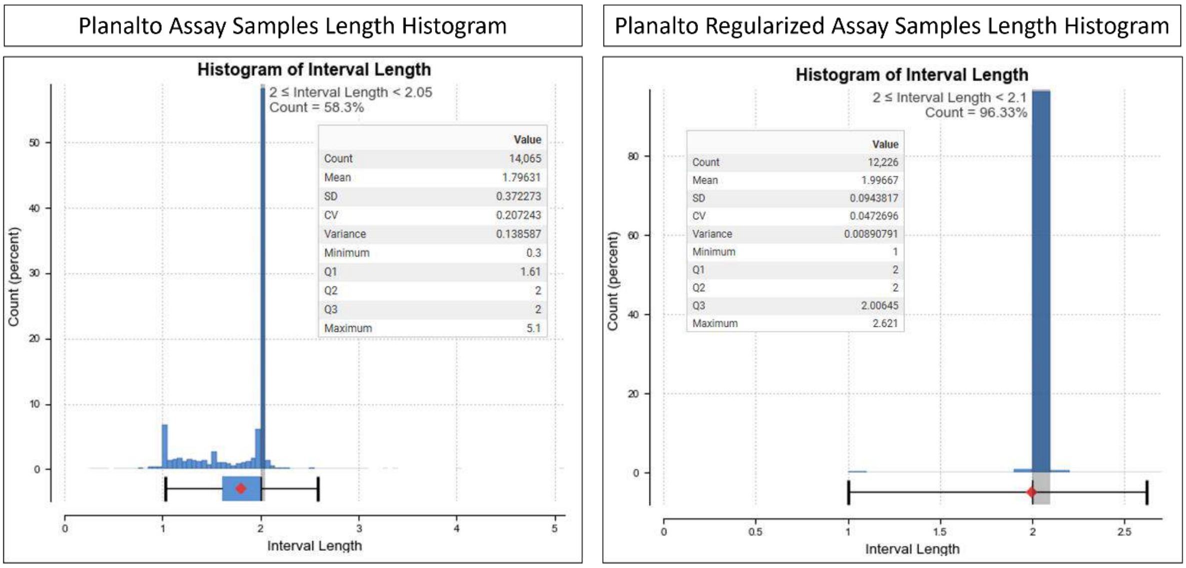


Figure 14-11: Planalto project's sample length statistics.
Source: GE21, 2024.

14.4 Exploratory Data Analysis (EDA)

Statistical analysis for Cu (%) and Au (ppm) variables, by the individual modeled domains was undertaken using the regularized 2.00m composite sample database. Table 14-3 shows the summarized statistics for these variables. Figure 14-12 and Figure 14-13 show the Boxplots for the Cu (%) and Au (ppm) variables.

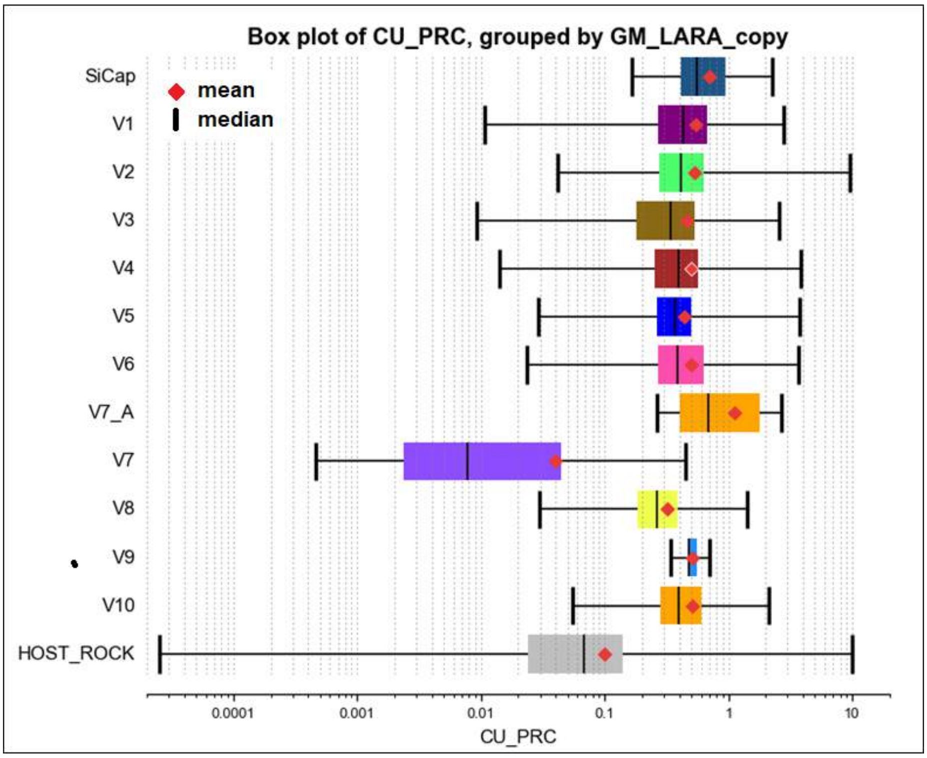


Figure 14-12: Cu (%) box Plot chart by domains.
Source: GE21, 2024.

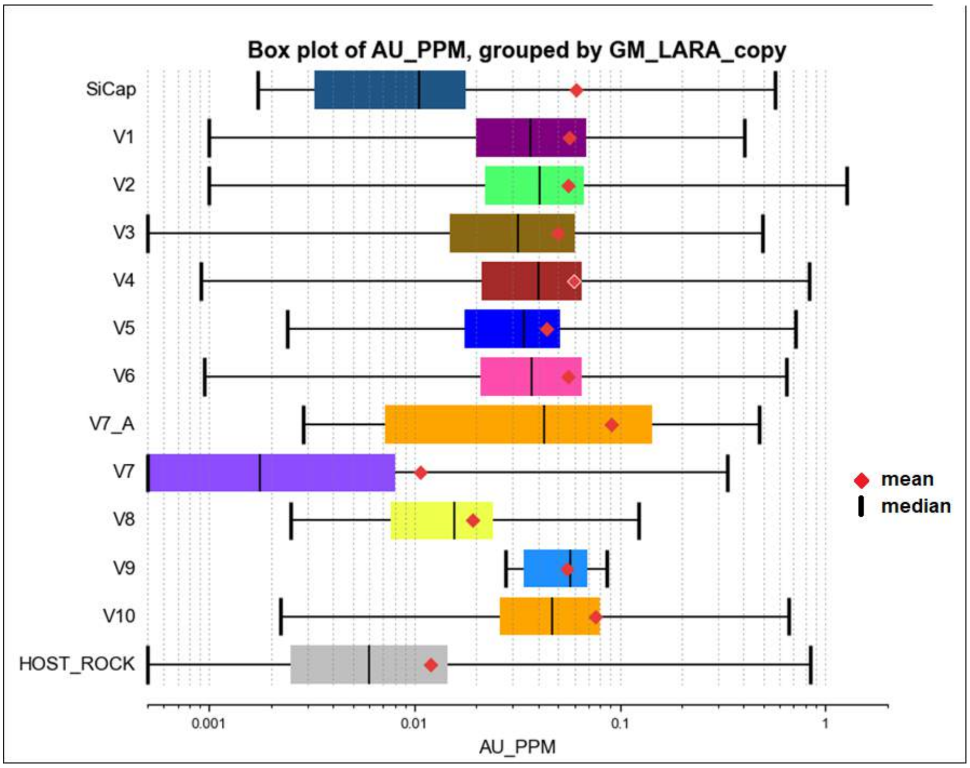


Figure 14-13: Au (ppm) box plot chart by domains.
Source: GE21, 2024.

GE21 conducted an analysis of histograms, box plots, and probability plots for each variable (Cu% and Au g/t) within each domain of the Planalto Grade Shell Model. Figure 14-14 and Figure 14-15 illustrate the layouts of these plots for domains V1 and V3, respectively, which are the largest continuous main mineralization zones of the model. High grade Cu and Au outlier values were observed within and outside the modelled domains. The outlier treatments are discussed on next sections for variographic analysis and grade estimation processes.

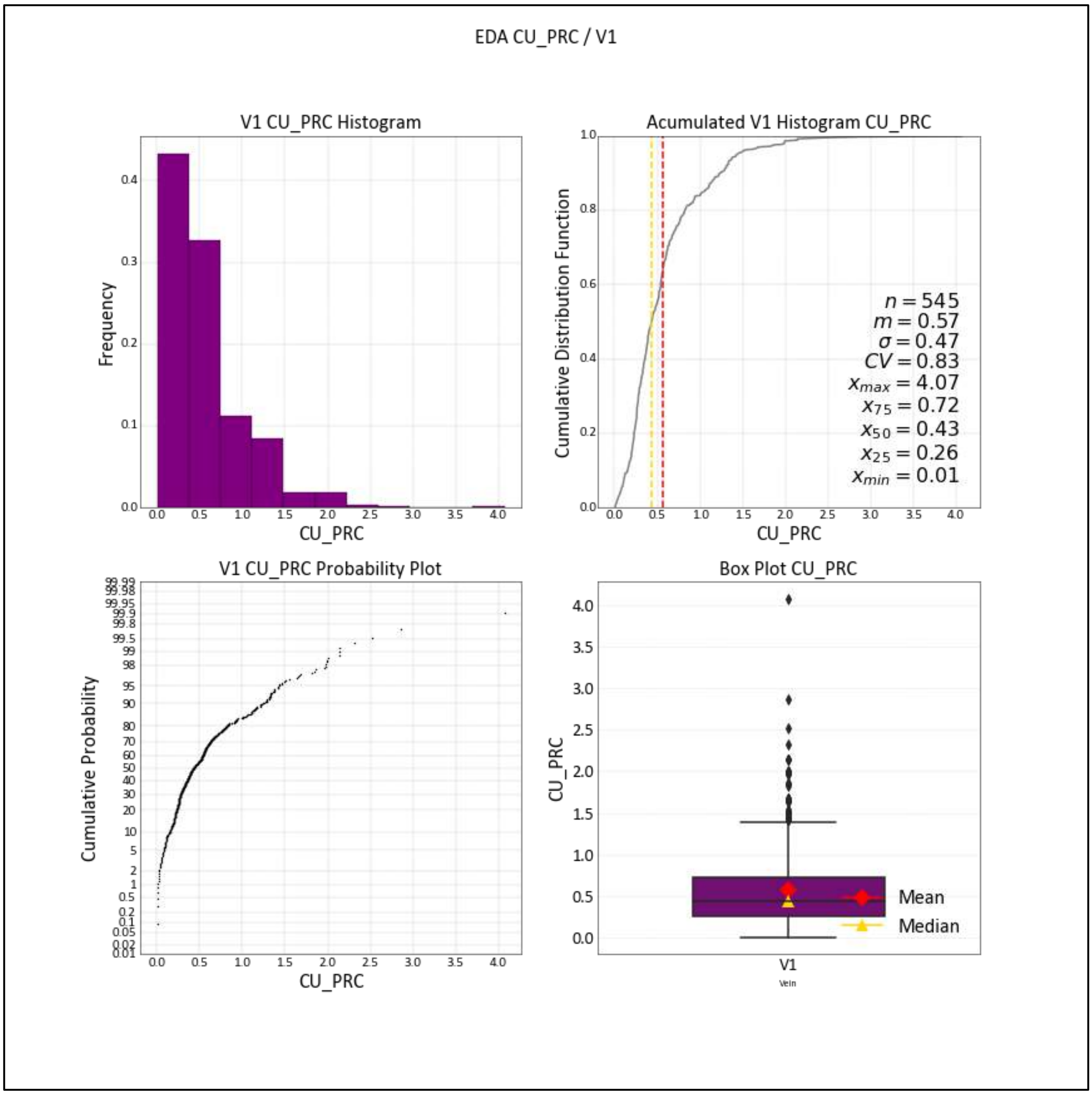


Figure 14-14: EDA Cu (%) for domain V1.
Source: GE21, 2024.

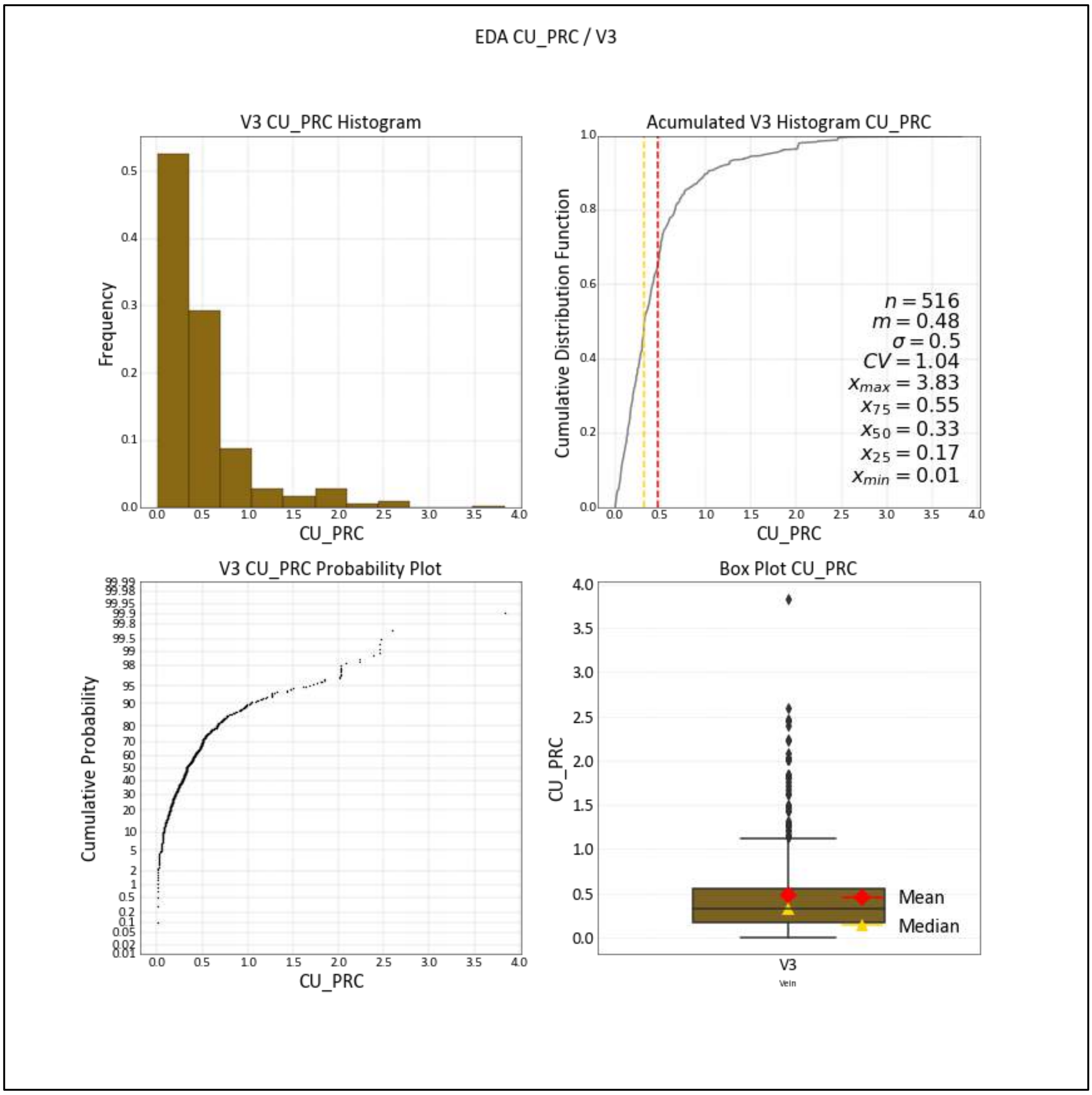


Figure 14-15: EDA Cu (%) for domain V3.
Source: GE21, 2024.

Table 14-3: Planalto domains statistical summary.

Variable	Domains	Count	Length	Mean	Standard deviation	Coefficient of variation	Variance	Minimum	Lower quartile	Median	Upper quartile	Maximum
CU_PRC	SiCap	32	63	0.704	0.53	0.75	0.019	0.002	0.003	0.01	0.940	2.276
	V1	426	855	0.543	0.42	0.77	0.004	0.001	0.020	0.04	0.672	2.763
	V2	712	1425	0.528	0.54	1.03	0.005	0.001	0.022	0.04	0.635	9.523
	V3	429	855	0.464	0.44	0.95	0.003	0.001	0.015	0.03	0.535	2.563
	V4	392	782	0.497	0.44	0.88	0.006	0.001	0.021	0.04	0.571	3.801
	V5	241	478	0.444	0.35	0.79	0.004	0.002	0.017	0.03	0.504	3.720
	V6	129	258	0.498	0.44	0.89	0.006	0.001	0.021	0.04	0.629	3.649
	V7_A	12	23	1.119	0.81	0.72	0.019	0.003	0.007	0.04	1.771	2.695
	V7	121	243	0.040	0.08	1.97	0.001	0.001	0.001	0.001	0.044	0.453
	V8	45	88	0.320	0.23	0.72	0.000	0.003	0.008	0.02	0.389	1.425
	V9	5	10	0.509	0.13	0.26	0.001	0.028	0.034	0.06	0.552	0.698
	V10	205	403	0.505	0.38	0.76	0.009	0.002	0.026	0.05	0.609	2.121
	HOST_ROCK	8 590	17 153	0.099	0.15	1.54	0.001	0.001	0.003	0.01	0.139	10.005
	SiCap	32	63	0.061	0.14	2.26	0.277	0.166	0.409	0.55	0.018	0.571
AU_PPM	V1	426	855	0.057	0.06	1.06	0.176	0.011	0.269	0.43	0.068	0.405
	V2	712	1425	0.056	0.07	1.24	0.296	0.042	0.278	0.41	0.066	1.260
	V3	429	855	0.050	0.06	1.12	0.196	0.009	0.180	0.34	0.061	0.493
	V4	392	782	0.059	0.08	1.35	0.191	0.014	0.255	0.40	0.065	0.835
	V5	241	478	0.044	0.06	1.35	0.122	0.029	0.265	0.37	0.051	0.717
	V6	129	258	0.056	0.08	1.37	0.195	0.024	0.269	0.39	0.065	0.648
	V7_A	12	23	0.090	0.14	1.51	0.657	0.264	0.402	0.69	0.144	0.477
	V7	121	243	0.011	0.03	3.17	0.006	0.000	0.002	0.01	0.008	0.332
	V8	45	88	0.019	0.02	1.09	0.052	0.029	0.183	0.27	0.024	0.123
	V9	5	10	0.055	0.02	0.44	0.017	0.340	0.473	0.48	0.070	0.086
	V10	205	403	0.076	0.10	1.26	0.146	0.054	0.283	0.39	0.080	0.665
	HOST_ROCK	8 590	17 153	0.012	0.02	2.01	0.024	0.000	0.024	0.07	0.014	0.844

14.5 Variographic Analysis

The Main Mineralization Domains are gently undulating in a down dip direction towards the east and along strike from the south to the north. Accurately representing the geological distances between samples which lie within folded structures is more difficult, as the geological distance between samples is longer than the straight-line distances between samples. This creates a challenge when undertaking traditional variographic analysis to estimate the variability of grade (Cu % and Au g/t) over distances in specific directions. To address the challenge of this undulating structures at the Planalto deposit, a structural analysis was undertaken to identify 3D mineralization Domain surfaces to act as a reference point to unfold the undulating surfaces as shown in the schematic diagram below (Figure 14-16). Sample data points such as drill hole samples can be transformed (unfolded) relative to the reference surfaces. The relative distribution of the transformed (unfolded) sample points will better reflect the geological distances between samples. Subsequent variographic analysis of the Cu and Au grades between these transformed samples should better reflect the geological mineralization (spatial grade continuity) within the Planalto deposit.

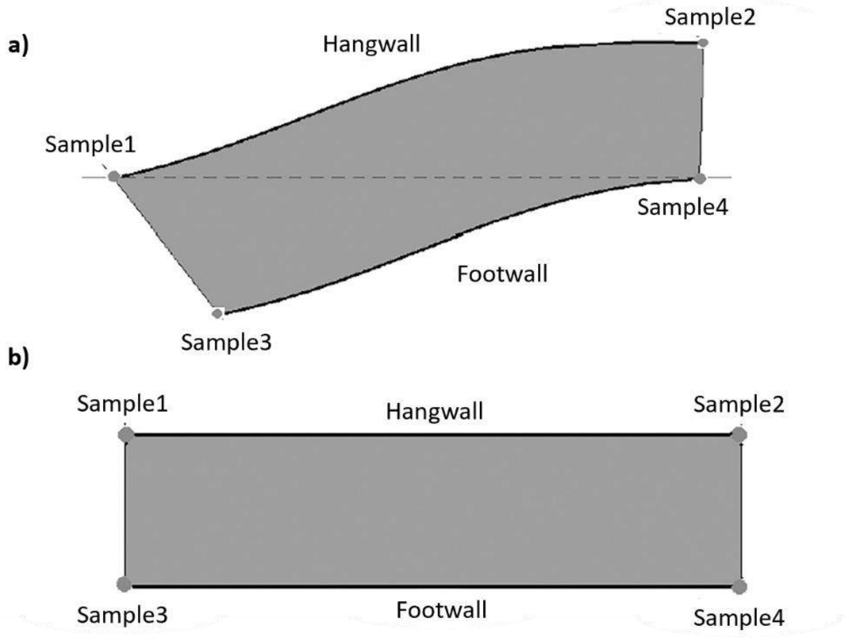


Figure 14-16: Interpretation of coordinates between different samples. a) Cartesian coordinates. b) transformed coordinates. Source: Rubio, et al (2015).

