Exhibit 96.9

SEC Technical Report Summary
Pre-Feasibility Study
Tantahuatay
Department of Cajamarca, Peru

Effective Date: June 14, 2023
Report Date: February 15, 2024

Report Prepared for:

Compañía de Minas Buenaventura S.A.A.

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CONSENT OF SRK CONSULTING (PERU) SA

SRK Consulting (Peru) SA ("SRK"), a "qualified person" for purposes of Subpart 1300 of Regulation S-K as promulgated by the U.S. Securities and Exchange Commission ("S-K 1300"), in connection with Compañia de Minas Buenaventura S.A.A.'s (the "Company") Annual Report on Form 20-F for the year ended December 31, 2023 and any amendments or supplements and/or exhibits thereto (collectively, the "Form 20-F"), consent to:

- the public filing by the Company and use of the technical report titled "SEC Technical Report Summary Tantahuatay Sulphides" (the "Technical Report Summary"), with a report date of February 15th, 2024, which was prepared in accordance with S-K 1300, as an exhibit to and referenced in the Annual Report.
- the use of and references to SRK, including the status as an expert "qualified person" (as defined in Sub-Part S-K 1300) for mineral resources purposes of the Tantahuatay Sulphides greenfield project, in connection with Form 20-F and any such Technical Report Summary; and
- the use of information derived, summarized, quoted or referenced from those sections of Technical Report Summary, or portions thereof, for which SRK is responsible and which is included or incorporated by reference in the Annual Report.

SRK is responsible for authoring, and this consent pertains to, the following sections of the Technical Report Summary:

- 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 21, 22, 23, 25 and Appendixes.

Angel Mondragon
SRK Consulting (Peru) S.A. | Director

Antonio Samaniego
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Abbreviations

The following table contains definitions of symbols, units, abbreviations and terminology that may be unfamiliar to the reader.

[Metric]

The metric system has been used throughout this report. Tonnes are metric of 1,000 kg, or 2,204.6 lb. All currency is in U.S. dollars (US$) unless otherwise stated.

[US System]

The US System for weights and units has been used throughout this report. Tonnes are reported in short tonnes of 2,000lbs. All currency is in U.S. dollars (US$) unless otherwise stated.

To facilitate the reading of large numbers, commas are used to group the figures three by three starting from the comma or decimal point.

Abbreviation	Unit or Term
%	Percent
°	Degree (degrees)
°C	Degrees Centigrade
µm	Micron or microns
µm	Micrometers
AA	Atomic absorption
acQuire	Systematic database program
Ag	Silver
ANA	National Water Authority
ANFO	Ammonium nitrate fuel oil
As	Arsenic
ASTM	American Society of Testing and Materials
Au	Gold
BF	Pulp blanks
BG	Coarse blanks
BGS	British Geological Survey
Bi	Bismuth
Buenaventura	Compañía de Minas Buenaventura S.A.A.
Cd	Cadmium
CIRA	A certificate of non-existence of archeological remains
CM	Metal Content
cm	Centimeter
cm^3	Cubic centimeter
CoG	Cut-off grade

Abbreviation	Unit or Term
Coimolache	Compañía Minera Coimolache S.A.
CONENHUA	Consorcio Energetico de Huancavelica S.A.
Cu	Copper
CuEq	Equivalent Copper
CuT	Total Copper
CV	Coefficient of Variation
DDH	Diamond drill holes
DF	Pulp duplicates
DG	Coarse duplicates
ELOS	Equivalent linear overbreak/slough
FA	Fire assay
g	Gram
g/t	Grams per tonne
GM	Twin samples
ha	Hectares
Hg	Mercury
HS	High Sulfidation
ICP	Inductively couple plasma
ID	Inverse distance
Ingemmet	Institute of Geology, Mining and Metallurgy
ISO	International Organization for Standarization
km	Kilometer
koz	Thousand troy ounce
kt/d	Thousand tonnes per day
kV	Kilovolt
lb	Pound
LIMS	Laboratory Information Management System
LOM	Life of the mine
LPD	Practical Limit of Detection
M	Mass
m	Meter
masl	Meters above sea level
MINEM	Ministerio de Energía y Minas / Ministry of Energy and Mines
mm	Millimeter
mm/y	Millimeters per year
MS	Mass Spectrometry
Mt	Million tonnes
My	Million years
NN	Nearest Neighbor

Abbreviation	Unit or Term
NSR	Net Smelter Return
OEFA	Environmental Evaluation and Oversight Agency
OES	Optical Emission spectroscopy
OK	Ordinary Kriging
Osinergmin	Supervisory Agency for Investment in Energy and Mining
oz	Troy ounce
Pb	Lead
ppb	Parts per billion
ppm	Parts per million
QA/QC	Quality assurance/quality control
QKNA	Quantitative Kriging Neighborhood Analysis
QP	Qualified Person
R2	Coefficient of determination
RE	Relative Error
RF	Revenue Factor
ROM	Run-of-Mine
RPEEE	Reasonable Prospects for Eventual Economic Extraction
RQD	Rock quality description
Sb	Antimony
SEC	U.S. securities & exchange commission
SENACE	National environmental certification authority
SENAMHI	Servicio Nacional de Meterorología e Hidrología del Perú
SMEB	Sociedad Minera El Brocal S.A.A.
SPCC	Southern Peru Copper Corporation
SRK	SRK Consulting Perú S.A.
SRM	Standard Reference Material
STD	Standard
t	Tonne (metric tonne) (2,204.6 pounds)
t/d	Tonnes per day
TRS	Technical Report Summary
UIT	One tax unit
UTM	Universal Transverse Mercator
V	Volume
y	Year
Zn	Zinc

1 Executive Summary

This Technical Report Summary (TRS) was prepared by SRK Consulting (Peru) S.A. (SRK) under the Securities and Exchange Commission (SEC) S-K regulations (Title 17, Part 229, Items 601 and 1300 through 1305) for Compañía de Minas Buenaventura S.A.A. (Buenaventura). This TRS focuses on the Tantahuatay Sulfuros Project, which SRK assumes is an extension of the current oxide open pit operation.

The Tantahuatay Sulfuros Project is owned by Compañía Minera Coimolache S.A. (Coimolache) and operated by Buenaventura. The ownership structure of Coimolache is as follows: 44.2% Southern Peru Copper Corporation (SPCC), 40.1% Buenaventura and 15.7% ESPRO S.A.C. Coimolache is a subsidiary of Buenaventura and currently operates an open pit mine that produces gold and silver from oxide materials. The mineral deposit and operations began in 2011.

1.1 Property Description

The Tantahuatay Sulfuros Project as part of the Tantahuatay mining unit is located in the districts of Chugur and Hualgayoc, province of Hualgayoc, region of Cajamarca, in the Andes Mountains of northern Peru. The center of this project has the following geographic coordinates: Latitude 6°44’25’’ S and Longitude 78°41’50’’ W.

Access to Tantahuatay Sulfuros Project is by air from Lima (Jorge Chávez International Airport) to the city of Cajamarca (Armando Revoredo Iglesias International Airport), which is located 568 km north of Lima. Hualgayoc can be accessed from the city of Cajamarca by traveling northwest approximately 85 km. By land, the project can be accessed from Lima by traveling the Panamericana Norte highway, taking the detour to the city of Cajamarca, and continuing from Cajamarca to the project (total distance of 1,006 km).

1.2 Geological Setting, Mineralization, and Deposit

The geology is characterized by the occurrence of volcanic units that are found overlying the limestones of the Cretaceous Pulluicana Group, which outcrops east of Tantahuatay, where they are cut by a felsic granodioritic to dioritic intrusive.

Tantahuatay Sulfuros hosts different types of mineral deposits such as epithermal high sulfidation, copper-gold porphyries associated with the epithermal event, skarns, copper porphyries associated with skarns, polymetallic mineralization in veins and replacement bodies (Paredes, 2023).

1.3 Land Tenure

There are 26 mining concessions in the area of the current pits (oxide Au-Ag deposits), the Tantahuatay Sulfuros Project and other exploration projects. The concessions area where Coimolache explores sulfides covers approximately 22,251 ha. of the total area of under Coimolache’s control, including the Oxide and Sulfide zones. The titleholder is Coimolache.