Within the Planalto Main Mineralization modelled Domains, GE21 selected the most representative mineralization horizons from the V1 hanging wall and V5 footwall Domains as the limiting surface for the unfolding process, with the V1 hanging wall surface used as the top surface reference. Isatis Neo software was used to flatten the top surface and unfold the drill hole sample locations to a new set of transformed coordinates. This transformed dataset was then used to study the spatial continuity by variographic analysis. (Figure 14-17 and Figure 14-18).

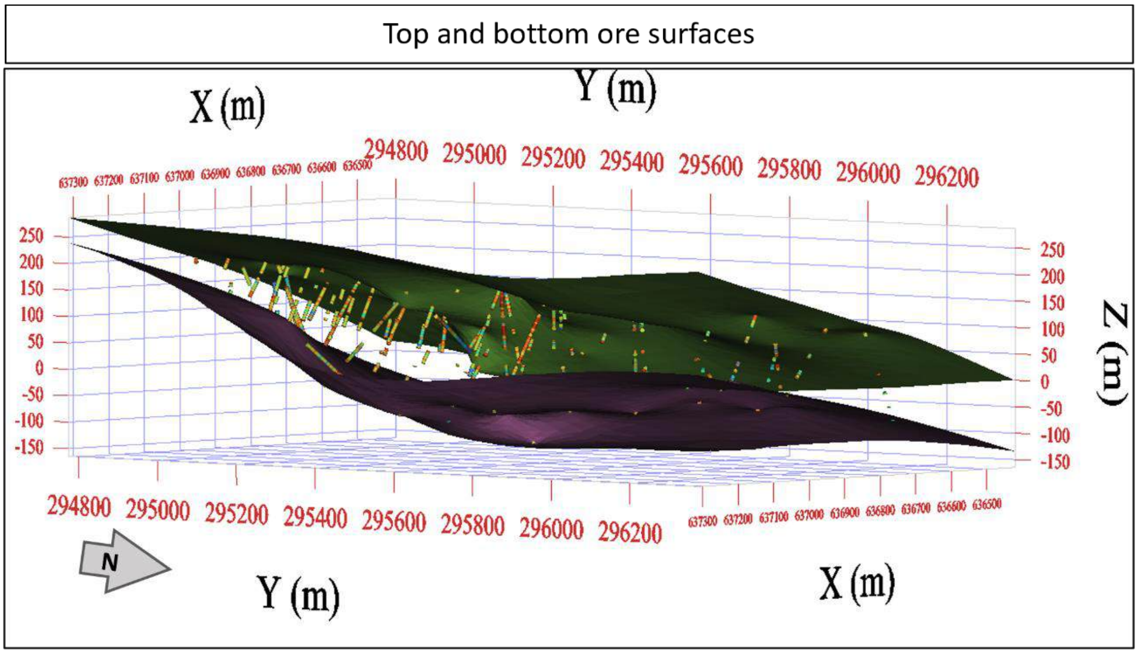


Figure 14-17: Composites between V1 hang wall surface in green and V5 footwall surface in purple, before the transformation.
Source: GE21, 2024.

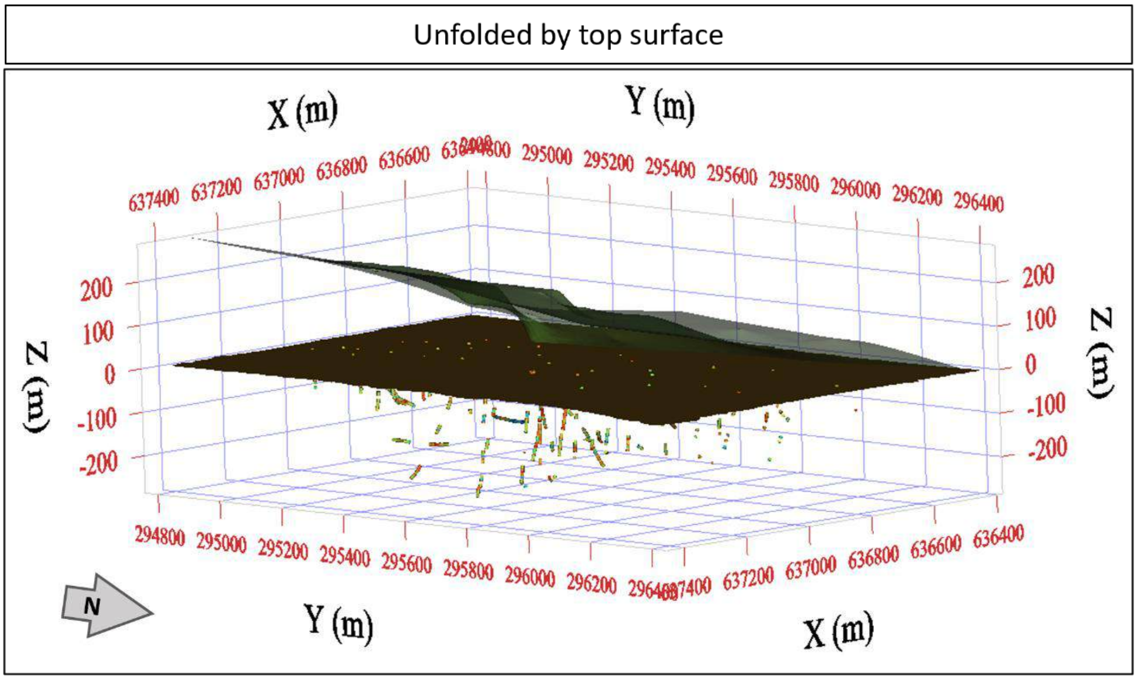


Figure 14-18: V1 hang wall top surface before and after the unfolding. The flatten transformation is the reference for the drill holes samples transformation.
Source: GE21, 2024.

The regularized 2.0m composited drill hole samples and a transformed (unfolded) coordinate dataset was utilized by GE21 for the variographic modeling study. High, above 4% Cu and low, below 0.04% Cu grade outlier samples were excluded from the dataset for the variographic study (0.04% < Cu (%) < 4) to enable more consistent experimental variograms to be calculated, which represented the main copper mineralization distribution. The modelled variograms were applied individually to all domains. The variogram directions were determined using the Isatis software *varmap* tool to identify the orthogonal variographic models. Major direction (Along strike S-N), semi-major direction (Down dip, dipping west) and minor direction (Across dip). Figure 14-19 presents the variographic models.

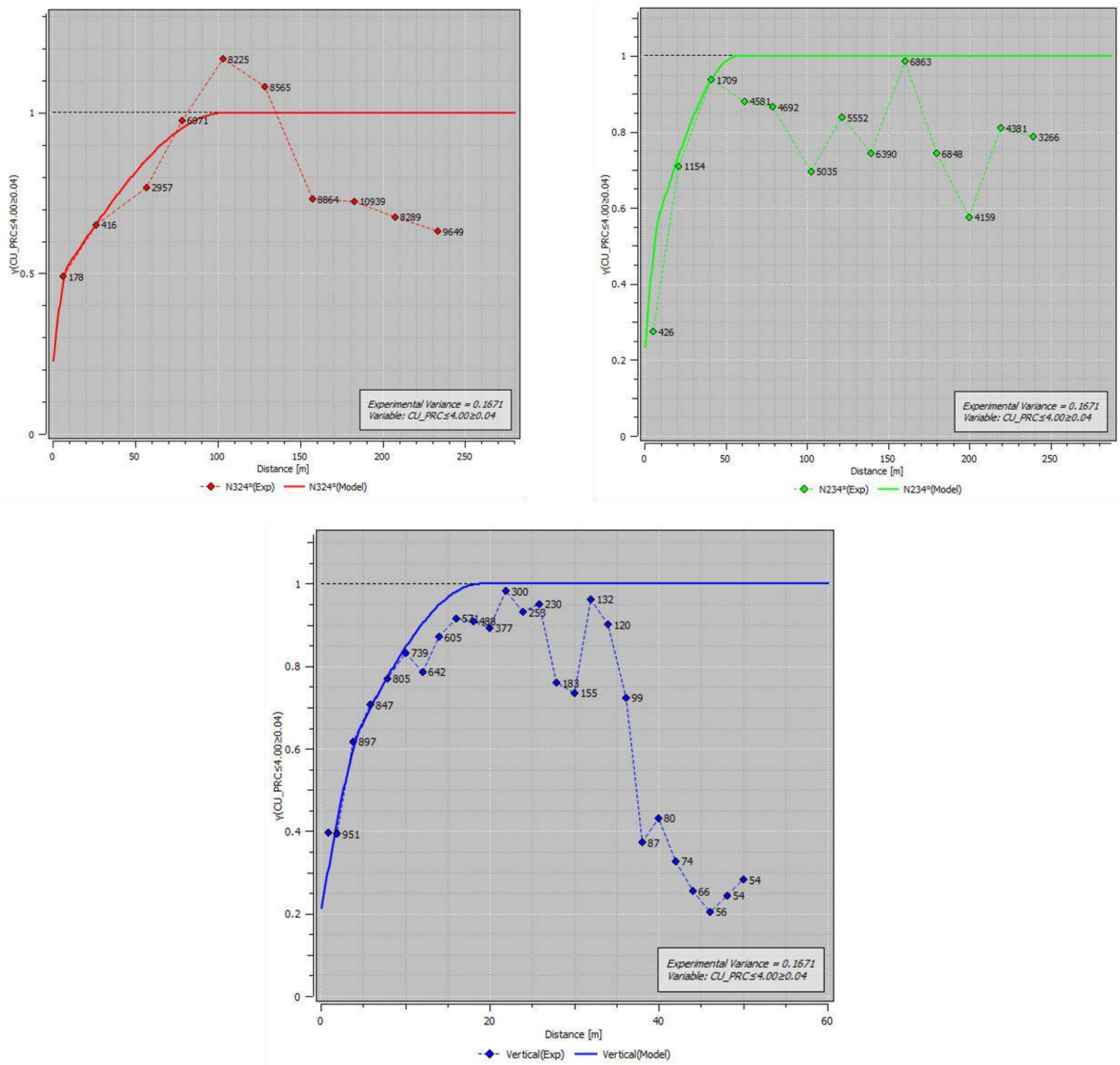


Figure 14-19: 0.04<Cu (%)>4 variogram.
Source: GE21, 2024.

Table 14-4: Variogram Structures.

Dip	Az	Pitch	NE	Sill 1 (Sph)	Range 1	Range 2	Range 3	Sill 2 (Sph)	Range 1	Range 2	Range 3
0º	340º	75º	0.2	0.25	10	10	5	0.55	105	60	20

There is a notable correlation between Au (ppm) and Cu (%) as shown in Figure 14-20. Coefficient of variation of these two variables are also considered equivalent. For this reason, the standardized variogram of Cu (%) variable was also applied to estimate the Au (ppm) variable, based on correlation these two variables and in the QP opinion.

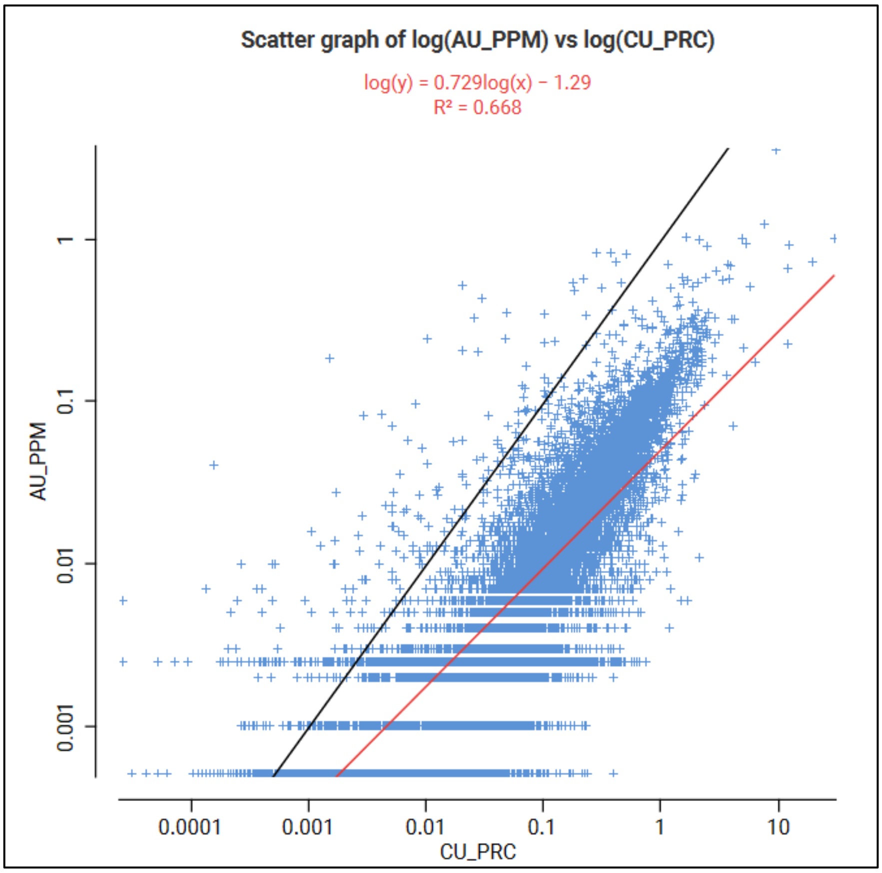


Figure 14-20: Scatter Plot of Cu (%) and Au (ppm).
Source: GE21, 2024.

14.6 Block Model

GE21 generated a block model to perform the Mineral Resource estimation. The parental block model for resource estimation has been designed to preserve the variance of estimates and ensure geometric fidelity to modeled domains with blocks measuring 40m x 40m x 20m based on one-quarter of the drilling grid size (area-based dimension), and sub-blocks of 10m x 10m x 5m. Drilling grid size varies on Homestead target from 100m x 100m to 100m x 50m according to the

QP verification.

The complete description of attributes of the block model is presented from Table 14-5 to Table 14-7:

Table 14-5: Block Model parameters.

Number of parent blocks	75 x 93 x 39 = 272 025
Parent block size	40m x 40m x 20m
Minimum sub-block size	10m x 10m x 5m
Rotation	0° x 0° x 0°

Table 14-6: Block Model origin.

Item	X	Y	Z
Minimum coordinates	635600.00	9293400.00	430.00
Boundary size	3000.00	3720.00	780.00

Attribute Name	Variable Type	Description
CU_PRC	Numerical	OK Cu (%) estimated grade
Au_PPM	Numerical	OK Au(ppm) estimated grade
Density	Numerical	Density g/cm³
Min_zone	Character	Mineralization Grade Shell
Weathering	Character	Weathering zones
Class	Character	Measured, Indicated, Inferred, Not classified

The adherence between the Planalto 3D mineralization model of wireframe volume and the block model volume follows in Table 14-7, and it's considered inside acceptance limits.

Table 14-7: Adherence between grade shell model and sub block model.

Planalto's Model	Volume Block Model m³	Volume Geological Model Mt	Bias %
SiCap	2 901 000	2 904 700.00	99.87%
HOST_ROCK	480 737 500	480720000	100.00%
V1	7 887 500	7894900	99.91%
V2	10 886 000	10875000	100.10%
V3	7 113 500	7124700	99.84%
V4	10 919 500	10923000	99.97%
V5	5 703 500	5708500	99.91%
V6	2 713 500	2712200	100.05%
V7	8 262 500	8229700	100.40%
V7_A	2 000	1808.7	110.58%
V8	603 500	605230	99.71%
V9	112 500	111530	100.87%
V10	4 777 500	4 896 300.00	97.57%

14.7 Density

GE21 classified 3 zones in the geological model for a density study as follows:

I. Oxide
II. North
III. South

The Oxide zone was categorized based on the 3D weathering model, and the boundary between the North and South zones was established by the Planalto Mineração technical team, who advised that they represent different geological contexts for density definition considerations. North zone is slightly higher in density due to more iron rich alteration- pyrite. The North Zone is characterized as all blocks above a northing coordinate value of 9295400N. For Domains with enough density measurements, the Domain density was calculated using the mean density of the samples after treating outlier's, when anomalous samples evaluated by histogram graphics were excluded from the analysis. Average values of density were applied for each domain individually after the outlier treatment. Domains with a low number of density measurements were assigned the overall average density of the Zone (North, South or Oxide). Figure 14-21 shows the density drill holes samples:

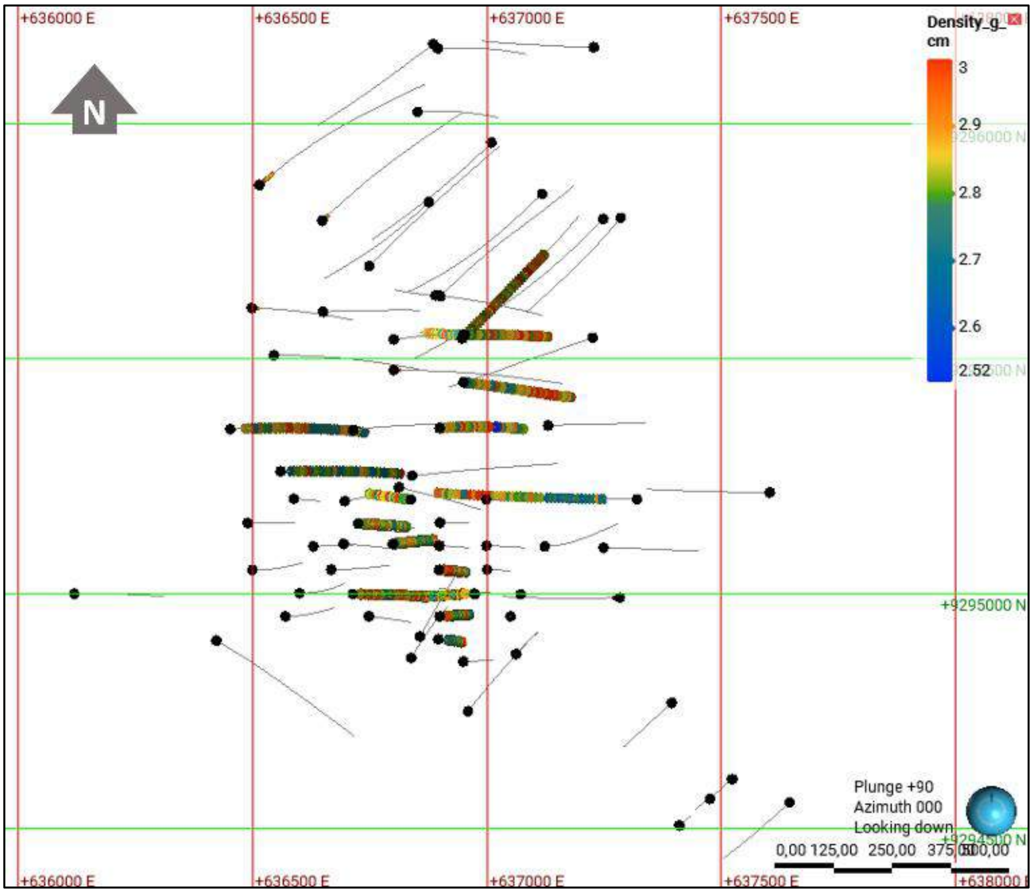


Figure 14-21: Density drill holes plan view samples.
Source: GE21, 2024.

Table 14-8 presents overall average values by the oxide zones, North and South. Figure 14-22 to Figure 14-24 present the graphs that detail the statistics of density results.

Table 14-8: Number of samples in each zone.