1.4 History

The first work in the area was conducted in 1969 -1971 by the British Geological Survey (BGS), which engaged in sediment sampling in the region and the district and identified seven anomalies in the Tantahuatay and Sinchao creeks.

Exploration work for the Tantahuatay Mine (oxide Au-Ag deposits) was conducted from 1991 to 1998 by SPCC. In 1992, Coimolache was chartered.

Work under SPCC involved geological mapping, rock and soil geochemistry assessment in trenches and test pits. In 1994-1998, the company conducted 27,411 m of diamond drilling in the sectors of Tantahuatay, Mirador, Cienaga and Peña de las Águilas as Calera Orbamas S.A. (the company's name was Coimolache at that time).

Coimolache began the pre-feasibility stage of the oxide project in 2007 and started production in June 2011. In 2011, a hole (166 m) was carried out used in the interpretation as sulfides. In 2016, geological exploration in Tantahuatay was reoriented as sulfide exploration with the lithological reinterpretation of the Tantahuatay 2 and 4 zones. Since then, 82,978.61 meters of drilling have been carried out to update the geological interpretation of the Tantahuatay Sulfuros.

1.5 Exploration

SRK notes that the property is an active mining operation (oxides) with a long production history and that results and interpretation from exploration data are generally supported in more detail by extensive drilling and by active mining exposure of the orebody in open-pits works.

The area around the Tantahuatay Sulfuros has been extensively mapped, sampled, and drilled over several years of exploration work. For this report, active mining and extensive exploration drilling should be considered the most relevant and robust exploration work for the current mineral resource estimation.

The current pits provide information (i.e. structural) to model intrusive bodies and most of the information from diamond drilling is based on data from the holes made in the pits.

1.6 Mineral Resource Estimates

SRK reviewed the integrity of the Tantahuatay Sulfuros Project database provided by Coimolache, which includes sampling information, grades, bulk density and drillhole logs. SRK found no significant issues and believes that the database is consistent and acceptable for mineral resource estimation purposes.

SRK performed the quality control evaluation for the 2021 – 2023 period. The quality control program included an appropriate rate insertion of control samples in the submitted samples. SRK believes no significant issues exist in terms of contamination and accuracy, sampling, subsampling and analytical precision for Au and Ag are within acceptable limits. However, Cu and As precision in samples sent to Certimin Laboratory is close to acceptable limits (For more details consult Table 8-12). The results of the review of the data prior to 2021 are reflected in the Resource Estimation Audit Report (SRK, 2020), including information from Regulus Resources Inc. (Regulus).

SRK and Coimolache have estimated the mineral resources of Tantahuatay Sulfuros Project based on the geological database updated as of June 13, 2023. The estimation methodology included the compilation and verification of the database, review, and construction of geological models (lithology, alteration, and mineralization), definition of estimation domains and geostatistical analysis. The quality of sampling and preparation, as well as the analytical precision and accuracy of the laboratories, were evaluated. Capping and compositing procedures were applied to control the influence of outliers. The bulk density was assigned to each lithological domain based on statistical analysis. The estimation of mineral resources in the sulfide zone was carried out for Cu, Ag, Au, Pb, Zn, As, Sb, Cd, Bi and Hg, respecting the limits of the lithological model. A variographic analysis was performed by estimation domain and a block model was built to support the interpolation of grades. The estimation methods used were Ordinary Kriging (OK), Inverse Distance (ID), and Nearest Neighbor (NN) interpolation for validation purposes. Model validation included review of global and local bias, as well as visual validation on sections and floor plans. Finally, criteria were defined to categorize mineral resources, considering: the drilling spacing, the number of passes and the number of drillings and samples. A smoothing process was implemented to avoid the "Spotted Dog" effect. This comprehensive approach ensured a reliable estimate of the mineral resources at Tantahuatay Sulfuros Project.

The evaluation of the Reasonable Prospects for Eventual Economic Extraction (for its acronym in English: RPEEE) of the Tantahuatay Sulfuros has been developed exclusively for an open pit mining at a processing level of 60 kt/d. The property limit of Coimolache was the only restriction considered in the floating of the economic cone.

The mineral resources report was generated based on the block model estimated jointly by Coimolache and SRK with an effective date of June, 2023.

SRK reports the mineral resources within the envelope of the economic cone (PitShell 41) and using a NSR cut-off value of 7.76 US$/t (or CuEq cut-off grade of 0.1958 % Cu), reporting 734.8 Mt of ore with a weighted average grade of 0.43 % Cu, 0.19 g/t Au and 8.08 g/t Ag. Table 1-1 shows the mineral resources estimation by category.

Mineral Resources are reported as of June 14, 2023, and detailed in Table 1-1.

Table 1-1: Mineral Resources Report by category

Type Category	Mineral (Mt)	NSR (US$/t)	CuEq (%)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	Zn (ppm)	Pb (ppm)	Hg (ppm)	Bi (ppm)	Cd (ppm)
Indicated	133.6	34.71	0.88	0.59	0.27	10.24	2,020	171	197	297	1.04	9.31	1.93
Inflerred	601.2	23.52	0.59	0.40	0.17	7.60	917	69	252	513	0.82	10.34	2.56

*No mineral resource was reported in the measured category.

Source: (SRK, October 2023)

Notes:

[1] The evaluation of the reasonableness of economic extraction has been developed exclusively for open pit mining at a throughput rate of 60 kt/d.

[2] The property limit of Coimolache has been considered the only one surface restriction to define the economic cone.

[3] The mineral resources report was generated based on the block model estimated jointly by Coimolache (Cu) and SRK (Au, Ag, As, Sb, Zn, Pb, Hg, Bi and Cd) with an effective date of June, 2023.

[4] The evaluation has considered metal prices of US$8,800/t Cu, US$1,750/oz Au and US$23.0/oz Ag.

[5] Unit costs for mining 2.58 US$/t, stripping 2.32 US$/t, processing 5.50 US$/t, general and administrative 2.00 US$/t.

[6] Cu metallurgical recovery = 85% and 96.35% payable, Au metallurgical recovery = 60% and 90% payable, Ag metallurgical recovery = 50% and 90% payable

[7] The formula for assigning the NSR value (US$/t) = 39.6300*Cu% + 30.1875*Au g/t + 0.3245*Ag g/t

[8] NSR cut-off value = 7.76 US$/t.

[9] The equivalent copper assignment formula CuEq (%) = Cu% + 0.7617*Au g/t + 0.0082*Ag g/t.

[10] Cut-off grade CuEq grade = 0.1958 %.

[11] Totals may not add up due to rounding procedures.

Possible aspects which impact on estimates encompass:

- Metal price and exchange rate assumptions,
- Modifications in cut-off grade assumptions,
- Alterations in local interpretations of mineralization geometry and continuity,
- Shifts in geological form and mineralization,
- Density variations,
- Geo-metallurgical assumptions,
- Changes in geotechnical, mining, dilution,
- Metallurgical recovery assumptions,
- Modifications in design
- Input parameters of conceptual pit designs constraining estimates,
- Assumptions regarding continued site access,
- Retention of surface and mineral rights,
- Maintenance of environmental and regulatory permits,
- Upholding the social license to operate.

No other discernible environmental, legal, title, tax, socioeconomic, marketing, political, or other factors likely to significantly impact mineral resource or mineral reserve estimates have been identified beyond the scope of this report.

1.7 Qualified Person's Conclusions and Recommendations

1.7.1 Conclusions

Database Verification

- It was observed that 14% of the total drill holes have no core recovery data and 15% of the total drillholes present core recovery percentages less than 90% (Most of this information comes from the period 2014-2018).
- Only minor inconsistencies were detected in the data reviewed.
- SRK believes that the database is acceptable for mineral resource estimation purposes.

Sample Preparation, Analyses, and Security

- SRK believes that the insertion rate of control samples is adequate and aligned with current best practices.
- SRK believes that there is no evidence of significant contamination for Au, Ag, Cu and As.
- SRK is of the opinion that the sample preparation, chemical analysis, quality control, and the security procedure are sufficient to provide reliable data to support resource estimation and mineral reserve estimation.
- SRK believes that there is good sampling, sub-sampling and analytical precision in the samples sent to the ALS laboratory. In the samples sent to the Certimin laboratory, Ag and Au have good sampling, sub-sampling and analytical precision; however, As and Cu have precision close to acceptable limits and the percentage of samples within parameters varies from 80% to 87% in the three types of duplicates.
- SRK believes that the analytical accuracy of the ALS laboratory for Ag, Au, As and Cu is within acceptable limits. In the case of the Certimin laboratory, the analytical accuracy of Au and Cu is within acceptable limits and in Ag and As it is close to acceptable limits.
- Inter-laboratory bias results (SGS versus Certimin) are within acceptable limits for Au, Ag, As and Cu.

Lithological Model

- SRK observed that some modeled bodies have no drillhole sample information. In other cases, modeled bodies were supported by information from a limited number of drillhole samples and were subsequently extrapolated to the periphery of the model as uncategorized areas.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.
- SRK identified that Coimolache is not equipped with a structural model that helps users understand the interaction between stratification and the geometry of the intrusions.
- According to the analysis of the grades contained within each unit, it can be expected that some lithological units have more than one population of grades. Nonetheless, SRK believes that for this stage of study, the definition of domains is acceptable.
- The Tantahuatay Sulfuros' Project Lithological model in general shows geological continuity and geological coherence; it is consistent with the input information and the cross-sectional relationships that are defined are correct between the events represented.

Alteration Model

- SRK used the same criteria to subdivide phyllic alteration domains (Fil1, Fil2, FIl3 and Fil4) and advanced argillic alteration domains (ArgAvd1, ArgAvd2, ArgAvd3 and ArgAvd4; this subdivision generates some very small bodies due to the limited number of samples. SRK believes that the subdivision of the alteration domains is coherent with the type of deposit to which it belongs.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.

- SRK found that some of the identified sections did not match the interpreted sections received; in these cases, SRK coordinated directly with the team that defined the geological model and the database was corrected.
- The Tantahuatay alteration model, in general, has continuity and geological coherence. Back flagging[1] analysis indicates a good relationship between the modeled solids and the samples used to build the model.

Mineralization Model

- SRK identified cases where lithological solids did not match the interpreted sections of the mineralization; these discrepancies were generated by the modeling strategy, which prioritized lithological solids over interpreted sections.
- Coimolache provided a surface that differentiates oxides, mixed and sulfides.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.
- To reproduce the trends of some mineralization domains, SRK used structural trends to build the corresponding lithological domain.
- The Tantahuatay Sulfuros Project mineralization model in general has continuity and geological coherence. Back flagging analysis indicates that model is consistent with input information and the cross-cutting relationships are correct between the represented events.

Mineral Resource Estimation

- Coimolache developed the mineral resource estimation of Cu. SRK was responsible for the mineral resource estimation of Au, Ag, Pb, Zn, Hg, Cd Sb, Bi and Cd in the Tantahuatay Sulfuros Project. In its assessment, SRK validated the diamond drilling database and confirmed that the lithological model generated by Coimolache restricts and controls the shapes of the mineralized bodies that host Cu. Diamond drilling data within the relevant geological domains and their Au, Ag, Cu and As grades were interpolated into a block model using ordinary kriging (OK) and inverse distance (ID) methods. The results were validated visually and through statistical comparisons. The estimate generated was consistent with industry standards across categorizations.
- Mineral resources were reported within optimized limits and based on economic and mining assumptions to support reasonable potential for economic extraction of the resource. A cut-off grade has been derived from these economic parameters and the resource reported was above the cut-off grade of 0.1958% CuEq.
- Regarding the mineral resource estimation, SRK found the following:
  - Global biases show no significant differences.

[1] Back flagging: Tool that facilitates comparisons of the Database used and the Geological Model (Lithological, Alteration or Mineralization), whose purpose is to define what percentage of the sections of a domain are within the solid modelled for the same domain, to demonstrate that the geological Model represents the Database used.

- The drifts show a small conditional bias when there is enough data, but as the graphs approach the extremes (at the edge of the deposit), the variability between the nearest-neighbor and that estimated by ordinary kriging appears different; and,
- There are domains with greater conditional bias, but the graphs show little variability when the R2 (coefficient of determination) is reviewed in each domain.

Block Model: Resource Category

- The mineral resource categories "indicated" and "inferred" were considered in the estimation. Measured category was not considered due to drilling mesh spacing; consequently, no tonnage was reported for this category.

Economic parameters

- SRK reviewed the economic parameters based on the following costs:
- Plant, general & administrative costs and commercial terms (selling expenses), as provided by Buenaventura.
- Mining unit costs by benchmarking with other similar operations, evaluated by SRK.
- SRK and Buenaventura agreed to set the copper mineral throughput rate at a capacity of 60 kt/d.

Calculation of NSR and its cut-off value

- The NSR value allocation function considers the value contribution of copper, gold, and silver. For this, the point value of each element has been estimated and includes in the calculation the value of the net price payable less charges for smelting, refining, arsenic penalty, freight, transportation, royalties, and concentrate loss.
- The NSR cut-off value of 7.76 US$/t was determined from the sum of the plant, general and administrative costs, and the difference between ore mining cost and waste mining cost.

Arsenic grade in copper concentrate

- Within the mineral resource cone, zones over 1,000 ppm As have been identified that report 256.9 Mt of mineral with an average grade of 0.73 % Cu, 0.29 g/t Au, 9.36 g/t Ag and 2,317 ppm As. These mineral zones generate a copper concentrate with a grade of 9.5 % As.

1.7.2 Recommendations

Database Verification

- It is recommended that deviation measurements be more frequent, at least every 10 m, especially in drillholes that are more than 100 m in length.
- SRK recommends that Coimolache periodically monitor and/or review the drilling recovery results. SRK considers a recovery percentage greater than 90% acceptable for drillhole samples.

- It is suggested that, in future drilling campaigns, the minimum and maximum drillhole sampling length be respected, as indicated in the Coimolache sampling protocol.
- It is suggested that the number of decimal places used for data stored in the database coincide with the values reported in the laboratory analysis certificates because this is a strong indicator of the precision of laboratory analysis methods.

Sample Preparation, Analyses, and Security

- SRK recommends that Coimolache increase the insertion of external control samples, as established in its Quality Control protocol (2020). Sending external control samples to the secondary laboratory must include a review of the granulometry in 10% of the samples, as well as the insertion of fine blanks and SRMs (Standard Reference Material) in said lots.
- SRK recommends that Coimolache check that the inserted SRMs utilize the same methods chemical analysis digestion as that applied for primary samples, for example the SRM M2AL20 (inserted in 2023) has been analyzed by aqua regia digestion, while the primary samples have been analyzed by digestion by four acids.
- SRK recommends that Coimolache investigate the origin of the error rates in the results of pulp, coarse, and twins duplicate samples of As and Cu from the Certimin laboratory by reviewing the sampling, preparation, and sample analysis processes.
- SRK recommends frequently reviewing the behavior of the quality control results and informing the laboratory about any problems detected to implement corrective measures in the shortest possible time.

Geological Model

- SRK recommends working on a structural model to help better delineate bedding planes and the geometry of the intrusions.
- SRK recommends completing the information corresponding to the sections interpreted in 2D with information on sections that are located further north of the L1400 section.
- SRK suggests complementing the information obtained from the lithological model with the alteration and mineralization models generated.
- SRK recommends reviewing the definitions of alterations with the types of deposits described (Corbett & Leach, 1998).
- SRK recommends adapting the names of the alteration domains to the terminology currently used in the industry (Corbett & Leach, 1998).

Mineral Resource Estimation

- The mineral resource estimation was based on the lithological model and the Minzone model of the sulfide zone, both delivered by Coimolache (Minzone Model refers to the division of the deposit into Oxide and Sulfide zones). SRK recommends that for future work, both alteration and mineralization models be included to define estimation domains.
- SRK recommends that density be estimated by domains (defined based on lithology or a combination of criteria). To this end, subsequent drilling campaigns must include taking bulk

density samples systematically to generate a larger of samples (per domain) for the estimation process.