Zone	Drill Holes	Samples	Density Average
Oxide	8	66	1.66
North	4	144	2.87
South	12	749	2.85

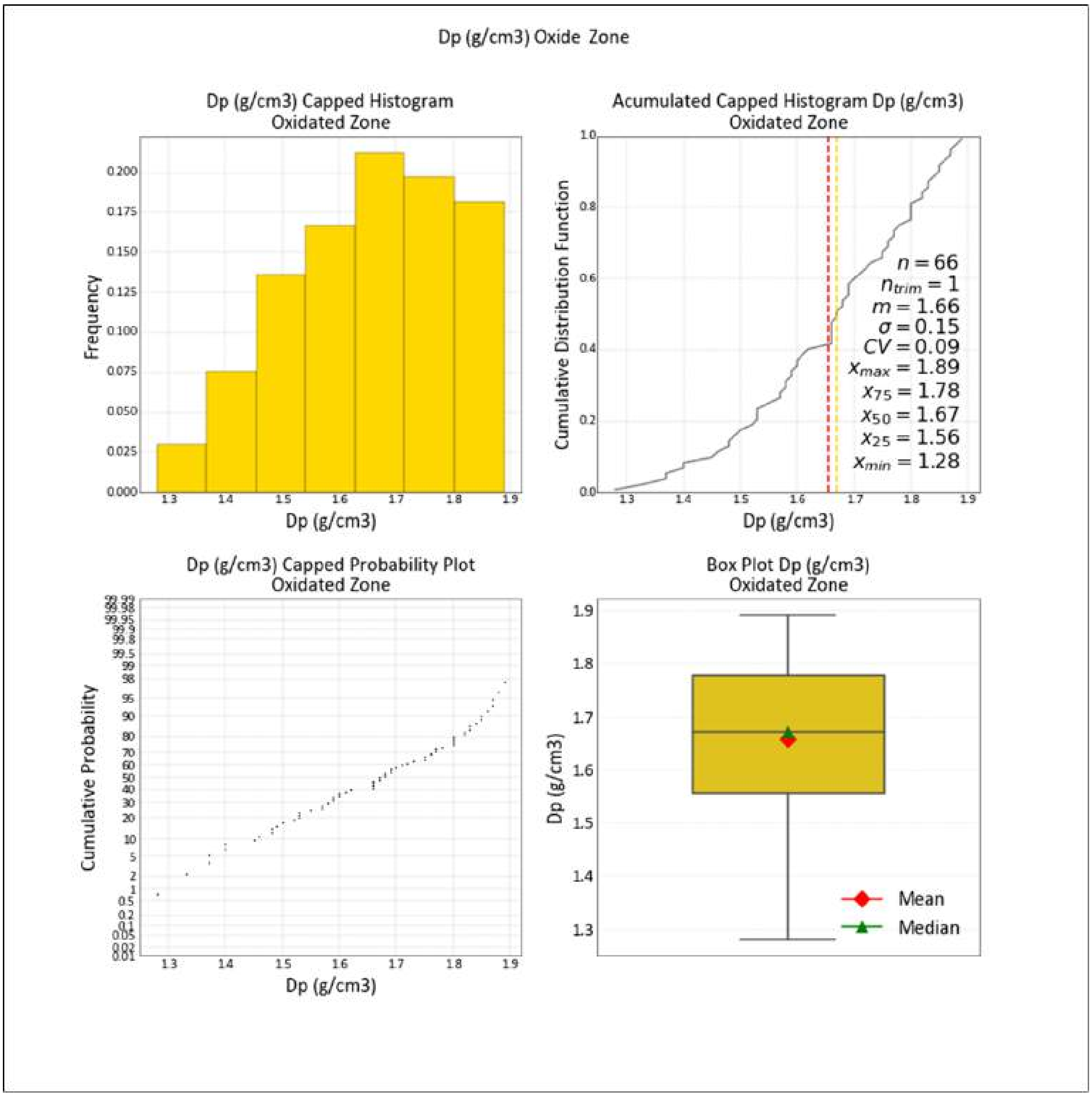


Figure 14-22: Density samples in Oxide zone statistics.
Source: GE21, 2024.

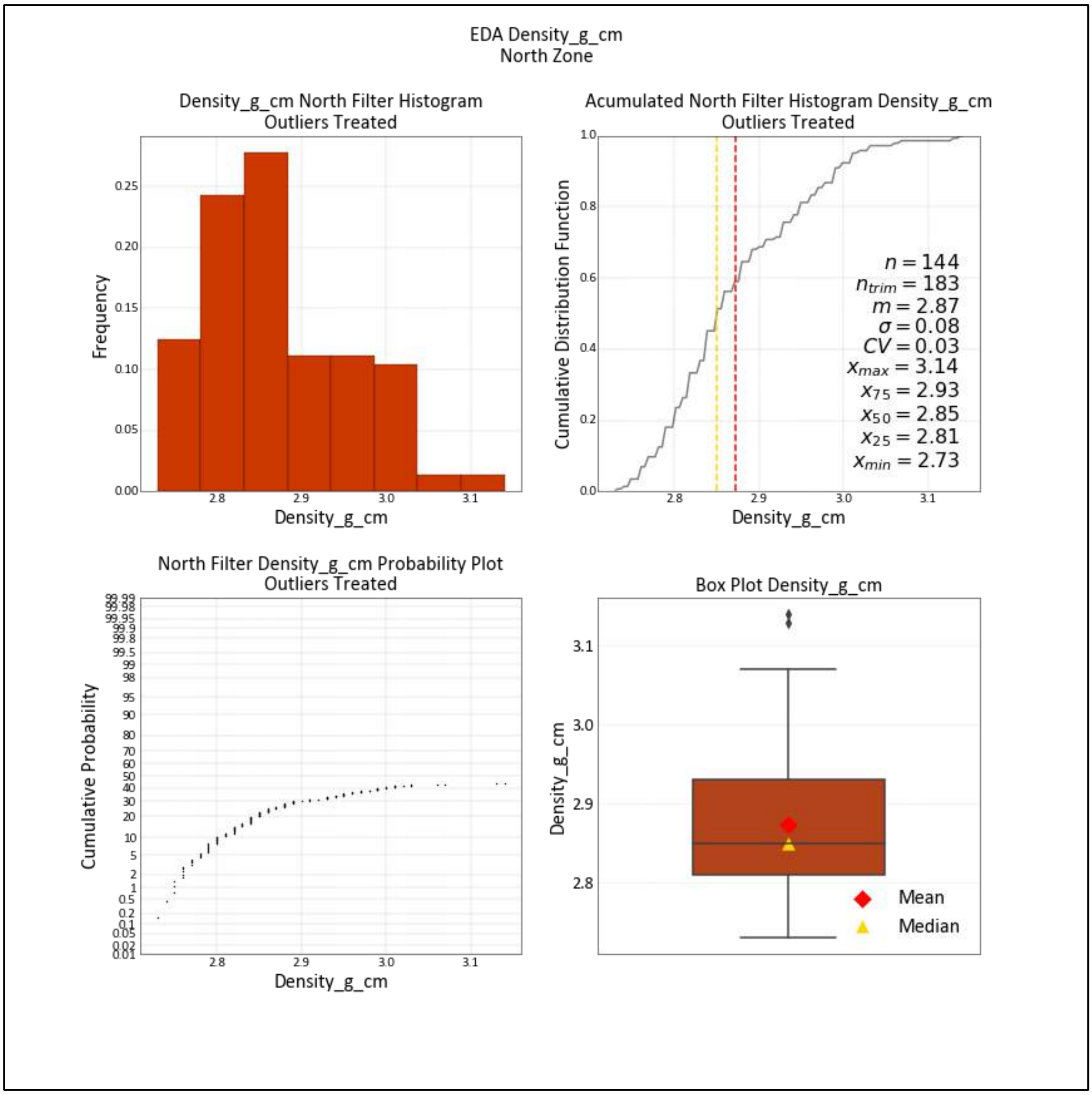


Figure 14-23: North Zone density samples statistics.
Source: GE21, 2024.

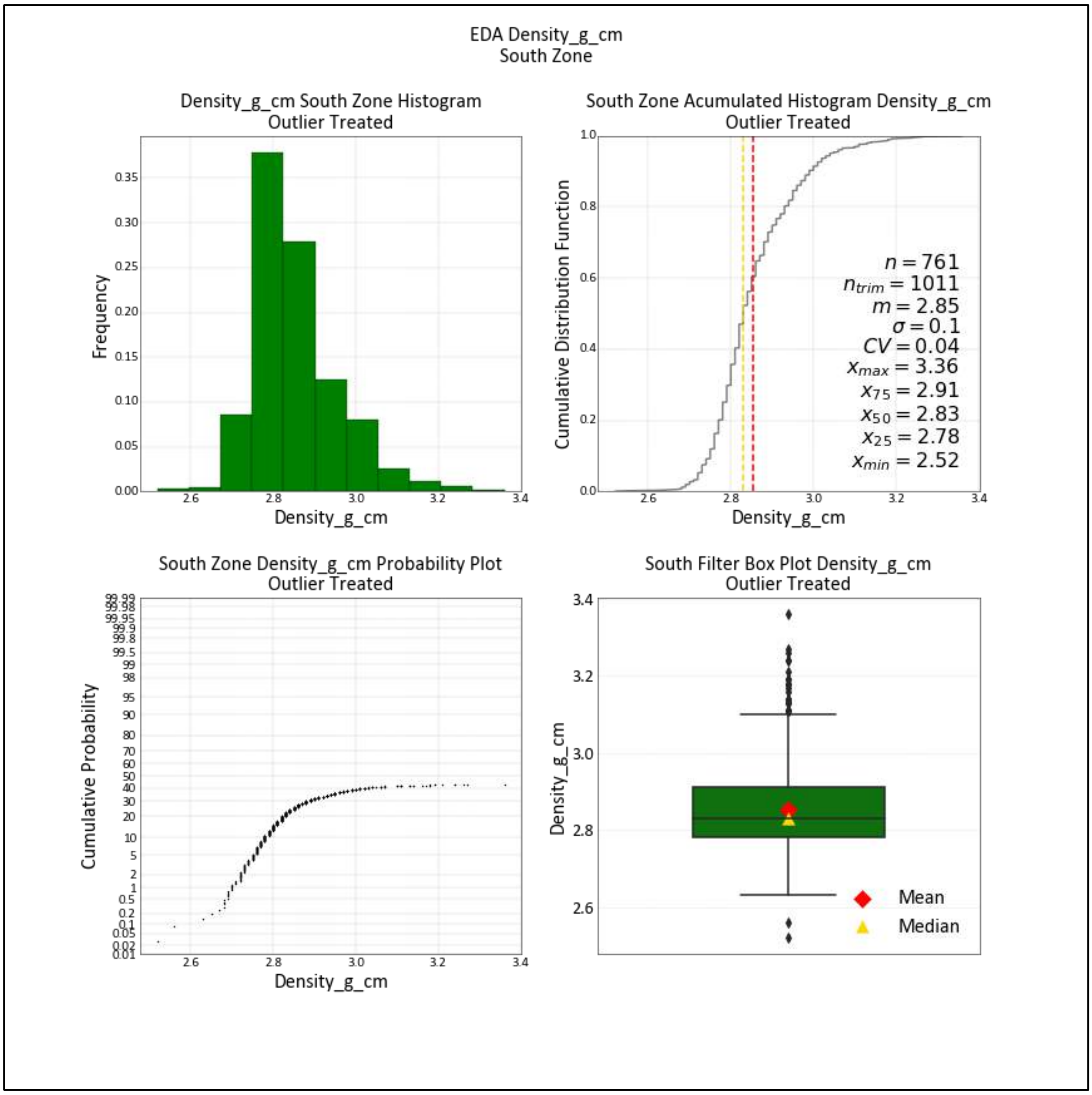


Figure 14-24: South zone density samples statistics.
Source: GE21, 2024.

Figure 14-25 show the distribution of density samples in North and South Zones

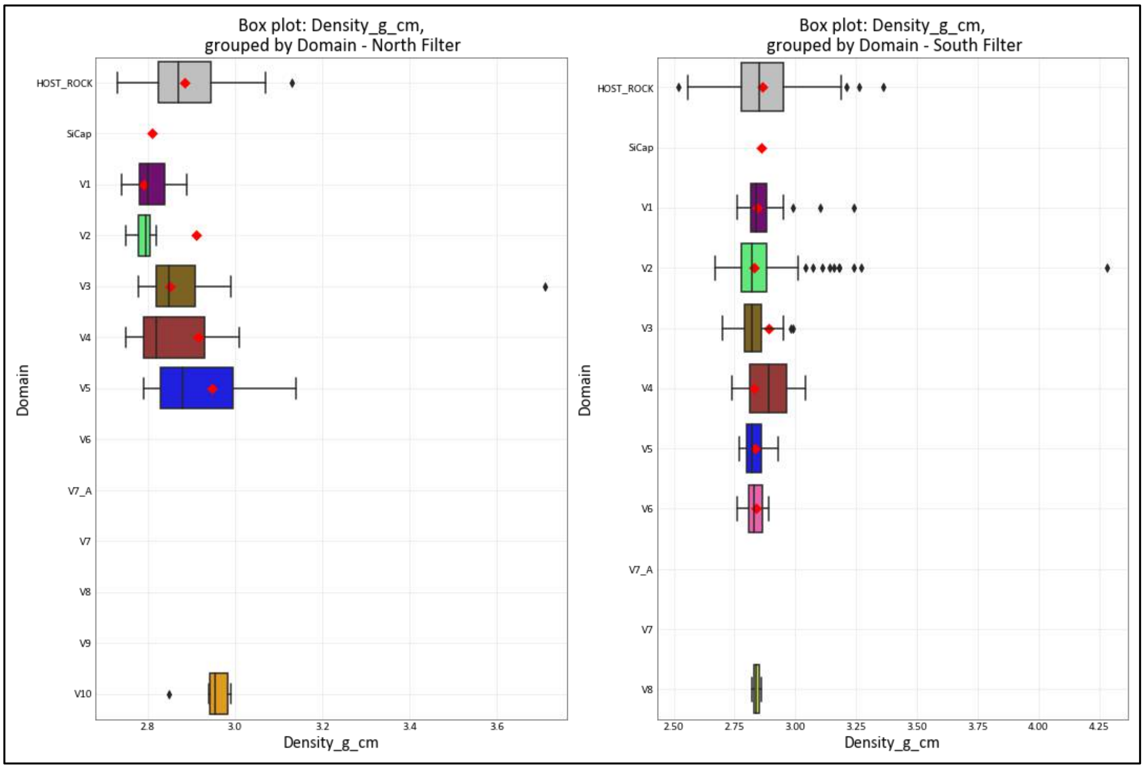


Figure 14-25: Density samples locations by Domain in the North and South zones.
Source: GE21, 2024.

Table 14-9 and Table 14-10 describe the density values computed in the block model. Figure 14-26 shows a north-south cross-section of the attribute density in the block model:

Table 14-9: North Zone block model densities by domain.

Domain	Samples Count	Average
V1	18	2.81
V2	4	2.79
V3	16	2.86
V4	11	2.85
V5	11	2.92
V6	0 - Average used	2.87
V7	0 - Average used	2.87
V7_A	0 - Average used	2.87
V8	0 - Average used	2.87
V9	0 - Average used	2.87
V10	6	2.95
Host Rock	74	2.88

Table 14-10: South Zone block model densities by domains.

Domain	Samples Count	Average
V1	54	2.85
V2	225	2.84
V3	37	2.83
V4	1-- Average used	2.83
V5	13	2.83
V6	8-- Average used	2.83
V7	0-- Average used	2.83
V7_A	0- - Average used	2.83
V8	2-- Average used	2.83
V9	0-- Average used	2.83
V10	0-- Average used	2.83
SiCap	0-- Average used	2.83
Host Rock	412	2.87

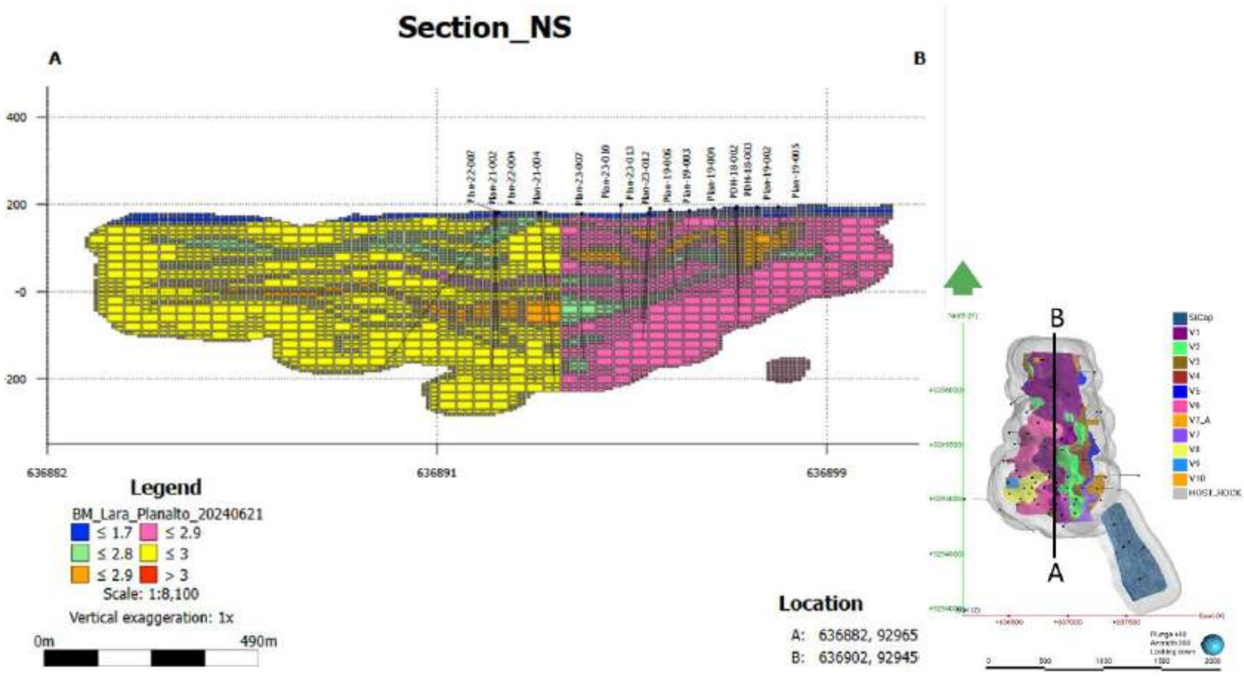


Figure 14-26: Planalto block model classified by density values.
Source: GE21, 2024.

14.8 Grade Estimation

The Planalto Copper project block model grade interpolation was undertaken using Ordinary Kriging (OK) interpolation method using Leapfrog Edge software for the Cu (%) and Au (g/t) variables, based on the variographic structural analysis results (ranges, sills and anisotropy).

Each mineralized domain was estimated independently, employing a hard boundary strategy, ensuring that samples from one domain did not influence blocks in neighboring domains. GE21 undertook a domain boundary - grade contact analysis study, Figure 14-27 demonstrates a steep decrease in the average copper grade (Cu%) from within the Main Mineralized domains across the boundary to the lower grade Host Rock. This decrease is expected and can be attributed to the higher-grade samples included in the Main Mineralized domain, validating the domain modeling using a 0.3% Cu cut-off grade.

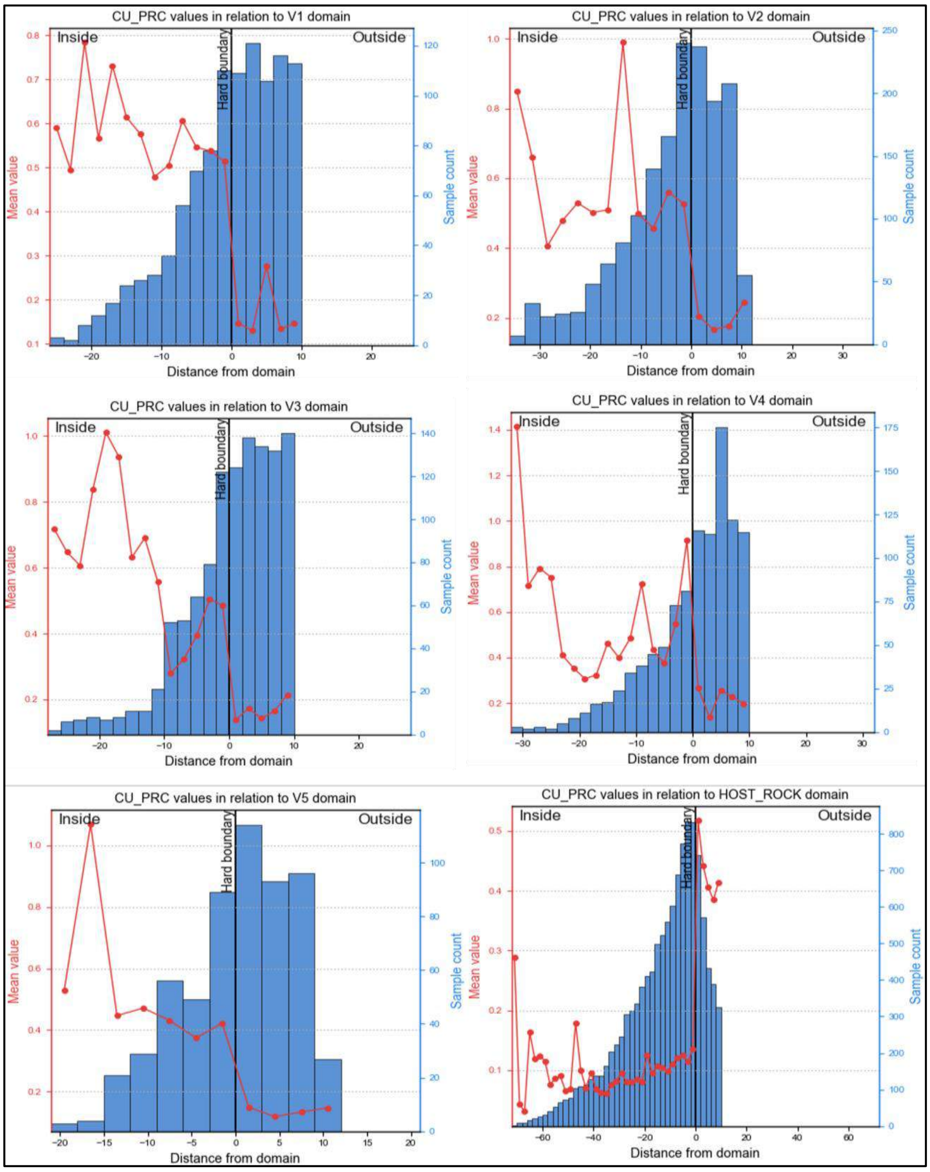


Figure 14-27: Contact analysis for domains V1, V2, V3, V4, V5 and Hosted Rock.
Source: GE21, 2024.