- The mineral resource report does not include measured resources due to lack of drilling mesh support. SRK recommends conducting drilling mesh spacing studies to define and classify measured resources.
- SRK recommends including QA/QC parameters within the mineral resource classification analysis.

Processing level and costs

- SRK recommends evaluating the use of a processing level between 80 kt/d or 100 kt/d and updating unit costs.

Arsenic grade in copper concentrate.

- SRK recommends developing studies regarding the definition and presence of arsenic in the deposit and the impact of the arsenic grade in the copper concentrate commercialization possibilities.

2 Introduction

2.1 Registrant for Whom the Technical Report Summary was Prepared

This Technical Report Summary was prepared by SRK Consulting (Peru) for Compañía de Minas Buenaventura S.A.A., (40.1% owner of Compañia Minera Coimolache) and covers the Tantahuatay Sulfuros project. The report herein has been developed in accordance with the regulations set forth by the Securities and Exchange Commission (SEC), namely S-K regulations (Title 17, Part 229, Items 601 and 1300 through 1305).

2.2 Terms of Reference and Purpose of the Report

The quality of information, conclusions, and estimates contained herein are consistent with the services provided by SRK's services, based on: i) information available at the time of preparation and ii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Buenaventura subject to the terms and conditions of its contract with SRK and relevant securities legislation. The agreement permits Buenaventura to file this report as a Technical Report Summary with regulatory authorities in the USA pursuant to the SEC S-K regulations, more specifically Title 17, Subpart 229.600, item 601(b)(96) - Technical Report Summary and Title 17, Subpart 229.1300 - Disclosure by Registrants Engaged in Mining Operations. Except for the purposes regulated under provincial securities law, any other uses of this report by any third party are at said party's sole risk. Buenaventura continues to be liable for this disclosure.

This Technical Report Summary aims to estimate and report mineral resources, and exploration results.

The effective date of this report is March 15, 2024.

2.3 Sources of Information

This report is based in part on internal Company technical reports, previous feasibility studies, maps, published government reports, company letters, memoranda, and public information as cited throughout this report and listed in the References Section 24.

2.4 Details of Inspection

Table 2-1 summarizes the details of the property inspections conducted by each qualified person or, if applicable, indicates the reasons why a personal inspection has not been conducted.

Table 2-1: Site visits

Expertise	Date(s) of Visit	Details of Inspection	Reason why a personal inspection has not been completed
Geology	February 2024	Visit to the open pit operations areas (Tantahuatay 2). The visit includes inspection of the core warehouse, samples of rejects and pulps, coreshack and chemical laboratory. Meeting with the mine's geology and exploration staff to review drilling plans and geological interpretation.	

Source: SRK, 2023

2.5 Report Version Update

Buenaventura has not previously reported mineral resources for Tantahuatay Sulfuros in a filing with the SEC. Documents filed with the SEC up to date are focused on the mineral resource estimation of the oxide mineralization zone.

3 Accesibility, Climate, Local Resources, Infrastructure and Physiography

3.1 Topography, Elevation and Vegetation

Physiographically, the project area is located in the Central Andes. This area is characterized by the presence of high plains, which are located 3,500 meters above sea level, and has been named the Puna or Altiplano Region (INGEMMET, 1987).

Four (04) physiographic systems have been identified: mountainous, slopes, hills and valleys. These physiographic units can be described as follows: moderately sloping to moderately steep mountain relief; slightly sloping to moderately sloping hillside and hill relief; and almost level to slightly sloping flat valley relief. The aforementioned types of relief occur between altitudes of 3,700 to 4,100 masl.

In the project area, six (6) types of vegetation cover have been identified at the local level: the Andean Pajonal, high Andean areas with little and no vegetation, forest plantations, Andean agriculture, shrubby scrub, and Andean wetland (MINAM, 2019).

3.2 Means of Access

Access to Tantahuatay Sulfuros Project is by air (Table 3-1) from Lima (Jorge Chávez International Airport) to the city of Cajamarca (Armando Revoredo Iglesias International Airport), which is located 568 km north of Lima. Hualgayoc can be accessed from the city of Cajamarca by travelling northwest approximately 85 km.

By land, the project can be accessed from Lima by traveling the Panamericana Norte highway, taking the detour to the city of Cajamarca and then continuing on to the project as shown in (Table 3-2).

Table 3-1: Air and Land Access to the Project Area

Section	Distance (km.)	Status
Lima – Cajamarca	568	568 (Via air)
Cajamarca – Project	85	Paved road
Total distance (km)	**85**	

Source: (Environmental Management Coimolache, 2023)

Approximate time by air is 1 hour. Then, road travel time is 2 hours.

Table 3-2: Land Access of the Project Area

Section	Distance (km.)	Road status
Lima – Cajamarca detour	741	Paved
Cajamarca detour – Cajamarca	180	Paved
Cajamarca – Project	85	Unpaved
Distancia Total (km.)	**1,006**	

Source: (Environmental Management Coimolache, 2023)

Travel time by land is approximately 14 hours.

3.3 Climate

The Tantahuatay Sulfuros Project is located in an area with two (2) types of climates according to the classification map issued by the National Meteorology and Hydrology Service (SENAMHI): a semi-dry and cold climate and a temperate and rainy climate.

The average temperatures recorded from 2007 to 2017 at different monitoring stations located at current Tantahuatay mining unit (Exploration Area, Definitive Camp, Mirador Camp) fluctuated between 3.9°C and 8.1°C. The mining unit operates year-round (MINAM, 2019).

3.4 Infrastructure Availability and Sources

Currently, the Tantahuatay Sulfuros project uses the Tantahuatay mining unit's infrastructure.

3.4.1 Water

Currently, the water supply comes from the following sources (Table 3-3):

Table 3-3: Water supply

Source	Name	Resolution number	Volume Annual authorized (m^3)	Volume of water Used (m^3) 2019
Well	PW 1A	Resolución Administrativa N° 567-2010-ANA-ALA-CAJ	63,072.00	30,699.00
Well	PW 2A	Resolución Administrativa N° 567-2010-ANA-ALA-CAJ	189,216.00	63,976.00
Spring	Amalia Spring	Resolución Administrativa N° 427-2007-AG-INRENA/ATDRCH-L	1,576.80	-

Source: (Coimolache, 2021)

Water consumption is approximately 33.2% of the total authorized volume; of this total, 62% is for domestic use (camps and offices). It is important to mention that in 2019, 97% of the water used in the process came from recirculation and / or from the water storage pools generated in the rainy season.

3.4.2 Electricity

Coimolache has a 22.9 kV transmission line, run by CONENHUA (Consorcio Energético de Huancavelica S.A., a 100% subsidiary of Buenaventura). The power supply is delivered through a bypass that connects with a transmission line that feeds the Process Plant and the powerhouse; subsequently, electricity is transferred to the power line that feeds complementary services.

3.4.3 Personnel

Most of the staff working on the Project live in the camp and in nearby communities. Skilled labor comes from different provinces in the region and the country. As of December 31, 2022, the total workforce of the project, counting both Coimolache's personnel and contractors' employees, totaled 1,028 people (Buenaventura, 2022).

3.4.4 Supplies

Supplies are provided by the company's vendors. Providers are both local and from other regions of the country.

4 Property Description

4.1 Property Location

The Tantahuatay Sulfuros project, which is part of the Tantahuatay mining unit, is located in the districts of Chugur and Hualgayoc, province of Hualgayoc, region of Cajamarca, in the Andes Mountains of northern Peru, in the continental divide of the basins of the Pacific Ocean (Chancay River Basin) and Atlantic Ocean (Llaucano River Basin).

It is located 15 km west of the city of Bambamarca and 85 km northwest of the city of Cajamarca. The property is located at an average elevation of 3900 masl. The location is shown in Figure 4-1.

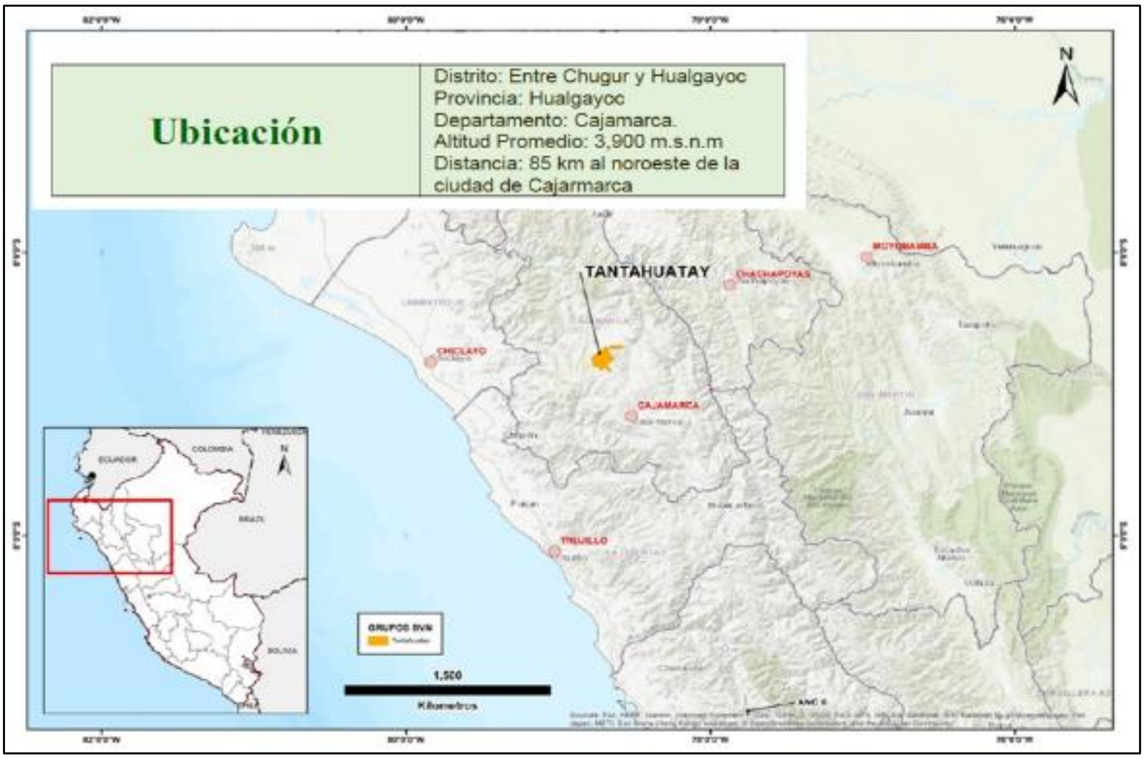


Figure 4-1: Tantahuatay Location Map

Source: (Buenaventura, 2023)

4.2 Property Area

At present, Tantahuatay Sulfuros project, which is part of Tantahuatay mining unit, covers a surface area of 17,742 ha (Figure 4-2). The current pits correspond to the Tantahuatay high-sulphidation epithermal deposit (oxidation zone, Au-Ag mineralization), which is composed of the following deposits: Tantahuatay 2, Tantahuatay 4 (or Tantahuatay 2 EXT. NW), Ciénaga Norte, Ciénaga Sur, Mirador Norte, Mirador Sur and Tantahuatay 5.

Below the Tantahutay open pit, there is a predominant Cu mineralization with the presence of As (Arsenic), which is known as Tantahuatay Sulfuros project.

Figure 4-2 shows Coimolache surface properties, rights, stocks, and shares in some areas and Distrital limits. Also, Tantahuatay Sulfuros open pit's surface projection overlaps with Coimolache's surface property. Note that around 5 ha are not included in Coimolache's surface property. In 2024, Coimolache will continue to pursue land acquisition (Buenaventura, 2022) through its community relations plan. Nevertheless, SRK contends that it is reasonable to believe that this project will eventually be developed.

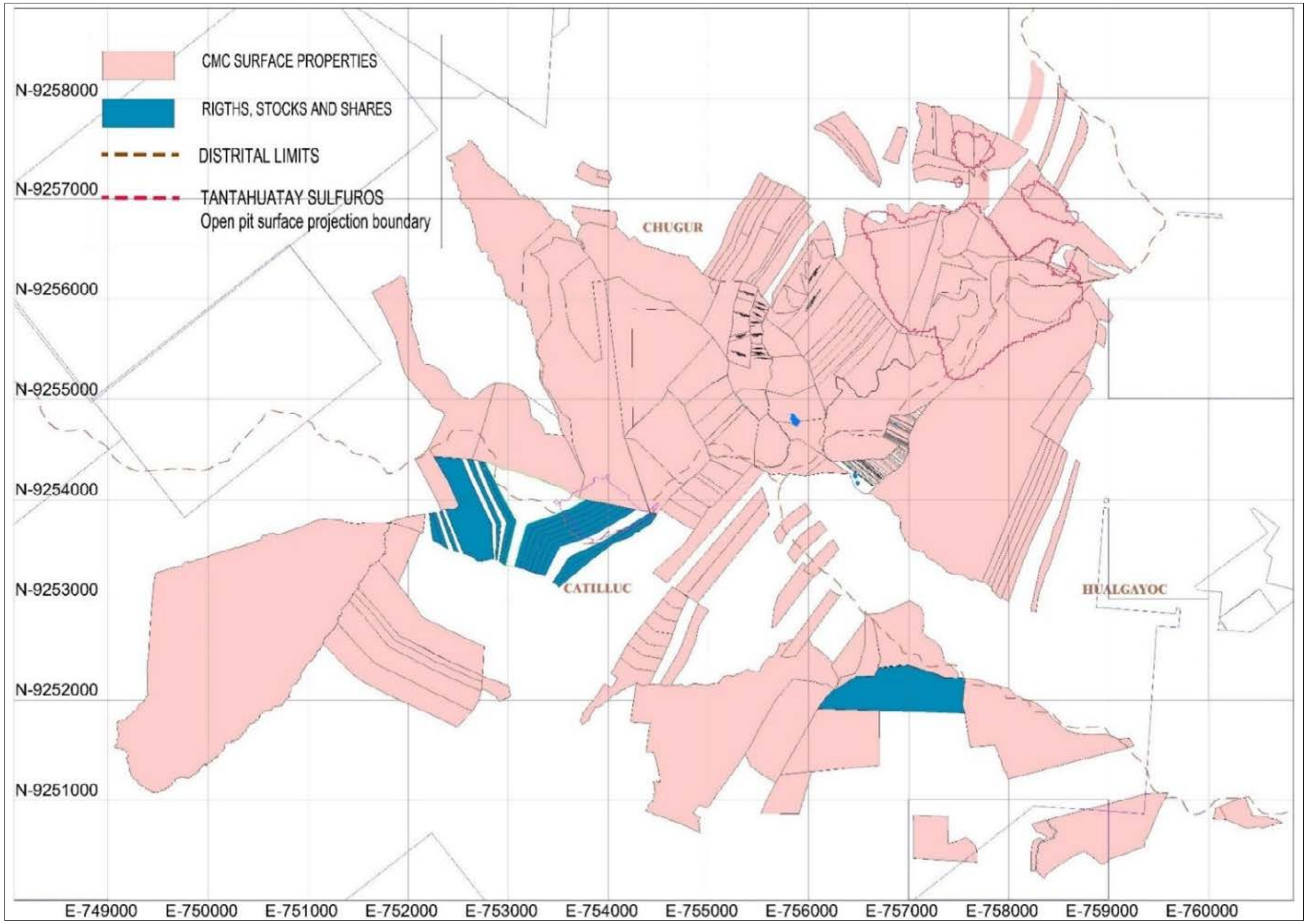


Figure 4-2: Property Area

Source: (Buenaventura, 2023)

4.3 Mineral Title, Claim, Mineral Right, Lease or Option Disclosure

There are 26 mining concessions (22,252 ha), which are located in the area of the current pits and exploration projects related to Tantahuatay Sulfuros. SRK indicates that all the mineral resources presented in this report are located within concessions whose titles are held by Coimolache as showed in Table 4-1.