The principal orientation of mineralization is variable within the domains in the down dip and along strike directions, as discussed earlier in the variographic analysis section of this report. GE21 applied dynamic anisotropy for block model grade interpolation, variogram and sample selection using search ellipsoids which were orientated individually for each block model cell. Dip angle and dip orientation parameters of the Domain surface were interpolated into each of the model cells. Figure 14-28 provides an example for domain V6. This approach was implemented across all estimated domains, including the Host Rock. The search elliptical volume was increased in 4 steps to estimate each block model cell, on the basis of the search volume satisfying minimum criteria of samples and drill holes falling within each search volume. High grade copper samples above 4% Cu were restricted to ensure these samples were not used to estimate model cells in which the center of the cell was more than 35m from the sample. Table 14-11describes the interpolation search parameters used for copper and gold.

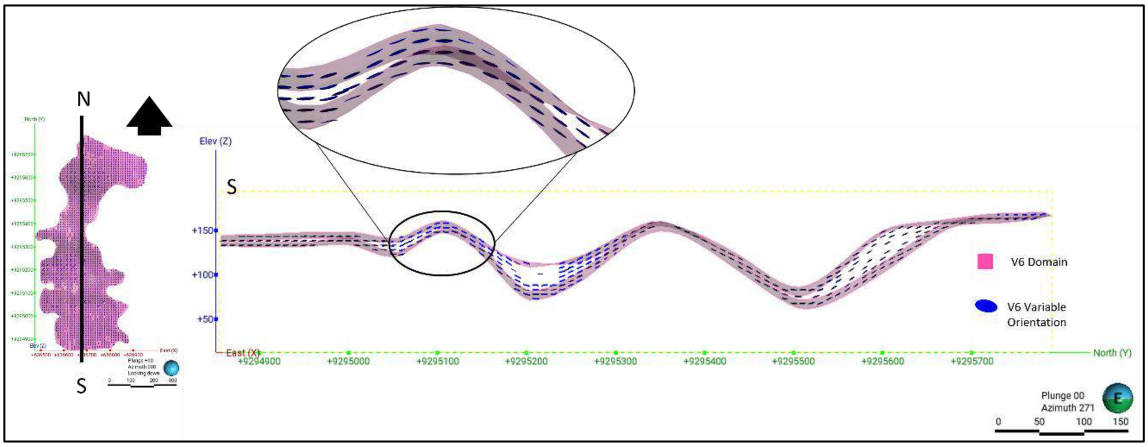


Figure 14-28: Variable orientation for domain V6.
Source: GE21, 2024.

Table 14-11: Kriging strategy - Search volume parameters.

Variables	Steps	Ellipsoid Ranges (m)			Number of Samples		
		Maximum	Intermediate	Minimum	Maximum	Minimum	Max. Drill Holes
Cu (%) and Au (ppm)	Step 1	70	39	13	8	3	2
	Step 2	105	58	19	8	3	2
	Step 3	210	116	38	8	3	2
	Step 4	2100	11600	3800	8	3	2
Dynamic variable orientation for estimation was applied to each domain in Leapfrog software applied block by block for variogram orientation and in moving neighbourhood search ellipsoid. Outlier restriction was applied in all steps of estimation: samples with grades higher than 4.00% Cu in distances higher then 35m from the block centroid were excluded from the estimate.							

14.9 Estimation Validation

The QP carried out the validation of the estimate through visual verification and by the Global and Local bias verification. Global bias checks used The Nearest Neighbour interpolation (NN) method as a comparison estimate by the NN-Check analysis. Local bias was compared using Nearest Neighbour and Inverse Distance interpolation method by Swath Plot Analysis. The comparison was performed for the Main Mineralized Zones and outside the Main Mineralized zone and Hosted Rock individually.

Figure 14-29 to Figure 14-33 show the results for global bias analysis of the estimated Cu (%) and Au (ppm) in NN-Check analysis. It allowed verifying the occurrence of expected smoothing of the estimation using Ordinary Kriging within the acceptance limits. The comparison showed that Ordinary Kriging globally respected the average grades, and the global bias in the estimated grades is within the limits of acceptance.

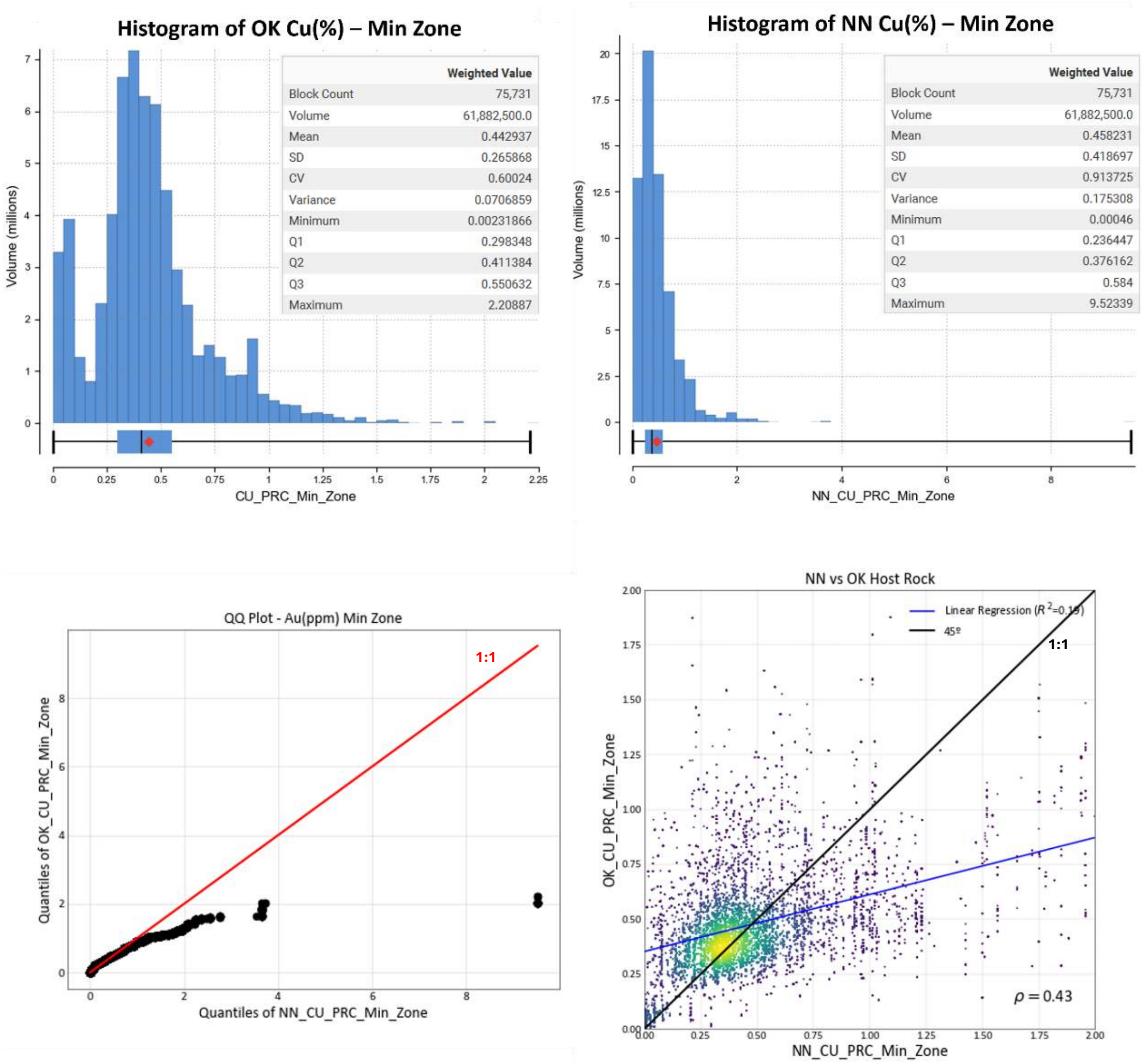


Figure 14-29: NN-Check: Global bias validation for Cu (%) Main Mineralized Zones.
Source: GE21, 2024.

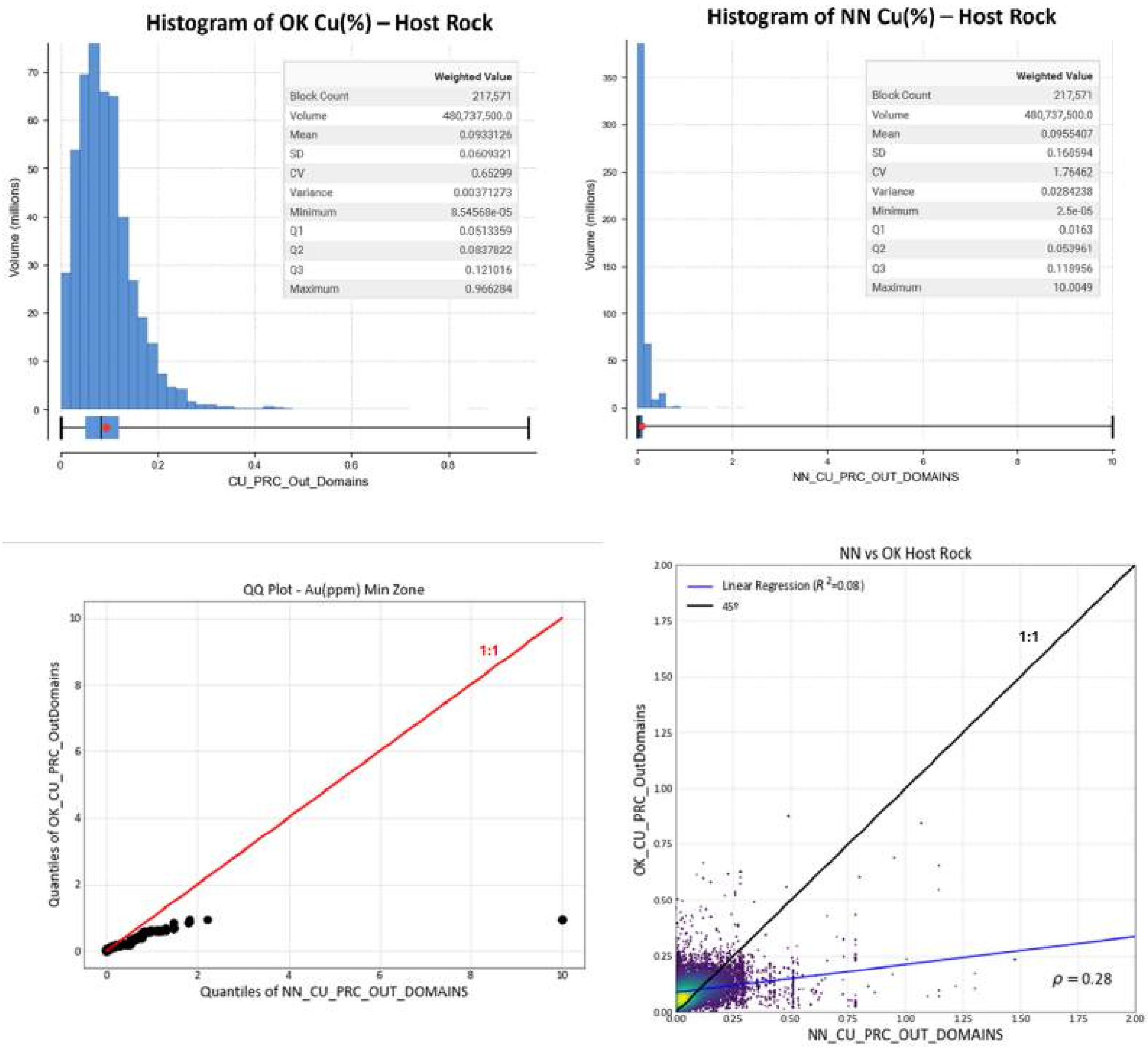


Figure 14-30: NN-Check: Global bias validation for Cu (%) out of mineralized zone.
Source: GE21, 2024.

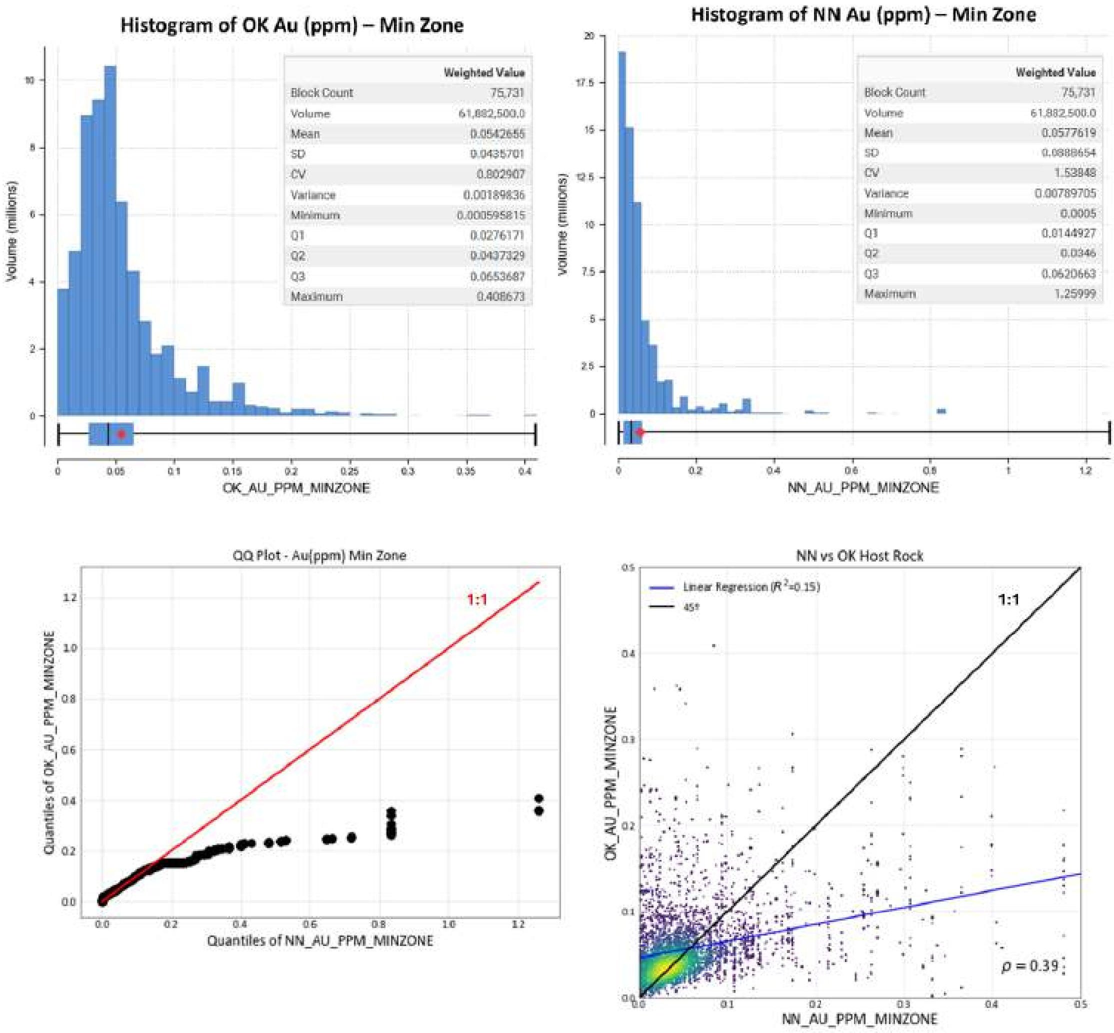


Figure 14-31: NN-Check: Global bias validation for Au (ppm) in mineralized zone.
Source: GE21, 2024.

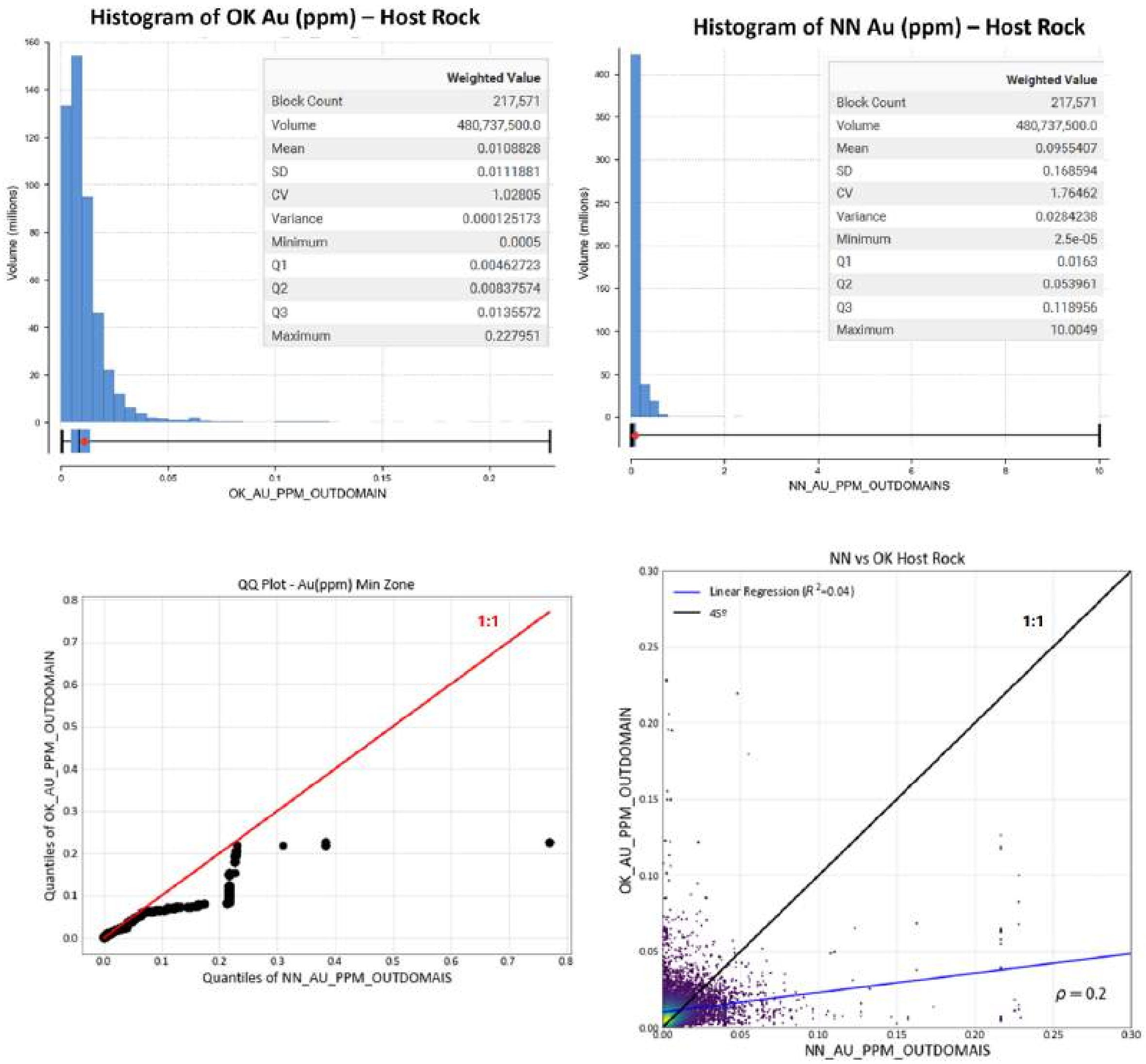


Figure 14-32: NN-Check: Global bias validation for Au (ppm) out of mineralized zone.
Source: GE21, 2024.

The local bias assessment by the Swath-Plot method aims to analyze the occurrence of local bias by comparing the average grades for the model through Ordinary Kriging, Nearest Neighbour and Inverse Distance interpolation methods in swath coordinates intervals graphs along the X, Y, and Z axes. Figure 14-33 to Figure 14-36 show the validation results of the Cu (%) and Au (ppm) swath plots.