Table 4-1: Mineral Tenure Table

Claim ID	Claim Name	Owner	As reported Type	Status	Date Granted	Expiry Date	Area (Ha)
010000510L	ACUMULACION TANTAHUATAY	Compañía Minera Coimolache S.A.	Mining Lease	Active	26/07/2010	Does not expire as long as statutory duties are paid	9,799.96
010160893	MUKI N°1	Compañía Minera Coimolache S.A.	Mining Lease	Active	23/08/1993		200.00
010160993	MUKI N° 2	Compañía Minera Coimolache S.A.	Mining Lease	Active	23/08/1993		700.00
010129794	MUKI N° 8	Compañía Minera Coimolache S.A.	Mining Lease	Active	11/03/1994		800.00
010320394	MUKI N° 10	Compañía Minera Coimolache S.A.	Mining Lease	Active	27/05/1994		100.00
010320494	MUKI N° 11	Compañía Minera Coimolache S.A.	Mining Lease	Active	27/05/1994		100.00
03003690X01	PERLA NEGRA 15	Compañía Minera Coimolache S.A.	Mining Lease	Active	03/06/1991		967.76
0302945AX01	PROVEEDORA N° 1-F-A1	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/09/1981		1.40
0302962AX01	PROVEEDORA N° 1-I	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/09/1981		13.66
03002958X01	PROVEEDORA N° 1-K	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/09/1981		0.04
0302958AX01	PROVEEDORA N° 1K-A-2	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/09/1981		1.03
0302958BX01	PROVEEDORA N° 1K-A-3	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/09/1981		36.89
03003647X01	TANTA HUATAY N° 1	Compañía Minera Coimolache S.A.	Mining Lease	Active	13/12/1990		0.39
03003651X01	TANTA HUATAY N° 5	Compañía Minera Coimolache S.A.	Mining Lease	Active	13/12/1990		374.91
03003696X01	TANTA HUATAY N° 7	Compañía Minera Coimolache S.A.	Mining Lease	Active	07/06/1991		999.75
03003699X01	TANTA HUATAY N° 10	Compañía Minera Coimolache S.A.	Mining Lease	Active	07/06/1991		999.76
03003700X01	TANTA HUATAY N° 11	Compañía Minera Coimolache S.A.	Mining Lease	Active	07/06/1991		999.75
03003703X01	TANTA HUATAY N° 14	Compañía Minera Coimolache S.A.	Mining Lease	Active	07/06/1991		999.76
03003704X01	TANTA HUATAY N° 15	Compañía Minera Coimolache S.A.	Mining Lease	Active	07/06/1991		624.85
010174815	TANTAHUATAY 30-2015	Compañía Minera Coimolache S.A.	Mining Lease	Active	23/02/2015		731.47

Claim ID	Claim Name	Owner	As reported Type	Status	Date Granted	Expiry Date	Area (Ha)
010011213	TANTAHUATAY 31	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/01/2013		900.00
010011113	TANTAHUATAY 32	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/01/2013		900.00
010011013	TANTAHUATAY 33	Compañía Minera Coimolache S.A.	Mining Lease	Active	02/01/2013		600.00
010274313	TANTAHUATAY 35	Compañía Minera Coimolache S.A.	Mining Lease	Active	01/08/2013		600.00
010336794	TANTAHUATAY N° 24	Compañía Minera Coimolache S.A.	Mining Lease	Active	03/04/1994		600.00
010336994	TANTAHUATAY N° 26	Compañía Minera Coimolache S.A.	Mining Lease	Active	03/06/1994		200.00

Source: (Buenaventura, 2023)

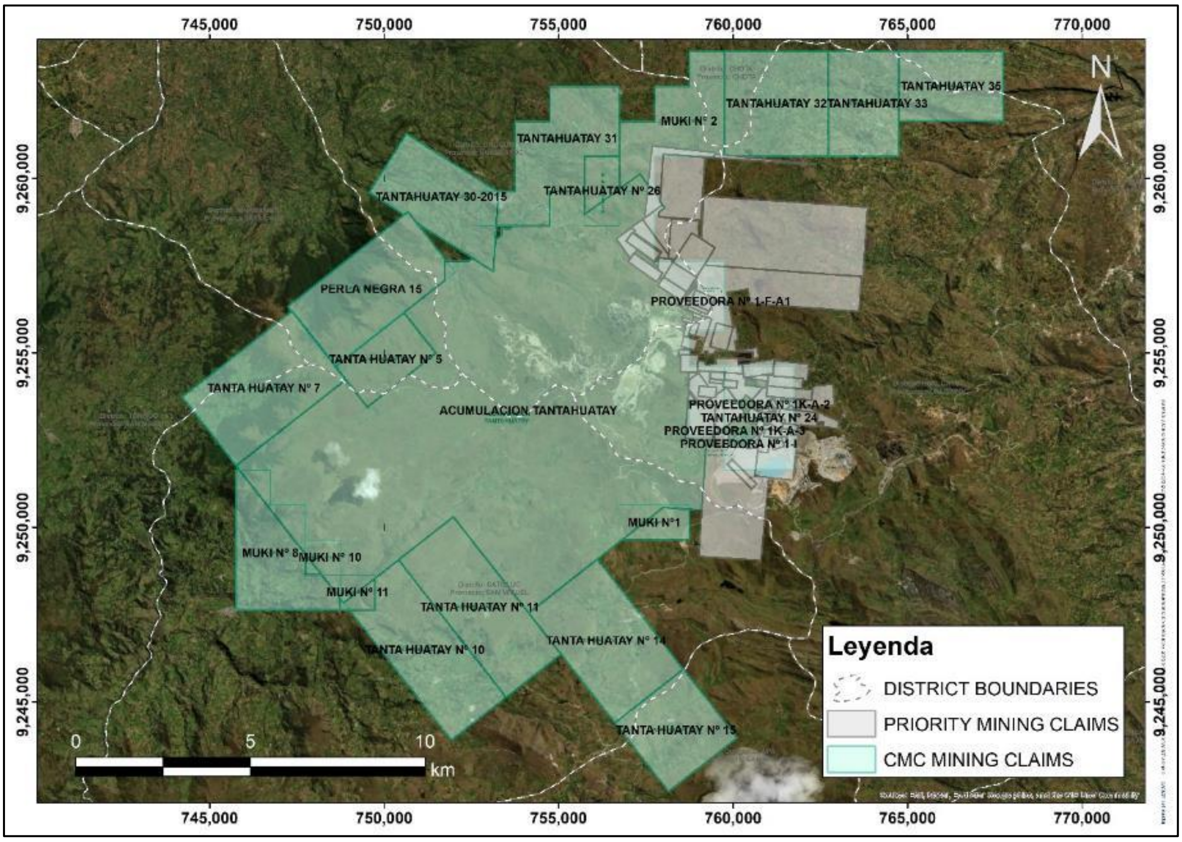


Figure 4-3: Mineral Tenure Claims

Source: (Buenaventura, 2023)

4.4 Mineral Rights description and how they were obtained

Property and Title in Peru (Ingemmet, 2021)

Overview

The right to explore, extract, process and/or produce minerals in Peru is primarily regulated by mining laws and regulations enacted by the Peruvian Congress and Executive Branch under the 1992 Mining Law. The law regulates nine different mining activities: reconnaissance, prospecting, exploration, exploitation (mining), general labor, beneficiation, commercialization, mineral transport and mineral storage outside a mining facility.

The Ministry of Energy and Mines (MINEM) is the authority that regulates mining activities. MINEM also grants mining concessions to local or foreign individuals or legal entities through a specialized body called The Institute of Geology, Mining and Metallurgy (Ingemmet).

Other relevant regulatory authorities include the Ministry of Environment (MINAM), the National Environmental Certification Authority (SENACE), and the Supervisory Agency for Investment in Energy and Mining (Osinergmin). The Environmental Evaluation and Oversight Agency (OEFA) monitors environmental compliance.

Mineral Tenure

Mining concessions can be granted separately for metallic and non-metallic minerals. Concessions can range in size from a minimum of 100 ha to a maximum of 1,000 ha.