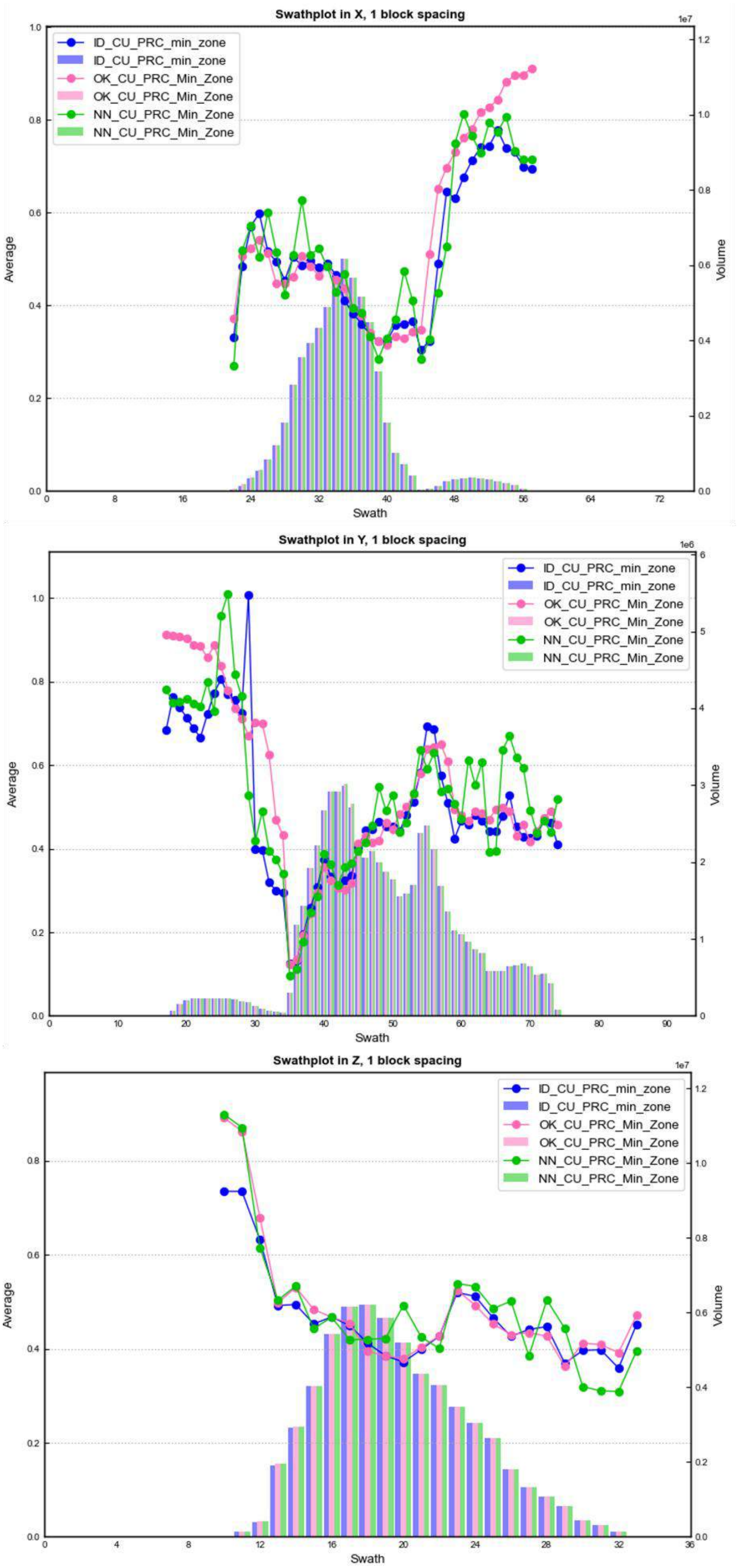


Figure 14-33: Swath Plot Cu (%) Main Mineralized Zones.
Source: GE21, 2024.

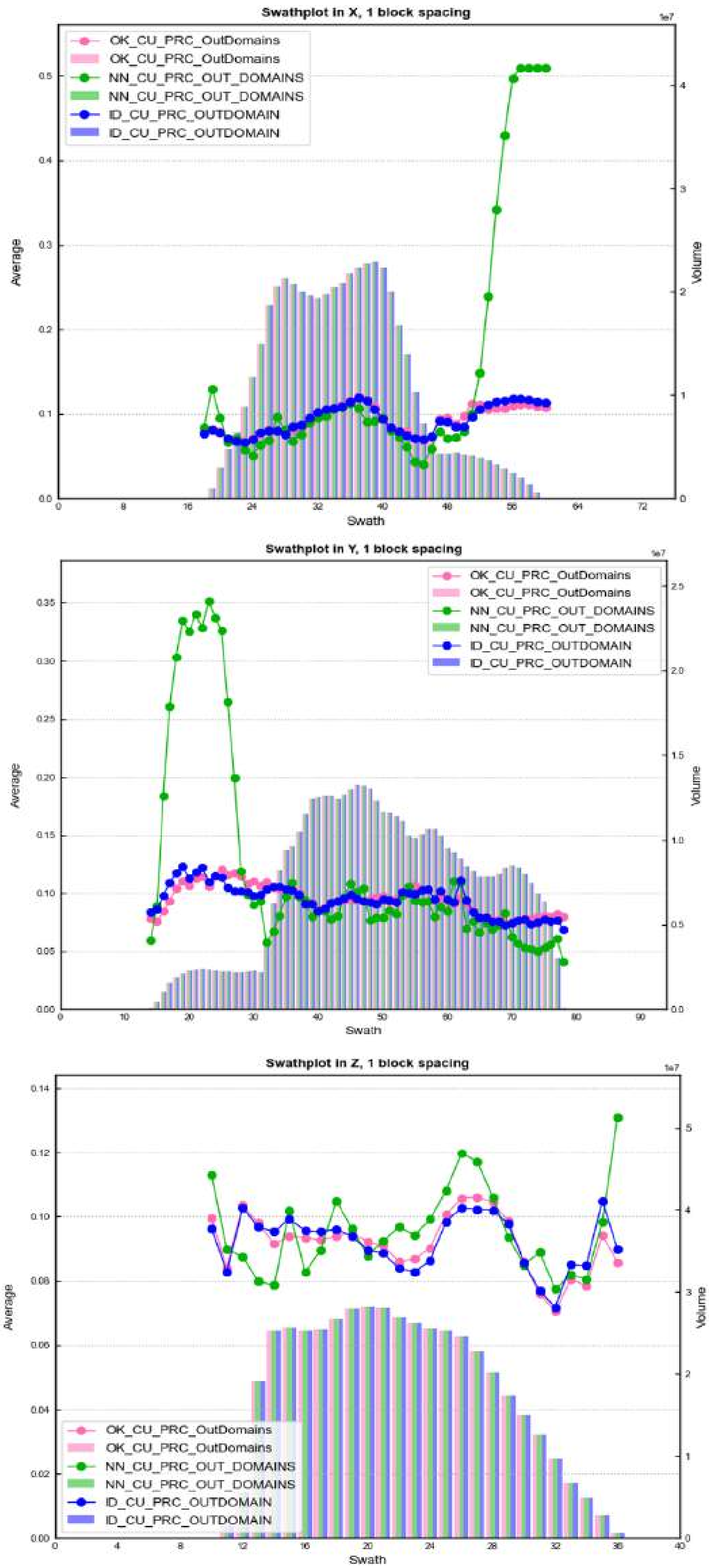


Figure 14-34: Swath Plot Cu (%) Out of Mineralized Zone- Host Rock.

Source: GE21, 2024.

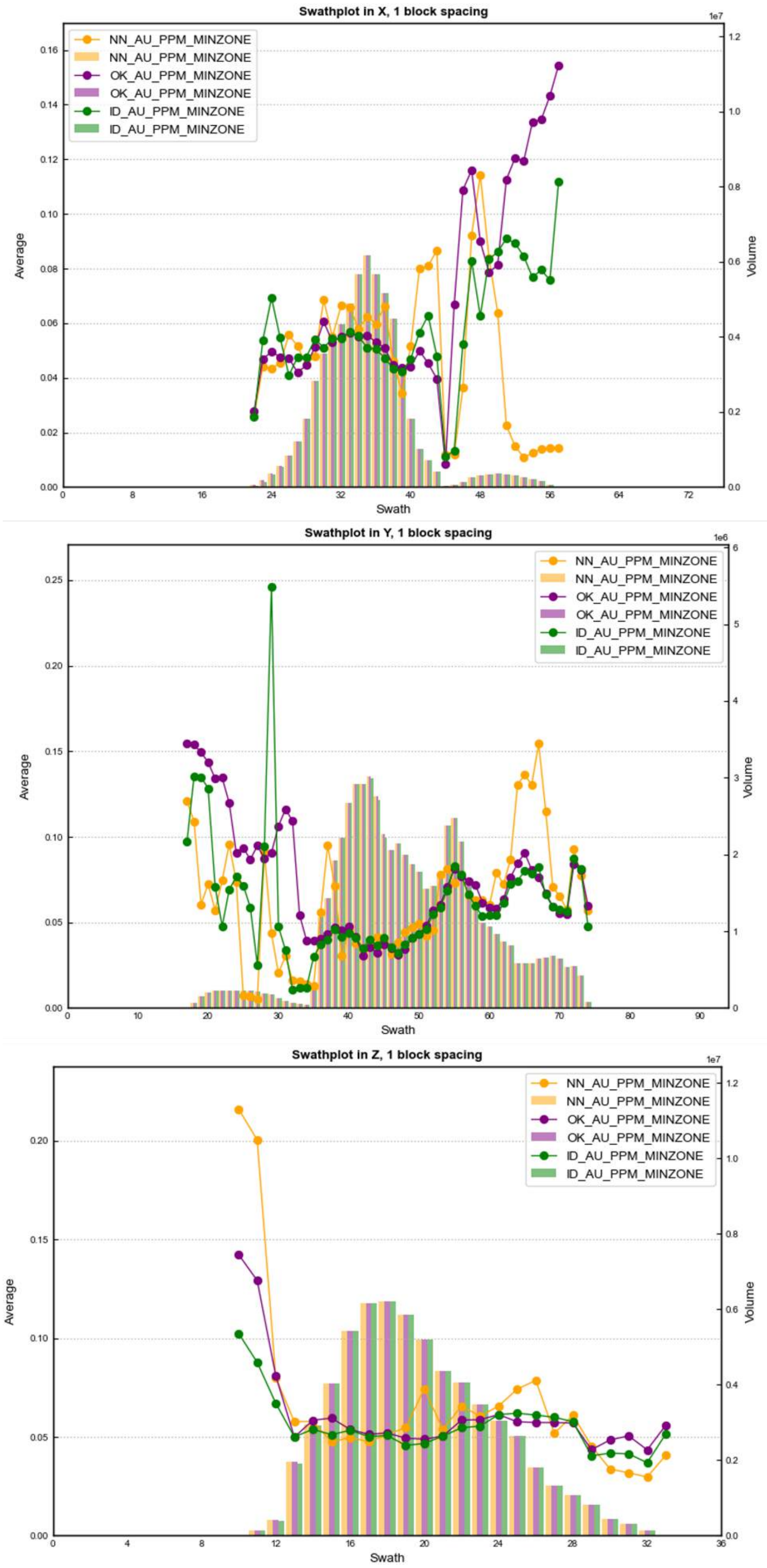


Figure 14-35: Swath Plot Au (ppm) Main Mineralized Zones.
Source: GE21, 2024.

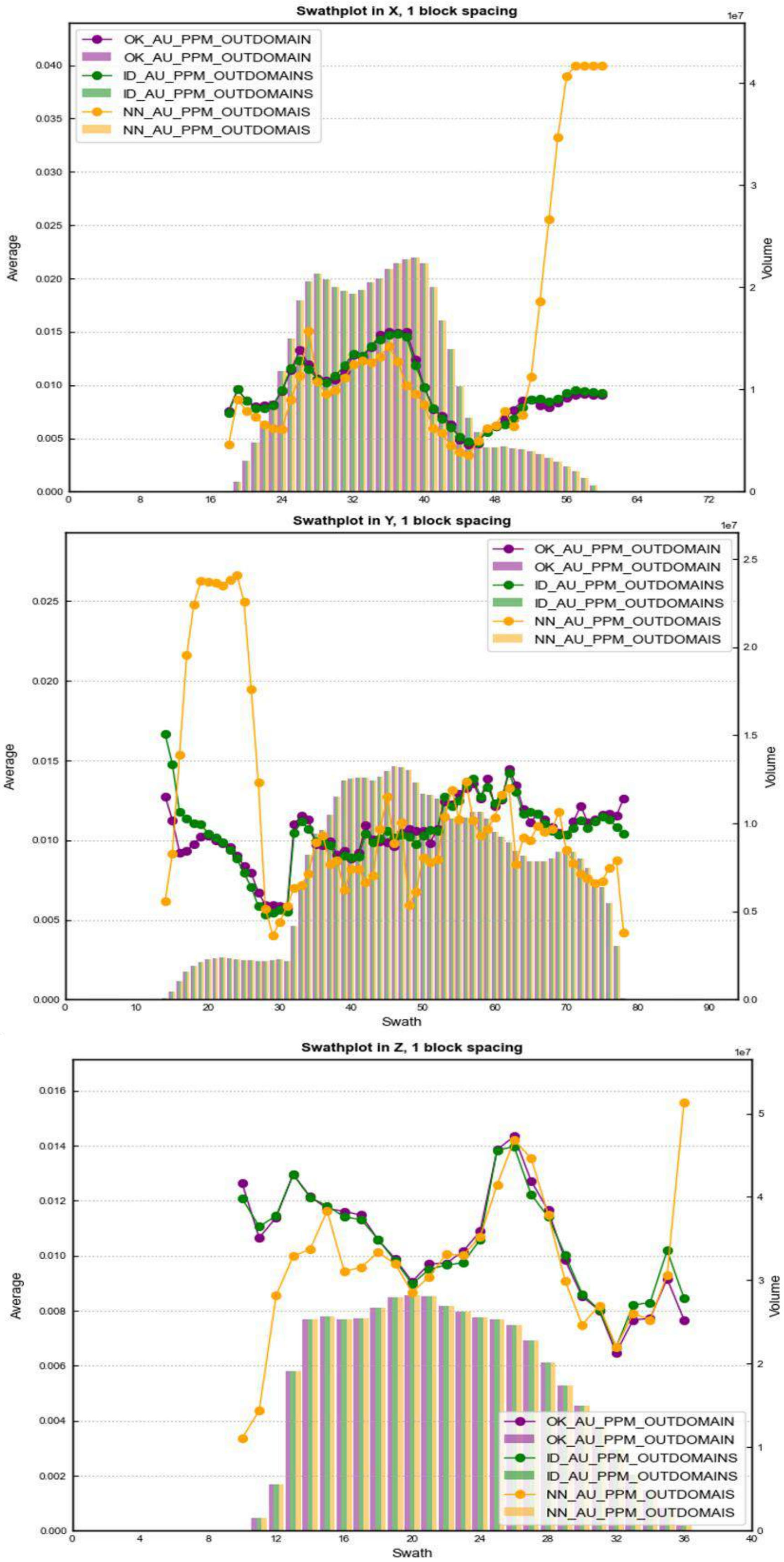


Figure 14-36: Swath Plot Au (ppm) Out of Mineralized Zone – Host Rock.
Source: GE21, 2024.

The results from the Ordinary Kriging grade estimate validation show that the smoothing effect or local and global bias are inside acceptance limits for the Mineral Resource estimate purposes. Silica Cap target presents a significant bias in the Au grade due its low number of samples, but it was considered as having a low estimation confidence in the mineral resource classification (Inferred), and for this reason, considered as within acceptance limits.

14.10 Open Pit Optimization for Mineral Resource Model

The resource classification was supported by a pit optimization process to assess the Reasonable Prospect for Eventual Economic Extraction (RPEEE) of the mineralization. This assessment is performed through a high-level pit optimization process which limits the mineralization blocks classified as resource blocks based on economic and geometric parameters. The parameters were based on following:

- Parameters of pit optimization are presented in Table 14-12.
- Exchange rate (US$/R$) was based on 3 years index average.
- Copper and Gold prices based on long term projections and current spot prices at the effective date of writing this report/ undertaking technical studies.
- Mining cost, processing costs and G&A costs based on GE21's understanding of other nearby operating miners with similar potential sized operations and mineralization styles and processing methodologies.
- Slope angles based on GE21 Planalto geotechnical stability study detailed in the report Planalto Copper Project Slope Stability Analysis (2024) and GE21's understanding of other nearby operating miners with similar host rock and geotechnical conditions.
- Metallurgical recovery based on two reports completed by consultants Blue Coast described in section 13.
- Transport and selling costs, smelter terms and treatment charges and refining charges based on GE21's understanding of commercial terms at local and other operating mines.
- Assumed a maximum mineralization extraction and no dilution.

Table 14-12: First Pass Parameters.

Category	Item	Unity	Value
Metal Prices	Copper (Cu)	US$/t metal	10,000
	Gold (Au)	US$/oz	2,200
Optimization	Mineral Resources Processed	-	Indicated, Inferred
	Processed Category	-	Sulphide
Mining	Average Mining Costs	US$/t mined	2.9
	Mining Recovery	%	100
	Mining Dilution	%	0
	Slope Angle - Oxide	°	32
	Slope Angle - Sulphide	°	52
	Minimum Model Block size	m x m x m	10x10x5
Processing	Total Processing Cost	US$/t ROM	8.5
	Copper Recovery	%	88
	Gold Recovery	%	68
	Concentrate Grade - Cu	%	27.5
	Concentrate Grade - Gold	oz/ton	0.075
Smelter	Deduction Metal - Cu	%	1
	Payable Metal - Au	%	90
	Treatment Cost	US$/t concentrate	59.5
Refinement	Gold Refining cost	US$/oz metal	4.47
	Copper Refining cost	US$/lb metal	0.06
Other Costs	Cost of Transport and Selling Concentrates	US$/t wet 9% concentrate	208
	Royalty (CFEM) – Copper 2%	US$/lb metal	2% of revenue
	Royalty (CFEM) - Gold 1.5%	US$/oz metal	1.5% of revenue
	Royalty - Ownership	US$/lb metal	0.0
	G&A	USS$/t ROM	3.0

The Net Smelter Return (NSR) is the net revenue that the owner of a mining property receives from the sale of the mine's metal products less transportation and refining costs, as illustrated on Figure 14-37. A Net smelter return was calculated for each cell in the block model using the inputs defined in Table 14-12 and applied in the pit optimization process.

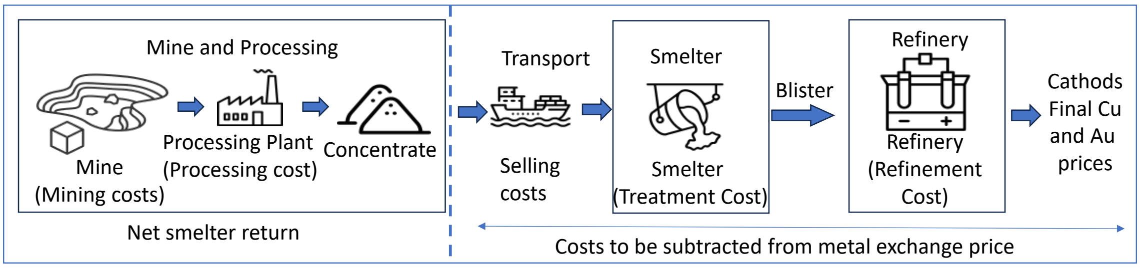


Figure 14-37: Net Smelt Return (NSR) flowchart.
Source: GE21, 2024.

Formulae below was applied on NSR calculations block by block:

$$NSR = (NV_{Au} + NV_{Cu} - trc - sc - ref_{Au} - ref_{Cu}) * mr_{Cu}$$

$$\begin{cases} NV_{Cu} = (Sp_{Cu} - Roy_{Cu}) * Pay_{Cu} * cg_{Cu} - G\&A \\ NV_{Au} = (Sp_{Au} - Roy_{Au}) * Pay_{Au} * cg_{Au} \\ cg_{Au} = RmetAu * t_{Au}/mr_{Cu} \end{cases}$$

Where:

- NSR = Net Smelter Return
- NV = Net Value
- trc = treatment cost
- sc = selling cost
- ref = refinement cost
- mr = mass recovery
- Sp = Selling Price
- Roy = Royalties
- Pay = Payable metal
- cg = concentrate grade
- G&a = General and administration cost
- Rmet = Metallurgical Recovery

An open pit optimization was undertaken using a variety of metal prices detailed in Table 14-13. The pit shell calculated using a metal price of 10,000 US$/t Copper and 2,200 US$/Oz gold is used to define the RPEEE limit of the Mineral resource estimate in the Planalto deposit and is presented in Table 14-13.

Table 14-13: Results of pit optimization and indication of selected pit

Scenarios		ROM *			Waste	Total Mov.	Strip	Marginal cut off
US$/t Cu	US$/lb Cu	Mt	Cu (%)	Au (g/t)	Mt	Mt	Ratio	Equiv. Cu%
$8,000/t	$3.63/lb	143.7	0.47	0.05	292.5	436.2	2.04	0.20
$8,500/t	$3.86/lb	152.6	0.45	0.05	301.0	453.6	1.97	0.19
$9,000/t	$4.08/lb	164.1	0.44	0.05	312.0	476.1	1.90	0.18
$9,500/t	$4.31/lb	179.8	0.42	0.05	315.0	494.8	1.75	0.17
$10,000/t	**$4.54/lb**	**201.7**	**0.40**	**0.05**	**336.7**	**538.4**	**1.67**	**0.16**
$11,000/t	$4.99/lb	240.7	0.36	0.04	335.4	576.1	1.39	0.14
$12,000/t	$5.44/lb	255.4	0.36	0.04	385.1	640.5	1.51	0.14

*-Tonnage and grade presented for sensitivity analysis purposes on the table are considered a mineral inventory without any resource classification and should not be considered as mineral resource. It was based on Geovia Whittle software output results from pit optimization process.

14.11 Classification of Mineral Resources

The Mineral Resource was classified per CIM Standards and CIM Guidelines (https://mrmr.cim.org/media/1146/cim-mrmr-bp-guidelines_2019_may2022.pdf) utilizing geostatistical and classical methods, along with economically and mining-appropriate parameters relevant to the deposit type.

The Resource definitions by CIM are transcribed below:

- A Mineral Resource is a concentration or occurrence of diamonds, a natural solid inorganic material or natural fossilized solid organic material, including base and precious metals, coal and industrial minerals in the earth’s crust or in the earth's crust in such form and quantity and of such grade or quality that allows reasonable prospects of economic extraction. The location, quantity, level, geological characteristics, and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
- An “Inferred Mineral Resource” is that part of a Mineral Resource for which the quantity and level or quality can be estimated on the basis of geological evidence and limited sampling and reasonably presumed but not verified geological and grade continuity. The estimation is based on limited information and sampling collected using appropriate techniques from locations such as outcrops, trenches, wells, and drill holes.
- An “Indicated Mineral Resource” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and assessment of the deposit’s economic viability. The estimation is based on thorough and reliable exploration and

testing information gathered using appropriate techniques from locations such as outcrops, trenches, wells, works, and drill holes spaced far enough apart for geological and level continuity to be reasonably assumed.

- A "Measured Mineral Resource" is that part of a Mineral Resource for which quantity, level or quality, densities, shape, and physical characteristics are so well established that they can be estimated with sufficient confidence to allow the appropriate application of technical and economic parameters, to support production planning and assessment of the deposit's economic viability. The estimation is based on thorough and reliable exploration, sampling, and analysis information gathered using appropriate techniques from locations such as outcrops, trenches, wells, works, and drill holes spaced far enough apart to confirm geological and level continuity.

The mineral resource classification boundaries were modelled by GE21 as solid volumes for the Indicated, and Inferred categories which were established through an approach that considered a comprehensive set of factors.

These factors included the sampling procedure analysis, the sample grid spacing, the survey methodology, and the quality of assay data.

Additionally, the progressive expansion of the search radius during grade estimation stages was also considered, as well as the continuity of the geological model mineralization.

This multi-faceted approach ensured the robustness and accuracy of the classification process.

Classification was applied as follows:

- The Measured Mineral Resource class has not been applied in the deposit.
- The classification of Indicated Mineral Resources was based on the first and second step of Ordinary Kriging, which utilizes the variogram range in the search ellipsoid of up to: 105m x 60m x 20m (Table 14-14) in the Main Mineralized domain only.
- The Inferred Mineral Resource classification is all remaining estimated blocks in Main Mineralized domain.
- The Host Rock zone was classified as Inferred resource class, irrespective of the search step used, due to the lower confidence in mineralization continuity.
- All other the blocks outside the pit optimization were not classified as mineral resources.

Mineral resources inside the selected RPEEE pit optimization shell are presented in the Table 14-14 and Figure 14-38. A cut-off of 0.16% equivalent Cu was applied to all model cells; (Main Mineralization and the Host Rock mineralization) within the chosen pit shell which has was calculated using metal prices of 10,000 $/t Cu and 2,200 $/Oz Au.

Equivalent Copper grade was calculated block by block using the formula below:

*Copper Equivalent grade= Cu grade + ((Au Recovery x Au price x Payable Au)/(Cu Recovery*Cu price x Percentage Payable for Cu in NSR)) x Au grade*

Where: Payable Au = 90% and Percentage Payable for Cu in NSR = 83.7%, the formulae is simplified to Cu-Eq% = Cu% + (Au g/t x 0.578).

Table 14-14: Planalto Project Mineral Resource Estimate

Zone	Category	Resource (Mt)	Cu Grade (%)	Au Grade (g/t)	Cu (Kt)	Au (Koz)	Copper Equivalent (%)
Main Mineralization	**Indicated**	**47.7**	**0.53**	**0.06**	**252.8**	**92.0**	**0.56**
	Inferred	77.7	0.51	0.06	396.3	149.9	0.54
Host Rock Mineralization	Inferred	76.3	0.20	0.03	152.6	73.6	0.22
Total	**Indicated**	**47.7**	**0.53**	**0.06**	**252.8**	**92.0**	**0.56**
	Inferred	154.0	0.36	0.04	548.9	223.5	0.38

Notes related to the Mineral Resource Estimate:

15. *The Mineral Resource Estimate (MRE) was restricted by a pit shell defined using metal prices of 10,000 US$/t Cu and 2,200 US$/oz Au, Mining cost of 2.9 US$/t mined, processing and G&A cost of 11.50 US$/t processed. Process recovery of 88% Cu and 68% Au. Concentrate transport and selling costs of 208 US$/t concentrate. Commercial smelter terms copper treatment and refining charges 59.5 US$/t concentrate, 0.06 US$/t metal, Gold refining charge 4.47 US$/Oz.*
16. *Indicated and Inferred Resources estimate reported above a 0.16 equivalent Cu (%) cut off.*
17. *Copper Equivalent grade = Cu grade + ((Au Recovery x Au price x Payable Au)/(Cu Recovery x Cu price x Percentage_Payabloe for Cu in NSR)) x Au grade , where: Payable Au = 90% and Percentage Payable for Cu in NSR = 83.7%*
18. *The MRE contains fresh rock domains only, the oxide mineralization is not reported.*
19. *Grades reported using dry density.*
20. *The MRE is within Planalto Mineração tenement areas.*
21. *The MRE was estimated using ordinary kriging in 40m x 40m x 20m blocks with sub-blocks of 10m x 10m x 5m.*
22. *The MRE report table was produced in Leapfrog Geo software.*
23. *The MRE was prepared in accordance with the CIM Standards, and the CIM Guidelines, using geostatistical and/or classical methods, plus economic and mining parameters appropriate to the deposit.*
24. *The effective date of the MRE is July 03rd, 2024.*
25. *The QP responsible for the Mineral Resources Estimate is geologist Leonardo Soares (MAIG #5180).*
26. *Mineral Resources are not ore reserves and are not demonstrably economically recoverable.*
27. *The MRE numbers provided have been rounded to the estimate relative precision. Values cannot be added due to rounding.*
28. *QP's/ authors are not aware of any legal, permitting, political, environmental, or other risks that could materially affect the development of the Mineral Resource.*

The RPEEE Resource Pit shell includes an oxide mineralization zone which has not been classified as a Mineral Resource due to the lack of information related to metallurgical recovery from this type of material. This material was not considered in the RPEEE pit optimization process as revenue generating, therefore reporting to waste. The possible oxide mineralization tonnage and grades expected for this exploration potential material are approximately 3.0 - 4.0Mt at 0.4 to 0.5% Cu and minor gold values of approximately 0.04 to 0.05 g/t Au. This potential quantity and grade are conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource'.

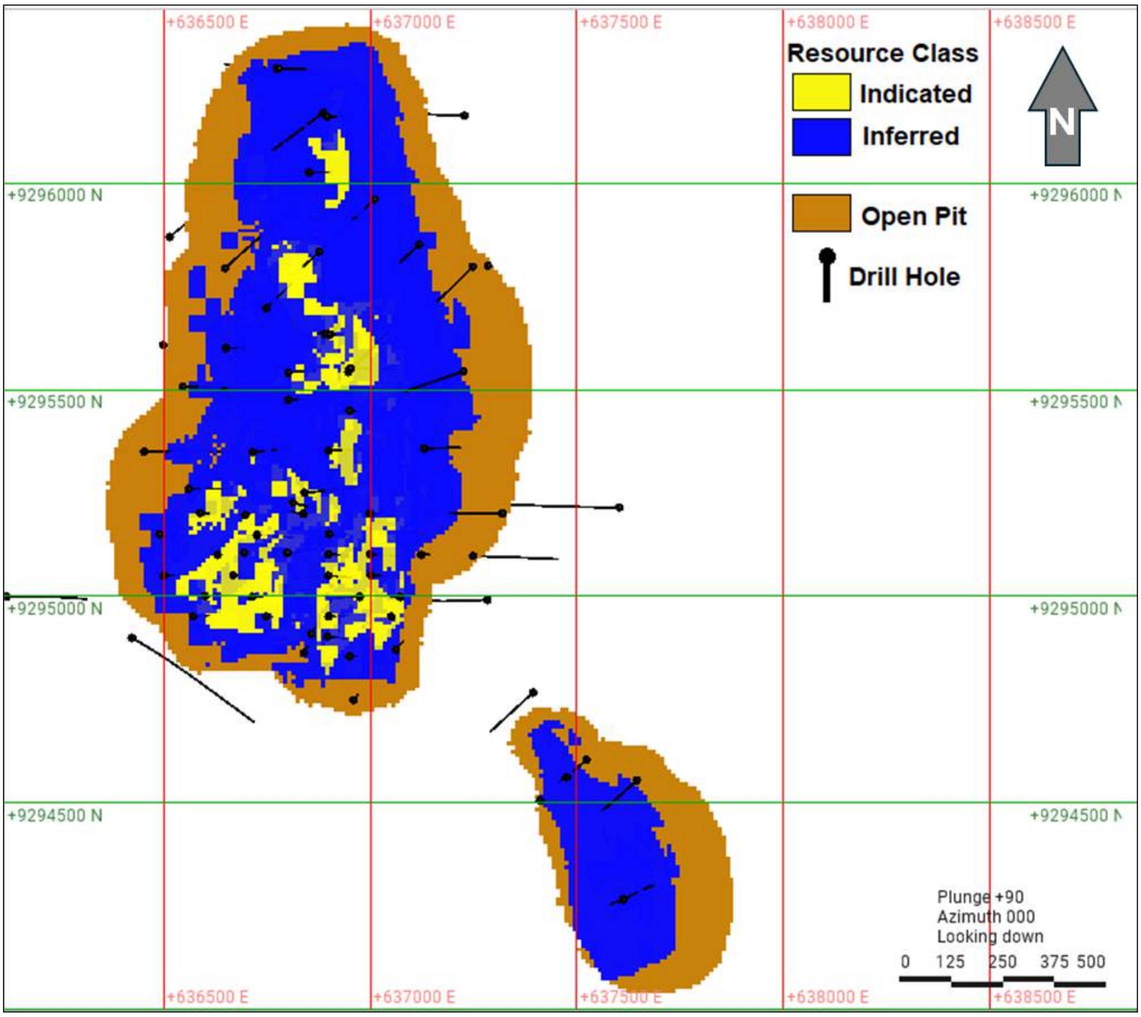


Figure 14-38: Planalto Project Mineral Resource Classification inside RPEEE pit.
Source: GE21, 2024.

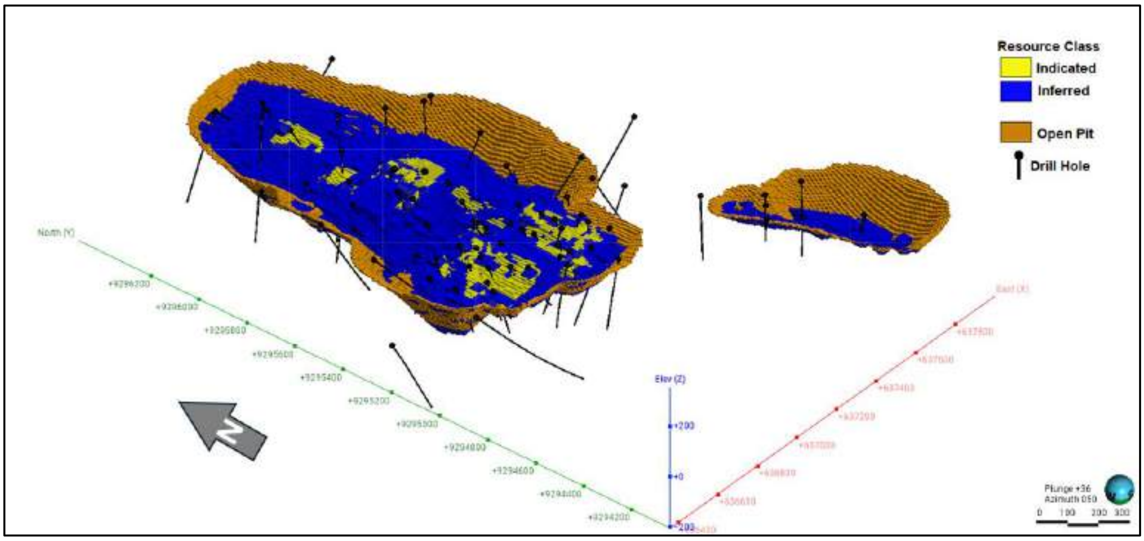


Figure 14-39: North-South cross-section – Mineral Resource classification inside RPEEE pit.
Source: GE21, 2024.

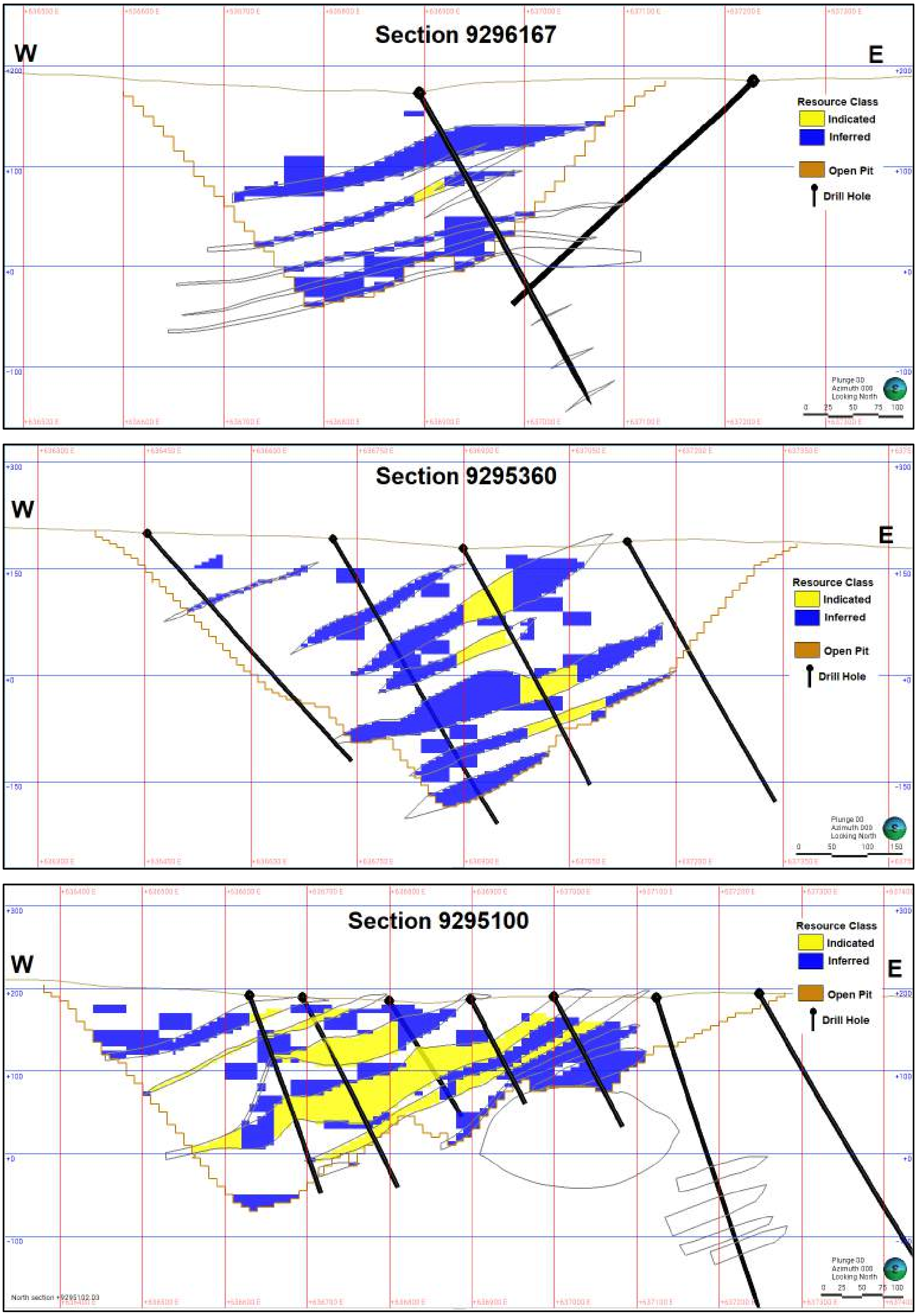


Figure 14-40: Cross-sections West-East – Resource Classification inside RPEEE pit.
Source: GE21, 2024.

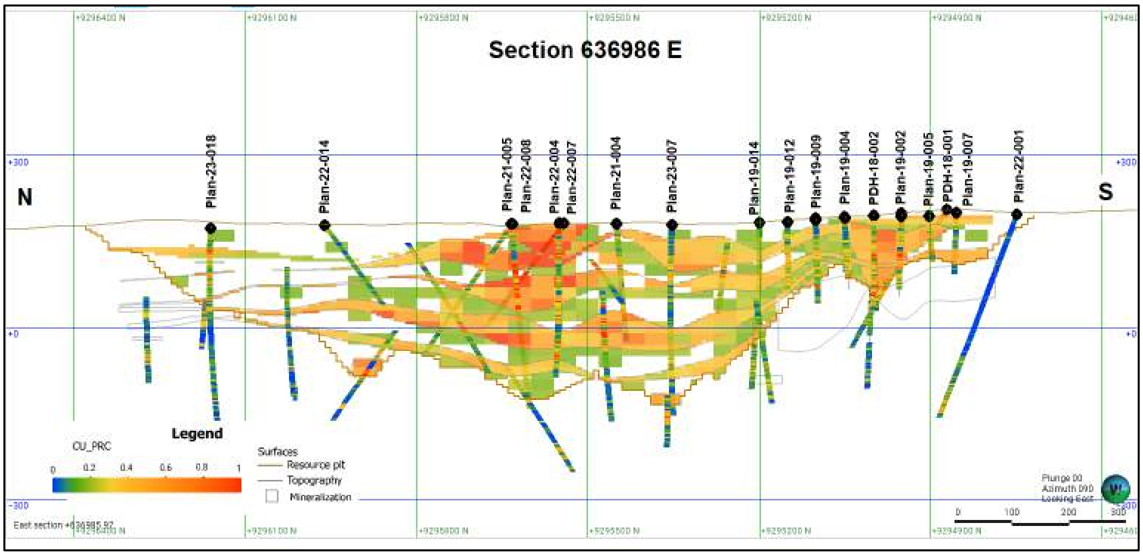


Figure 14-41: Long-section 636882 E – Cu grade (%) inside RPEEE pit.
Source: GE21, 2024.

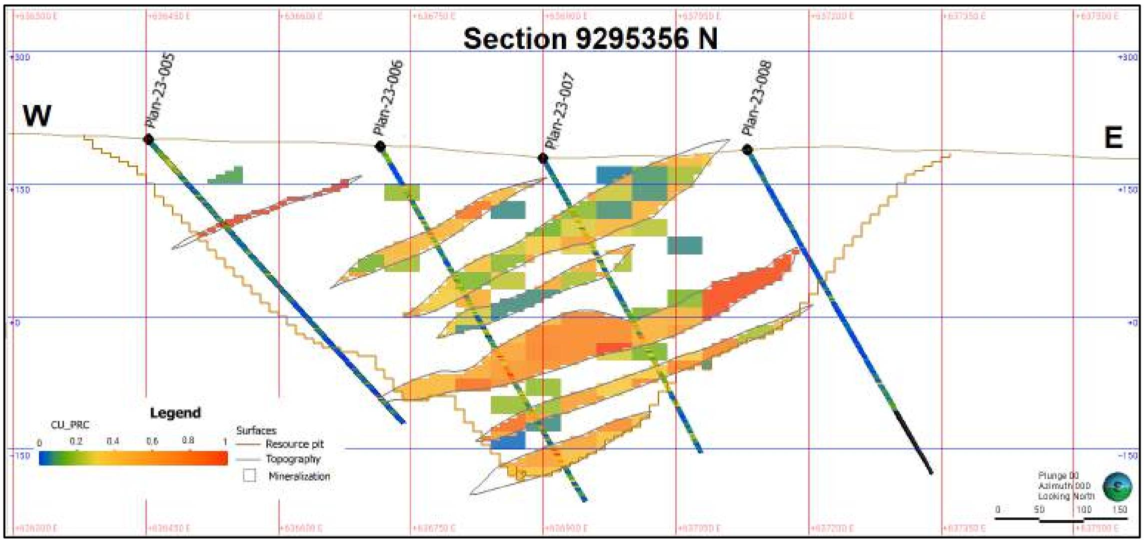


Figure 14-42: Cross-section 9295356 N – Cu grade (%) inside RPEEE pit.
Source: GE21, 2024.