- A granted mining concession will remain valid providing the concession owner:
- Pays annual concession taxes or validity fees (Derecho de Vigencia), currently US$3 /ha, are paid. Failure to pay the applicable license fees for two consecutive years will result in cancellation of the mining concession.
- Meets minimum expenditure commitments or production levels. The minimum is divided into two circumstances:
  - Achieves “Minimum Annual Production” by the first semester of Year 11, counting from the year after the concession was granted, or pays a penalty for non-production on a sliding scale, as defined by Legislative Decree N° 1320, which went into effect on January 1, 2019. “Minimum Annual Production” is defined as one tax unit (UIT) per hectare per year, which is S/4,200 in 2019 (about US$1,220)
  - Alternatively, no penalty is payable if the “Minimum Annual Investment” made is at least 10 times the amount of the penalty.

The penalty structure stipulates that if a concession holder cannot reach the minimum annual production on the first semester of the 11th year from the year in which the concessions were granted, the concession holder will be required to pay a penalty equivalent to 2% of the applicable minimum production per year per hectare until the 15th year. If the concession holder cannot reach the minimum annual production on the first semester of the 16th year from the year in which the concessions were granted, the concession holder will be required to pay a penalty equivalent to 5% of the applicable minimum production per year per hectare until the 20th year. If the holder cannot reach the minimum annual production on the first semester of the 20th year from the year in which the concessions were granted, the holder will be required to pay a penalty equivalent to 10% of the applicable minimum production per year per hectare until the 30th year. Finally, if the holder cannot reach the minimum annual production during this period, the mining concessions will expire automatically.

The new legislation means that title-holders of mining concessions that were granted before December 2008 will be obligated to pay the penalty from 2019 if the title-holder reached either the Minimum Annual Production or made the Minimum Annual Investment in 2018.

Mining concessions will lapse automatically if any of the following events take place:

- The annual fee is not paid for two consecutive years.
- The applicable penalty is not paid for two consecutive years.
- The Minimum Annual Production Target is not met within 30 years following the year after the concession was granted.

Beneficiation concessions follow the same rules applicable to mining concessions. A fee must be paid that reflects the nominal capacity of the processing plant or level of production. Failure to pay such processing fees or fines for two years will trigger loss of the beneficiation concession.

Permits

In order to start mineral exploration activities, a company is required to comply with the following requirements and obtain a resolution of approval from MINEM, as defined by Supreme Decree No. 020-2012-EM of 6 June 2012:

- Resolution of approval of the Environmental Impact Declaration.
- Work program.
- A statement from the concession holder indicating that owns the surface land. If said applicant is not the owner, it must provide proof of authorization from the owners of the surface land to perform exploration activities.
- Water License, Permission or Authorization to use water.
- Mining concession titles.
- A certificate of non-existence of archeological remains (CIRA), whereby the Ministry of Culture certifies that there are no monuments or remains within project the area. However, even with a CIRA, exploration companies can only undertake earth movement under the direct supervision of an onsite archeologist.

Mining companies in the production stage must submit (and receive subsequent approval from) an environmental impact study that includes a social relations plan, certification that there are no archaeological remains in the area, and a draft mine closure plan. Closure plans must be accompanied by payment of a monetary guarantee.

In April 2012, Peru’s Government approved the Consulta Previa Law (prior consultation), whose regulations were approved by Supreme Decree Nº 001-2012-MC. This requires prior consultation with any indigenous communities (as determined by the Ministry of Culture) before any infrastructure or projects, in particular mining and energy projects, can be developed in their areas.

Mining companies also have to separately obtain water rights from the National Water Authority (ANA) and surface lands rights from individual landowners.

4.5 Encumbrances

SRK is not aware of any material encumbrance that might affect the current resources as shown in this report.

4.6 Other significant Factors and Risks

SRK is not aware of any other significant factor or risk that might affect access, the title, right, or capacity to conduct works on the mine's property.

4.7 Royalties or Similar Interest

- Beneficiary: Regulus Resources Inc.

Status: Active

Type of contract: Assignment

Royalty: 5.0% NSR

Term: 2022

Comments: At this time there is no production, and the royalty is not being paid.

5 History

In the Tantahuatay Mining unit, initial exploration was conducted by Southern Peru Copper Corporation from 1991 to 1998 and in 1992, Coimolache was established with the following shareholder structure: 40.09% held by Buenaventura, 44.24% by SPCC and 15.67% by ESPRO S.A.C.

The Tantahuatay Sulfuros project consists of a flotation plant for the treatment of copper sulfides found underlying the Tantahuatay Au-Ag mineralization, which is currently being exploited (Buenaventura, 2022).

5.1 Background

Tantahuatay's history is intertwined with the origins of the Hualgayoc Mining District, a fruitful mining center in northern Peru. The first work in the area was conducted in 1969-1971 by the British Geological Survey (BGS), which engaged in sediment sampling in the region and the district and identified seven anomalies in the Tantahuatay and Sinchao creeks. In 1970-1991, Compañía Minera Colquirrumi S.A. developed exploration and exploitation work in the Hualgayoc district.

The first works during SPCC's administration involved geological mapping, rock and soil geochemistry in trenches and test pits. In 1994-1998, the company conducted 27,411 m of diamond drilling in the sectors of Tantahuatay, Mirador, Ciénaga and Peña de las Águilas as Calera Orbamas S.A. (the company's name was Coimolache at that time).

Buenaventura took over administration in 1999 and conducted underground exploration for oxides through two tunnels in the deposits of Tantahuatay 2 and Ciénaga Norte respectively (BISA) and carried out diamond infill drilling in the deposits of Tantahuatay 2 (BISA) and Ciénaga Norte, Mirador Norte (CEDIMIN) in 2002 and later in 2006-2007 for a total of 6,063 meters. The project is part of the final exploration plans of Compañía Minera Colquirrumi S.A. of the Buenaventura group.

Coimolache was established by public deed on December 16, 1981. The constitution was registered in File 33255 of the Book of Contractual Companies and Other Legal Entities of the Public Registry of Mining, today correlated with Item No. 11477429 of the Registry of Legal Entities of Lima.

Compañia Minera Coimolache S.A. Administration:

- Elmer Vidal Dávila, is granted additional powers to the position by agreement of the Board of Directors of April 2, 1984. It appears in As. 0003 of File 33244.
- Alfredo Farje Serpa, appointed by Board agreement of July 15, 1991. Appears in As. 0005 of File 33244.
- Inc. Minera Los Tolmos S.A. (subsidiary of Southern Perú) – appointed by agreement of the extraordinary general meeting of shareholders on July 6, 1995.
- Inc. Minera Colquirrumi S.A. (subsidiary of Buenaventura) - Appointed by agreement of the general meeting of shareholders on April 26, 1999.
- Inc. Minera Cedimin S.A.C. (subsidiary of Buenaventura) – Appointed by the general meeting of shareholders on May 23, 2002.

- Inc. De Minas Buenaventura S.A.A. – Appointed by agreement of the general meeting of shareholders from November 27, 2003 to date.

Contractors:

- Between 1999 and 2002, Buenaventura Ingenieros S.A. oversaw exploration.

Coimolache began the pre-feasibility stage in 2007. The EIA was completed with a public hearing in Hualgayoc in 2008, and construction began in 2009. The oxide operation began in June 2011; the reserve inventory was 658 koz Au between the Tantahuatay 2 and Ciénaga Norte deposits at a cut-off grade of 0.3 g/t Au.

5.2 Tantahuatay Sulfuros project exploration activities

In 2011, drilling was conducted to 166 m to interpret sulfides. Beginning in 2013, BNV increased diamond drilling in the Tantahuatay Sulfides zone.

In 2016, the geological exploration in Tantahuatay was reoriented as sulfide exploration with the lithological reinterpretation of the Tantahuatay 2 and 4 zones with the support of a consultant. To date, 82,978.61 meters of diamond drilling has been conducted. This drilling has been used to update the geological interpretation of the Tantahuatay area (Buenaventura, 2023).

6 Geological setting, mineralization, and deposit

6.1 Regional Geological Framework

The Tantahuatay Sulfides project is in the Hualgayoc mining district, within the Chicama-Yanacocha corridor, in the Cajamarca-Cutervo deflection of the Cordillera Occidental of northern Peru (Domain VI, INGEMMET) (Lecaros, Palacios, Vargas , & Sanchez, 2000); (Carlotto, y otros, 2009), (Carlotto, y otros, 2010) sector corresponding to metallogenic belt XXI, related to Miocene Epithermal Au-Ag deposits (Acosta, y otros, 2020).