14.12 Sensitivity Analysis Based on Copper Cut-off Grade

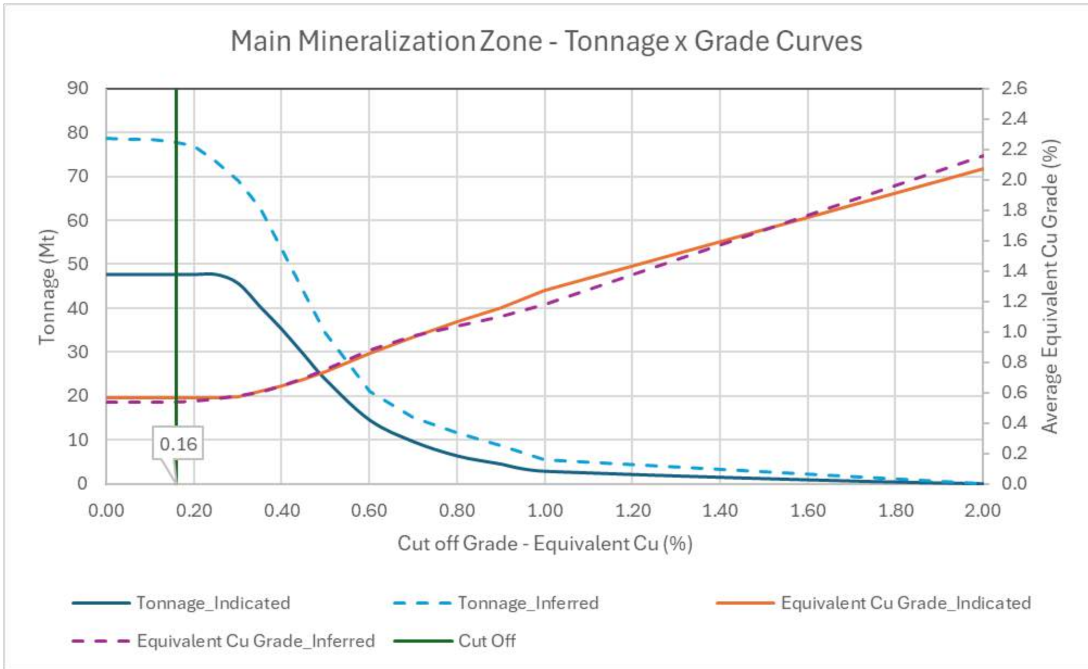
The Planalto Mineração technical team and the QP discussed extensively the application of a cut-off grade for the Resource classification reporting of the Planalto mineral resource estimate. The RPEEE pit optimization marginal cut-off grade for the 10,000 US$/t copper price pit shell was calculated to be 0.16% Cu Equivalent grade (CuEq), and this cut-off grade was used to report the mineral resource estimate tonnes and grade above this cut-off threshold. The tables and graphs below represent the grades and tonnages above different copper equivalent cut-off grades for the Main Mineralization (Table 14-15 and Figure 14-45) and Host Rock Mineralization (Table 14-16 and Figure 14-46) within the RPEEE pit shell. Tonnage and grade presented for sensitivity analysis purposes on these tables are considered a mineral inventory and do should not be considered as mineral resource.

Within the Main Mineralization domain it is apparent that the grade and tonnage is not sensitive to cut-off grades below 0.3%Cu Eq, which is as expected since the Main Mineralization has been modeled using a boundary close to 0.3% Cu to define the mineralization, above this threshold the mineralization tonnage drops more rapidly as the copper equivalent cut-off grade gradually increases. The mineralization tonnage is most sensitive between 0.3% and 0.6% Cu equivalent cut-off grade.

Table 14-15: Main Mineralization – Grade x Tonnage curve table mineral inventory within the US$10,000/t Cu selling price pit shell.

*Main Mineralization **								
Cut off Equiv. Cu	**Indicated Mineral Resource**				**Inferred Mineral Resource**			
	Mass	**Cu**	**Au**	**Equiv. Cu**	**Mass**	**Cu**	**Au**	**Equiv. Cu**
%	Mt	%	g/t	%	Mt	%	g/t	%
0.00	47.7	0.530	0.059	0.564	0.00	78.6	0.504	0.059
0.05	47.7	0.530	0.059	0.564	0.05	78.5	0.504	0.059
0.10	47.7	0.530	0.059	0.564	0.10	78.4	0.505	0.059
0.15	47.7	0.530	0.059	0.564	0.15	78.0	0.507	0.059
0.20	47.7	0.530	0.059	0.564	0.20	77.0	0.511	0.060
0.25	47.7	0.530	0.059	0.564	0.25	73.5	0.525	0.061
0.30	45.7	0.542	0.060	0.577	0.30	69.0	0.542	0.063
0.35	40.4	0.572	0.064	0.609	0.35	62.8	0.565	0.066
0.40	35.2	0.605	0.068	0.644	0.40	53.4	0.602	0.072
0.45	29.4	0.645	0.073	0.687	0.45	43.8	0.647	0.078
0.50	23.7	0.692	0.078	0.737	0.50	34.4	0.700	0.086
0.60	14.6	0.803	0.094	0.858	0.60	21.1	0.820	0.101
0.70	9.7	0.901	0.109	0.964	0.70	15.0	0.907	0.114
0.80	6.4	0.996	0.126	1.069	0.80	11.7	0.964	0.124
0.90	4.6	1.079	0.140	1.160	0.90	8.7	1.024	0.134
1.00	2.9	1.190	0.145	1.274	1.00	5.5	1.097	0.147
2.00	0.1	1.944	0.224	2.073	2.00	0.1	2.043	0.203
3.00	0.0	0.0000	0.0000	0.0000	3.00	0.0	0.0000	0.0000

*-Tonnage and grade presented for sensitivity analysis purposes on the table are considered a mineral inventory and should not be considered as mineral resource table.



*-Tonnage and grade presented for sensitivity analysis purposes on the figure above are considered a mineral inventory without any classification and should not be considered as mineral resource.

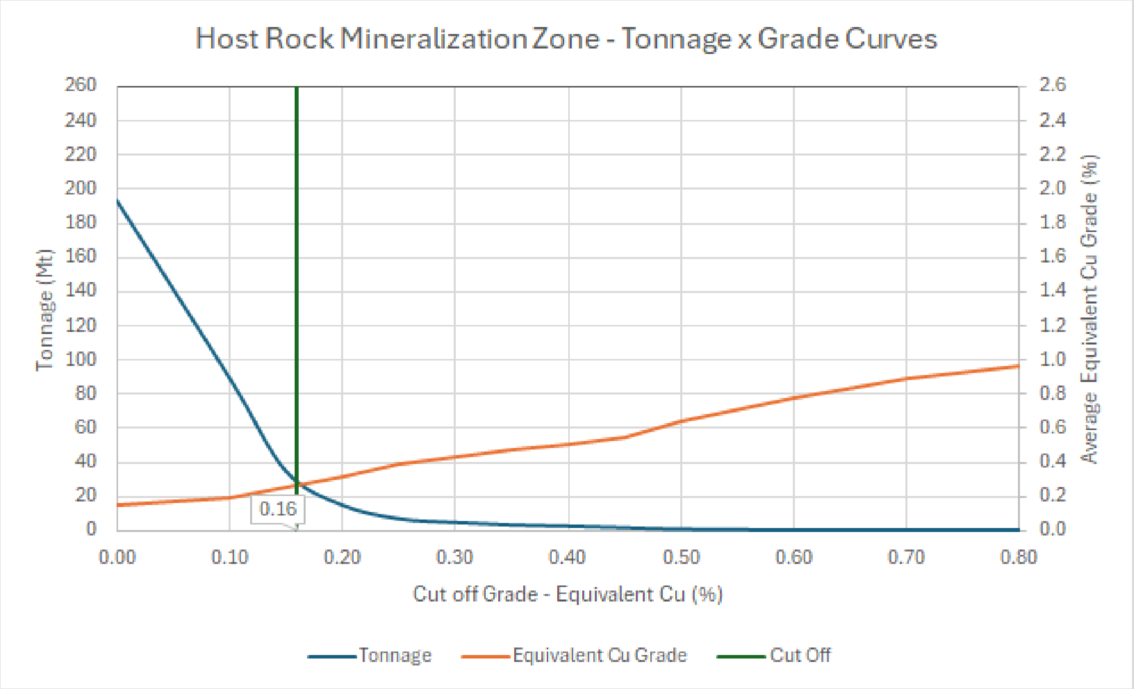
Figure 14-43: Main Mineralization – Grade x Tonnage curve for mineral inventory without classification within the US$10,000/t Cu selling price pit shell.
Source: GE21, 2024.

Within the Host Rock domain mineralization, the mineralization tonnage is much more sensitive to the CuEq % cut-off grades, the tonnages quickly fall to just over 35Mt at a 0.16% CuEq% cut-off and then falls below 10Mt of mineralization above 0.2% CuEq cut-off. The sensitivity of lower grade Host Rock domain mineralization tonnage to cut-off grade at a low CuEq% grades is relevant to a potential future mining operation, in that, tonnages of low grade Host Rock mineralization quickly change with small variations in copper cut-off grades. There is potential for large changes in the tonnage of mineralization which may be processed, stockpiled in a low-grade stockpile or considered waste depending on the future mining cut-off grade applied.

Table 14-16: Host Rock – Grade x Tonnage curve table for mineral inventory without classification within the US$10,000/t Cu selling price pit shell.

Host Rock Mineralization *				
Cut off Equiv. Cu %	Mass Mt	Cu %	Au g/t	Equiv. Cu %
0.00	194.0	0.153	0.019	0.153
0.10	89.6	0.196	0.024	0.196
0.15	34.9	0.251	0.033	0.251
0.20	14.8	0.313	0.046	0.313
0.25	6.8	0.386	0.060	0.386
0.30	4.5	0.433	0.063	0.433
0.35	3.1	0.476	0.066	0.476
0.40	2.4	0.501	0.072	0.501
0.45	1.5	0.544	0.078	0.544
0.50	0.6	0.643	0.062	0.643
0.60	0.1	0.782	0.022	0.782
0.70	0.1	0.896	0.020	0.896
0.80	0.0	0.966	0.010	0.966
0.90	0.0	0.000	0.000	0.000
1.00	0.0	0.000	0.000	0.000
2.00	0.0	0.000	0.000	0.000
3.00	0.0	0.000	0.000	0.000

*-Tonnage and grade presented for sensitivity analysis purposes on the table are considered a mineral inventory in Inferred resource class but should not be considered as mineral resource Table.



*-Tonnage and grade presented for sensitivity analysis purposes on the figure above are considered a mineral inventory and should not be considered as mineral resource.

Figure 14-44: Host Rock – Grade x Tonnage curve for mineral inventory without classification within the US$10,000/t Cu selling price pit shell.
Source: GE21, 2024.

A sensitivity analysis was also undertaken to understand the impact of different copper prices to resulting pit optimization shells for the Planalto mineralization. During the last 3 years there has been a significant variation of the copper price from a low of nearly 7,200 US$/t to a high of 10,500 US$/t and a wide range of predicted future prices. Pit optimizations using the same parameters as those used in the RPEEE pit optimization were undertaken using the Planalto mineralization block model and applying copper prices ranging from 8,000 to 12,000 US$/t, with the resulting tonnes and grade of the Main Mineralization and Host rock Mineralization domains contained within the calculated optimization shells are presented in Table 14-17. Figure 14-45 to Figure 14-48 show vertical sections presenting the pit optimization shells optimized using the different copper price. Figure 14-49 and Figure 14-50 present tonnage and grade resulting from the pit optimization at different copper prices and the associated marginal copper cut-off grades calculated by the optimization process. For clarification, the Planalto Mineral Resource classification, as described in the previous section of this report (14.20: Planalto Project Mineral Resource Estimate) uses an RPEEE open pit optimization shell calculated using 10,000 $/t Cu and 2,200 $/Oz Au.

Table 14-17: Planalto Project Pit Optimization Sensitivity Analysis by Copper Price.

Scenarios		ROM *								Waste	Total Mov.	Strip Ratio	Marginal cut off
		Main Mineralization				Host Rock							
US$/t Cu	US$/lb Cu	Mt	Cu (%)	Au (g/t)	Equiv Cu%	Mt	Cu (%)	Au (g/t)	Equiv. Cu%	Mt	Mt		Equiv. Cu%
$8,000/t	$3.63/lb	116.1	0.519	0.059	0.564	27.6	0.240	0.029	0.261	292.5	436.2	2.04	0.2
$8,500/t	$3.86/lb	118.5	0.519	0.059	0.560	34.1	0.230	0.027	0.249	301	453.6	1.97	0.19
$9,000/t	$4.08/lb	121.2	0.518	0.059	0.556	42.9	0.219	0.026	0.236	312	476.1	1.9	0.18
$9,500/t	$4.31/lb	122.9	0.517	0.059	0.553	56.9	0.208	0.024	0.223	315	494.8	1.75	0.17
$10,000/t	**$4.54/lb**	**125.5**	**0.516**	**0.059**	**0.550**	**76.3**	**0.205**	**0.026**	**0.220**	**336.7**	**538.4**	**1.67**	**0.16**
$11,000/t	$4.99/lb	127.6	0.516	0.059	0.546	113	0.189	0.024	0.201	335.4	576.1	1.39	0.14
$12,000/t	$5.44/lb	129.9	0.518	0.060	0.548	125	0.191	0.024	0.203	385.1	640.5	1.51	0.14

*-Tonnage and grade presented for sensitivity analysis purposes on the table are considered a mineral inventory without any resource classification and should not be considered as mineral resource. It was based on Geovia Whittle software output results from pit optimization process.

Initial observations from this optimization sensitivity analysis relating to the Planalto mineralization identify a number of broad trends which may impact the potential eventual development of the Planalto deposit as follows:

1) The overall pit shape remains largely similar and the deposit does not break down into smaller sub pits as the optimization metal price is reduced, indicating that overall the mineralization has the potential to be mined as a single pit over a range of different metal prices. The Silica Cap domain is mined as a separate small pit in all cases, and contains

approximately 5.5Mt with 0.6% Cu and 0.07 g/t Au at 0.16%Cu Cut off grade.

2) The Main Mineralization domain tonnage varies from 116Mt at the lowest copper price to 130Mt at the highest price with the copper equivalent grade varying marginally from 0.56% to 0.55% respectively. The higher-grade mineralization is contained within all the optimization pit shells over a range of copper prices.

3) The Host Rock domain mineralization occurs adjacent and between the Main Mineralization domain and is more sensitive to metal price in this optimization analysis, with a significant variation in tonnage from 26Mt through to 125Mt within the optimization pit shells from the lowest price to the highest price copper. The change in strip ratio (above cut-off grade to waste material) would indicate that there is low grade mineralization to be processed instead of being classified as waste as the marginal cut-off grade decreases with increased metal prices.

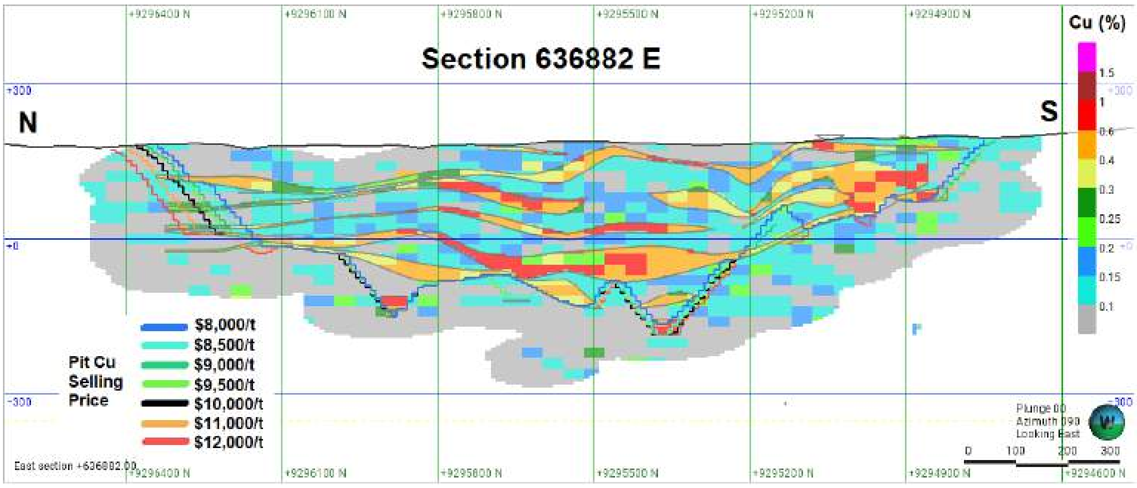


Figure 14-45: Long-section 636882 E – pit optimization sensitivity analysis.
Source: GE21, 2024.

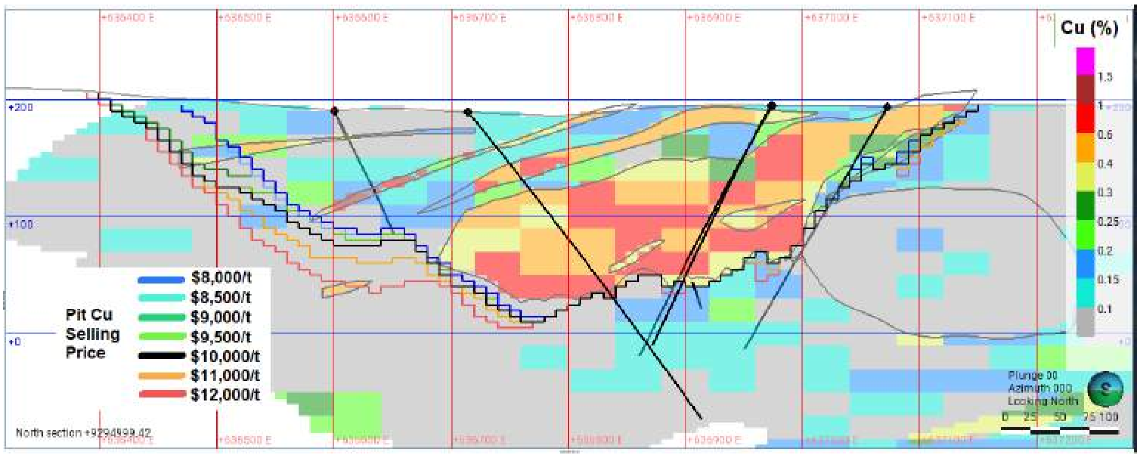


Figure 14-46: Cross-section 9294999 N – pit optimization sensitivity analysis.
Source: GE21, 2024.

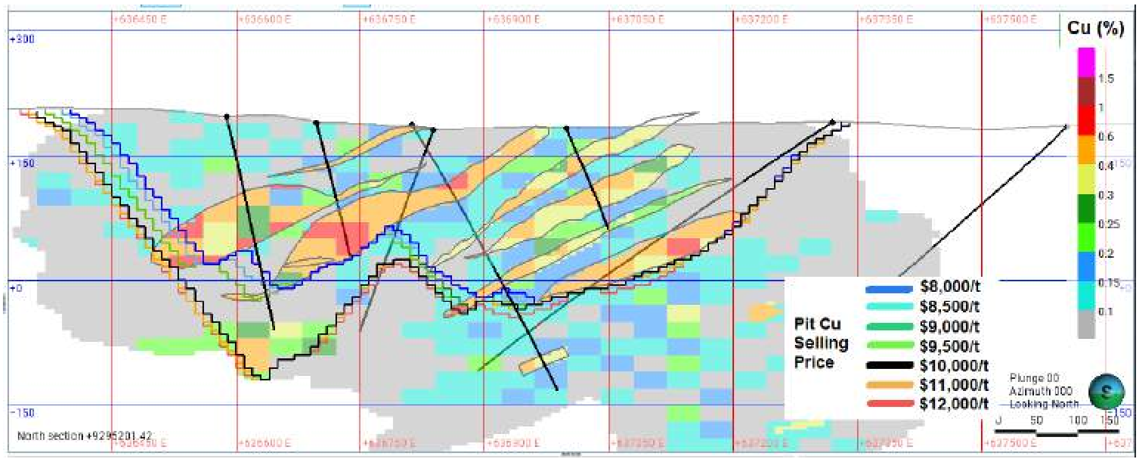


Figure 14-47: Cross-section 9295200 N – pit optimization sensitivity analysis.
Source: GE21, 2024.

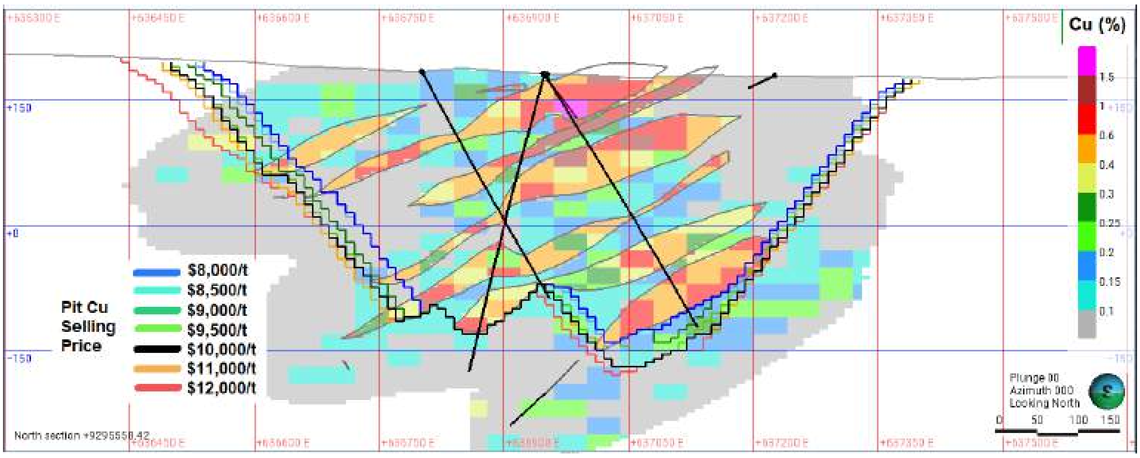
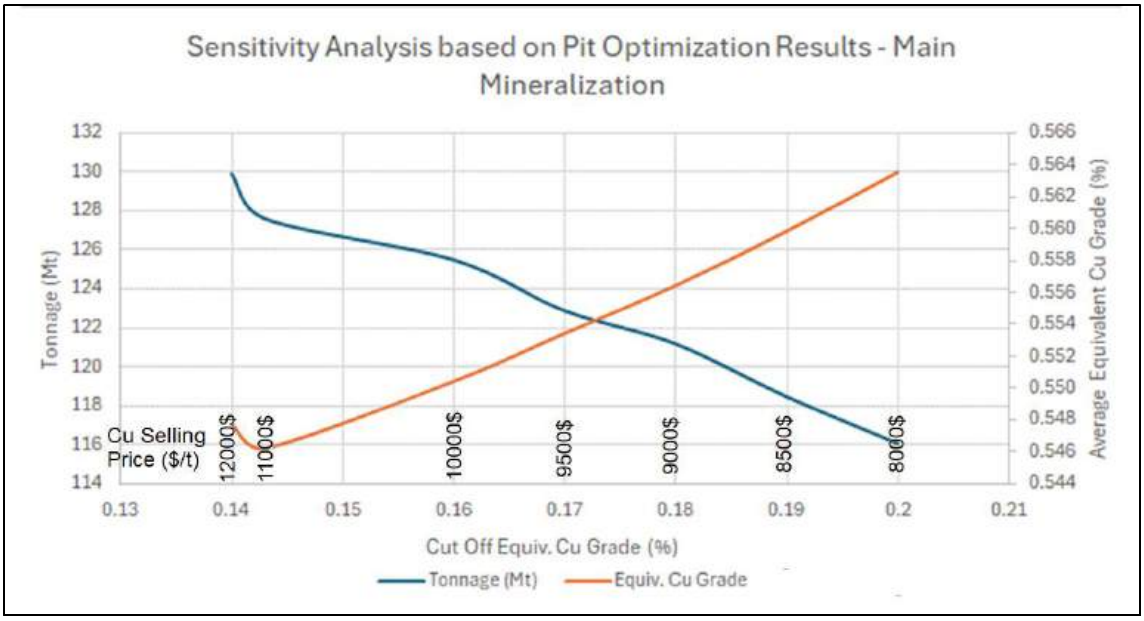


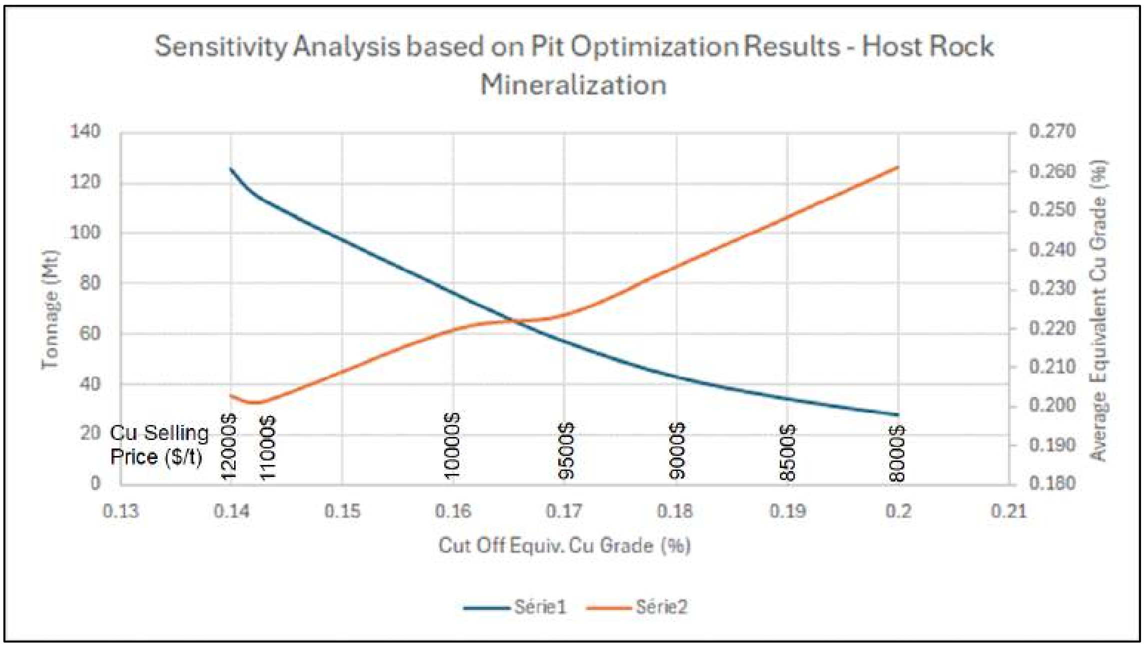
Figure 14-48: Cross-section 9295558 N – pit optimization sensitivity analysis.
Source: GE21, 2024.



*-Tonnage and grade presented for sensitivity analysis purposes on the figure above are considered a mineral inventory without any classification and do not should be considered as mineral resource. It was based on Geovia Whittle software output results from pit optimization process.

Figure 14-49: Tonnage x Grade curves for pit optimization sensitivity analysis at different copper prices – Main Mineralization domain.

Source: GE21, 2024.



*-Tonnage and grade presented for sensitivity analysis purposes on the figure above are considered a mineral inventory without any classification and do not should be considered as mineral resource. It was based on Geovia Whittle software output results from pit optimization process.

Figure 14-50: Tonnage x Grade curves for pit optimization sensitivity analysis at different copper prices – Host Rock mineralization domain.

Source: GE21, 2024.

15 MINERAL RESERVES ESTIMATES

No Mineral Reserve Estimates have been completed on the Project as part of this scope of work.

16 MINING METHODS

No detailed studies have been completed on mining methods as part of this scope of work.

17 RECOVERY METHODS

No detailed studies have been completed on this chapter as part of the mineral resource estimate scope of work.

18 PROJECT INFRASTRUCTURE

No detailed studies have been completed on project infrastructure as part of this scope of work.

19 MARKET STUDIES AND CONTRACTS

No detailed studies have been completed on market studies and contracts as part of this scope of work.

20 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS

No detailed studies have been completed on this chapter as part of this scope of work.

21 CAPITAL AND OPERATING COSTS

No detailed studies have been completed on capital and operating costs as part of this scope of work.

22 ECONOMIC ANALYSIS

No detailed studies have been completed on economic analysis as part of this scope of work.

23 ADJACENT PROPERTIES

Not applicable.

24 OTHER RELEVANT DATA AND INFORMATION

Not applicable.

25 INTERPRETATION AND CONCLUSIONS

The project area is located in the Carajás region in the southeast of Para State, approximately 700km by road from the state capital Belem, in Brazil. Two copper deposits, namely the Homestead and the Cupuzeiro, were identified by diamond drilling between 2017 and 2022, and drilling more recently in 2023, has shown both to be part of a larger deposit which is now referred to as the Planalto Copper Deposit.

The effective date of the MRE was July 03rd, 2024.

The Planalto Copper gold project is located in the Carajás Province, or the Carajás Mineral Province (CMP), as it is often referred to because of major endowment of world-class iron, gold, manganese, copper and nickel deposits. The Carajás Province is in the eastern part of the state of Para. The Archean Carajás Province contains some of the world's largest known concentrations of large tonnage IOCG deposits. The Planalto project is located at the contact of the Transition Sub-dominion and the Carajás Dominion in the southeast part of the Carajás Basin in the horsetail splay zone at the south end of the Carajás Fault. The Planalto copper gold deposit has many of the characteristics listed of other IOCG deposits in the Carajás.

Drilling has demonstrated that copper mineralization is present along a north-south trend with a footprint of 1,500m in strike length and as much as 800m wide from east to west. This mineralized trend is interpreted to cut across the regional NW-SE stratigraphic bedding or layering in the volcanics. Potentially economic grade mineralization is interpreted to occur in stacked sub-parallel sheet-like structures that can be modelled fairly continuously over the 1,500m north-south strike length of the mineralized zone. Individual zones vary from a few meters to up to several tens of meters thick, and where there is an amalgamation of zones the mineralization can be as much as

100m in thickness. Chalcopyrite is the only copper-bearing mineral recognized in the deposit. Pyrite is rarely seen in the drill core in the Homestead sector. In the Cupuzeiro zone, pyrite can constitute up to 5% of the rock and is very abundant in the drill core intervals with more than 1% Cu.

Investigatory reconnaissance visits to the Planalto Project area were made by Lara in late 2012 to assess the geological setting and collected some rock and soil samples that confirmed the presence of anomalous copper occurrences on the property. Based on the positive indications for mineralization of the IOCG type the property was acquired in 2013 by Lara's Brazilian subsidiary Lara do Brasil Mineração Ltda., but exploration activities were initiated only in 2016. Between 2016 and early 2019 exploration activities conducted by Lara included regional and detailed soil surveys and regional geological mapping. A saprolite channel sampling program and a five-hole diamond drill program was conducted on the Homestead target in 2017 and 2018.

Samples have been prepared predominantly from NQ diameter drill cores (47.6mm core diameter). The sample selection of drill core for analysis was intervals as close to 2.00 meters, with a minimum of 1.00m, taking account of changes in mineralization style, lithology, alteration and structure. The Qualified Person considers that the sampling, sample preparation, security and analysis procedures applied, and results presented by Planalto Mineração and contracted companies are suited for a Mineral Resource Estimation study. Quality Assurance procedures follow the industry's best practices, and Quality Control results are within industry standards and inside acceptance limits for quality of the assay information for Mineral Resource estimates.

During the site visit between 25 and 26 of April 2024, the QP checked in the outcropping mineralization, drill collar markers and the drill cores, as well as making a review of information about exploration results, sampling procedures, sampling preparation, chemical analysis, topographic and drillhole deviation surveys. Discussions were held in relation to geological and mineralization model interpretation. The QP has reviewed the adequacy of the exploration information and the visual, physical, and geological characteristics of the property and has found no significant issues or inconsistencies that would cause one to question the validity of the data. The QP is satisfied to include the exploration data including the drilling, drill litho-logs, and sample assays for the purpose of resource modelling, evaluation and estimations as presented in this report.

Metallurgical testwork was performed by Blue Coast Research Ltd. which executed a preliminary metallurgical program on samples from the Planalto Copper Project. Samples of the areas known as Cupuzeiro and Homestead were individually composited to form a master sample to carry out the tests. The Locked-Cycle test (LCT) conducted on the Homestead master composite (PL-3MC) was successful in achieving 90% copper recovery to a final concentrate grading approximately 29%. The super panner test tip recovered approximately 22% of the gold. The Locked-Cycle test conducted on the Cupuzeiro Master Composite was successful in achieving 85% copper recovery to a final concentrate grading approximately 26% copper with 2.6 g/t gold at 68% gold recovery.

GE21 undertook a review and validation of the Planalto Mineração 3D geological modeling. A Mineral Resource Estimate (MRE) of the Planalto project was undertaken which included statistical and geostatistical analysis and grade estimation. The Mineral Resource classification was based on the assessment of a number of factors, including, the density, and spacing of available data, interpreted mineralization controls, mineralization style, and quality of data. The Qualified Person considers that the geological interpretations and modelling are adequate for a Mineral Resource Estimation study.

The Planalto Copper project block model grade interpolation was undertaken using Ordinary Kriging (OK) interpolation method using Leapfrog Edge software for the Cu (%) and Au (g/t) variables, based on the variographic structural analysis results (ranges, sills and anisotropy). Each mineralized domain was estimated independently, employing a hard boundary strategy.

The QP carried out the validation of the estimate through visual verification and by the Global and Local bias verification. The comparison showed that Ordinary Kriging globally respected the average grades, and the global bias in the estimated grades is within the limits of acceptance.

The local bias assessment by the Swath-Plot method aims to analyze the occurrence of local bias by comparing the average grades for the model through Ordinary Kriging, Nearest Neighbour and Inverse Distance interpolation methods in swath coordinates intervals graphs along the X, Y, and Z axes, the smoothing effect or local and global bias are inside acceptance limits for the Mineral Resource estimate purposes. Silica Cap target presents a significant bias in the Au grade due its low number of samples, but it was considered as having a low estimation confidence in the mineral resource classification (Inferred), and for this reason, considered as within acceptance limits.

The Mineral Resource was classified per CIM Standards and CIM Guidelines. The resource classification was supported by a pit optimization process to assess the Reasonable Prospect for Eventual Economic Extraction (RPEEE) of the mineralization. This assessment is performed through a high-level pit optimization process which limits the mineralization blocks classified as resource blocks based on economic and geometric parameters. A cut-off of 0.16% Cu Equivalent grade was applied to all model cells; (Main Mineralization and the Host Rock mineralization) within the chosen selling prices of US$10,000/t Cu and 2,200 US$/oz pit shell. These values are based on spot prices and was submitted to a sensitivity analysis to permit discuss the variability, opportunity and the risks of the deposit.

Mineral Resources were classified as 47.5 Mt at 0.53% Cu and 0.06 g/t Au in the Indicated class and 154.0 Mt at 0.36% Cu and 0.04 g/t Au in the Inferred class.

26 RECOMMENDATIONS

The primary recommendation is to continue the development of the Project through more detailed exploration, technical and engineering studies. The aim being to first complete a Preliminary Economic Assessment (PEA) to better understand the high level economic and engineering drivers to the project.

The following recommendations are made with respect to future work on the Property. The work proposed is required for upgrading Planalto Copper Project Mineral Resources to Indicated and Measured category.

GE21 proposes the following recommendations for the continuous improvement of the Mineral Resource estimate:

- Preliminary Economic Assessment
    - Understand the high level economic and engineering drivers to the project using the current data available.
    - Undertake an assessment of the mineral processing characteristics of the near surface oxide mineralization to determine if copper recovery is viable and economic.
- Mineral Resource Classification Upgrade:
    - Conversion of Indicated Resources to Measured Resources. A 50m x 50m infill drilling program in the domain of indicated resource classification.
    - Conversion of Inferred Resources to Indicated Resources. A 100m x 100m infill drilling program in the domain of inferred resource classification.
    - Updated Mineral Resource Estimate after completion of infill drilling program.
- Exploration Targets Drilling:
    - Test existing copper soil geochemical and geophysical anomalies within the Planalto licence. Exploratory drilling campaign for the Divisa, Highway-W and Highway-E targets with 100m x 200m spaced diamond drill holes to achieve inferred resource classification.

The Table 26-1 present the estimated budget for the implementation of the recommendations.

Table 26-1 Planned Budget recommendations.

Recommended work		Estimated cost (US$)
Preliminary Economic Assessment	PEA study using all current technical and engineering information available for the project	~$150,000
Mineral Resource Classification Upgrade Bring all mineralization within open pit limit to minimum Indicated category resource	A 50x50m infill drilling program	~$1,000,000
	A 100x100m infill drilling program	~$2,500,000
	Updated mineral resource estimate	~$100,000
Exploration Targets Drilling	Exploratory 100m x 200m drilling program	~$1,000,000
Total		**US$ 4,750,000**

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APPENDIX A

TECHNICAL REPORT QP CERTIFICATES

QP CERTIFICATE OF LEONARDO DE MORAES SOARES

a) I, Leonardo de Moraes Soares, am a Geologist for GE21 Consultoria Mineral, located at Avenida Afonso Pena, 3130 − 12º andar, Belo Horizonte, MG, Brazil, CEP 30.130-910.

b) This certificate applies to the Technical Report entitled " Independent Technical Report on Mineral Resources Estimate for the Planalto Project, Canaã dos Carajás/Pará, Brazil" with an effective date of July 03rd, 2024.

c) I hold the following academic qualifications: a B.A.Sc. in Geology from the Federal University of Minas Gerais, in Belo Horizonte, Brazil.

d) I am a professional Geologist, with more than 22 years of experience in the mining industry. My relevant experience for the purpose of this Technical Report includes:

- I have 9 years of experience as a specialist geologist on exploration, geotechnics and grade control on gold mining companies on Brazil.
- 13 years of experience in consultancy companies as specialist for several commodities, including copper and gold projects in resource estimate and geostatistics.

e) I am a member of the Australian Institute of Geoscientists (#5180).

f) I have read the definition of "Qualified Person" set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for purposes of NI 43-101.

g) I inspected between 25th and 26th of April 2024 the property that is the subject of this Technical Report.

h) I am responsible for Section 1 to 12, 14 and 25 to 27 of this Technical Report.

i) I have read and understand NI 43-101 and I am considered independent of the issuer as defined in section 1.5 of NI 43-101 Rules and Policies.

j) I have prior involvement with the property that is the subject of the technical report in that I was involved in the preparation of a resource estimate appearing in the Final Exploration Report for the Brazilian National Mining Agency (ANM) in September 2023.

k) I have read National Instrument 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with this Instrument, including the CIM Definition Standards on Mineral Resources and Mineral Reserves.

l) At the effective date of the Technical Report, and at the date, it was filed, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Original document signed and sealed.

Leonardo de Moraes Soares

Belo Horizonte, Brazil, on September 05th, 2024.

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QP CERTIFICATE OF PAULO BERGMANN MOREIRA

a) I, Paulo Bergmann, am a Mining Engineer associated to GE21 Consultoria Mineral, located at Avenida Afonso Pena, 3130 – 12º andar, Belo Horizonte, MG, Brazil, CEP 30.130-910.

b) This certificate applies to the Technical Report entitled " Independent Technical Report on Mineral Resources Estimate for the Planalto Project, Canaã dos Carajás/Pará, Brazil" with an effective date of July 03rd, 2024.

c) I hold the following academic qualifications: a B.A.Sc. in Mining Engineering from the Federal University of Minas Gerais, in Belo Horizonte, Minas Gerais, Brazil.

d) I am a professional Mining Engineer, with more than 40 years of experience in the mining industry. My relevant experience for the purpose of this Technical Report includes:

   - 30 years in mining and plant operation management, including AngloGold, Yamana, Jaguar Mining and Buritirama Mineração.
   - 10 years as engineering development and consultancy in the mining industry, including gold, iron, manganese, rare earth elements and others.

e) I am a Member of the Australasian Institute of Mining and Metallurgy (#333121).

f) I have read the definition of "Qualified Person" set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for purposes of NI 43-101.

g) I have not visited the property.

h) I am responsible for section 13 and 25 to 27 of this Technical Report.

i) I have read and understand NI 43-101 and I am considered independent of the issuer as defined in section 1.5 of NI 43-101 Rules and Policies.

j) I have no prior involvement with the property that is the subject of the Technical Report.

k) I have read National Instrument 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with this Instrument, including the CIM Definition Standards on Mineral Resources and Mineral Reserves.

l) At the effective date of the Technical Report, and at the date it was filed, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Original document signed and sealed.

Paulo Bergmann.

Belo Horizonte, Brazil, on September 05th, 2024.