Regionally, it is mainly formed by Mesozoic sedimentary rocks and Cenozoic volcanic/volcano-sedimentary sequences deposited on a Paleozoic basement (Figure 6-1). The base of the stratigraphic column is defined by Lower Cretaceous siliciclastic rocks corresponding to the Goyllarisquizga Group. Overlying sequences of limestones and siliciclasts of the Inca, Chulec, Pariatambo Formations and the Pulluicana Group of the Upper Cretaceous are evident. Diorites, porphyritic monzonites, subvolcanic stocks and andesitic sills of the Eocene, intrude the Cretaceous sedimentary rocks, such as the porphyritic diorite of San Miguel, Puente de la Hierba Creek and the Coimolache sill, prior to the Miocene magmatism (Paredes, 1997), (Ericksen, Iberico Miranda, & Petersen, 1956) and (MacFarlane, 1994).

The main mineralization systems in the Tantahuatay-Hualgayoc region are associated with bimodal Miocene magmatism-volcanism events, such as porphyritic diorite stocks as in Cerro Corona of 14.4 My (MacFarlane, 1994), dacitic-andesitic domes as in Cerro Jesús, San José and Hualgayoc of 9.1 My (MacFarlane, 1994). Crowning the column are Upper Miocene to Pleistocene tuffs and ignimbrites as well as recent colluvial and eluvial deposits.

The lithology/stratigraphy of Cordillera Occidental in the region (Cajamarca) is summarized based on the work of Wilson (1984) and his references included, as described below.

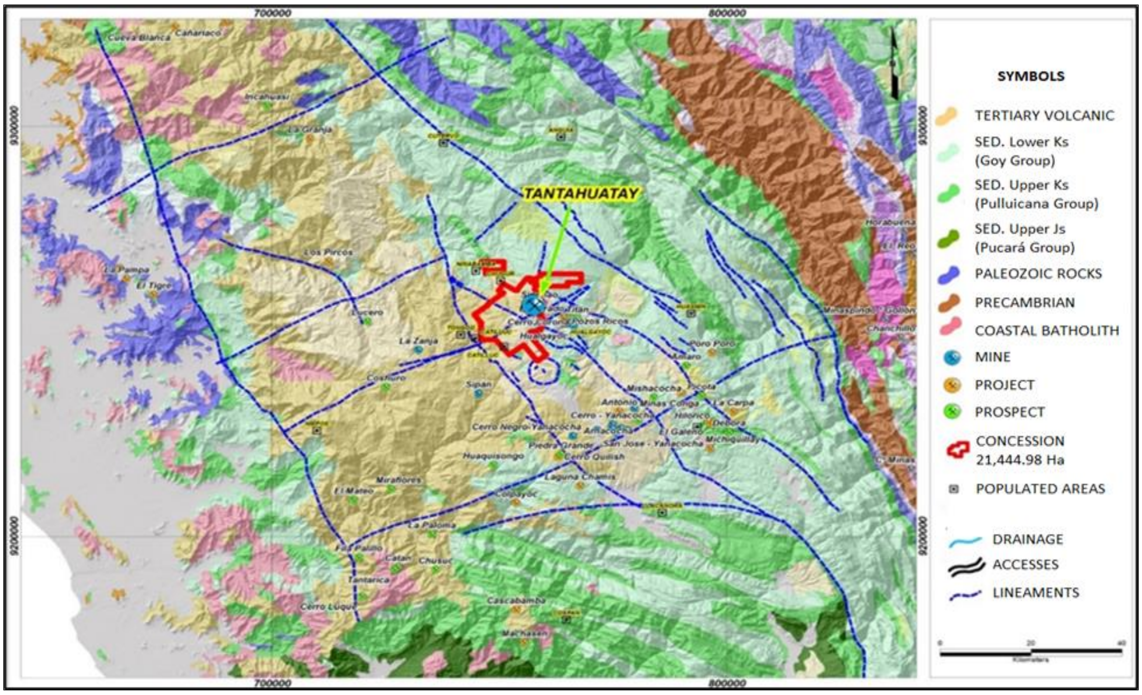


Figure 6-1: Regional geologic map

Source: (Buenaventura, 2019)

6.2 Stratigraphy

Extracted from: Auditoría de Estimación de Recursos y Reservas de la Mina Tantahuatay, Región Cajamarca, Perú (SRK, 2020).

6.2.1 Goyllarisquizga Group

The oldest rocks in the region belong to the Goyllarisquizga Group, which is mainly composed of sandstone and quartzite sequences with shale intercalations; this group is divided into the following formations: Chimú, Santa, Carhuaz and Farrat.

The Chimú Formation consists of sandstones, quartzites and shales with an estimated thickness of 600 m. The Santa Formation consists of gray shales with intercalations of marly limestones and dark gray sandstones, and conformably overlies the Chimú Formation. The Carhuaz Formation consists of brown and grayish shales, sandstones and quartzites, which are stratified in thin and medium layers with variable thicknesses. The Carhuaz Formation overlies the Santa or Chimú Formation. The Farrat Formation consists of medium to coarse grained white quartzites and sandstones, which present cross-bedding. The base of this formation conformably overlies the Carhuaz Formation.

6.2.2 Inca Formation

The Inca Formation is composed of brown to reddish to orange-colored sandstones and shales, with calcareous intercalations (i.e., massive sandy limestones); it varies in thickness to more than 100 m, and unconformably overlies the clastic sediments of Goyllarisquizga Group.

6.2.3 Chúlec Formation (Crisnejas Fm.)

The Chúlec Formation consists of nodular shales, marls and limestones of cream or yellowish-gray colors with an average thickness of 250 m. The Chúlec Formation conformably overlies the Inca Formation.

6.2.4 Pariatambo Formation (Crisnejas Fm.)

The Pariatambo Formation consists of thin layered sequences of thin black limestones, with intercalations of shales and tuffs. Generally, this formation is uniformly stratified with a thickness between 100 to 300m. The Pariatambo Formation conformably overlies the Chúlec Formation.

6.2.5 Pulluicana Group

The Pulluicana Group is composed of Yumagual and Mujarrún formations, which consist of approximately 800 to 1,100m of sequences of grayish clayey limestones, brown marls, grayish or greenish shales and sandstone. This group lies conformably and unconformably parallel to the Pariatambo Formation.

6.2.6 Quilquiñán Group

The Quilquiñán Group is composed of the Romirón and Cóñor formations, which generally consist of 100 to 200 m of dark gray friable shales and bluish marls with calcareous intercalations. The Quilquiñán Group conformably overlies the Pulluicana Group.

6.2.7 Cajamarca Formation

The Cajamarca Formation consists of 100 to 400m of thin and pure limestones of grayish or whitish color, with regular and uniform bedding. The Cajamarca Formation overlies the Quilquinán Group.

6.2.8 Celendín Formation

The Celendín Formation consists predominantly of thin layers of yellowish or dark cream to brown nodular clayey limestone, with intercalations of gray or bluish-gray marls and shales. The thickness of the Celendín Formation is variable, but it is estimated to reach up to 400 m and conformably overlies the Cajamarca Formation.

6.2.9 Chota Formation

The Chota Formation consists of a sequence of conglomerates interbedded with clays and red sandstones. The Chota Formation lies unconformably parallel to the Cajamarca and Celendín formations.

6.2.10 Calipuy Group

The Calipuy Group is composed of up to 3,000 m of volcanic sequences, mainly andesitic (80%) (i.e., tuff breccias, lahars or flow breccias), with intercalations of basaltic and rhyolitic flows, dacitic tuffs and sedimentary rocks that are widespread in the Cordillera Occidental and deposited between 54.8 ± 1.8 Ma and 8.2 ± 0.2 Ma; this includes several informal sequences, for example: Llama, Porculla, Huambos, Chilete and Tembladera volcanics (Hollister & Sirvas, 1978); (Benavides, 1999); (Navarro, Cereceda, & Rivera, 2008) - and references therein).

The volcanic centers/events (Figure 6-2) show a NW-SE trend, coinciding with regional fault/fracture patterns, and five (5) stages of volcanism, which migrate progressively in an easterly direction.

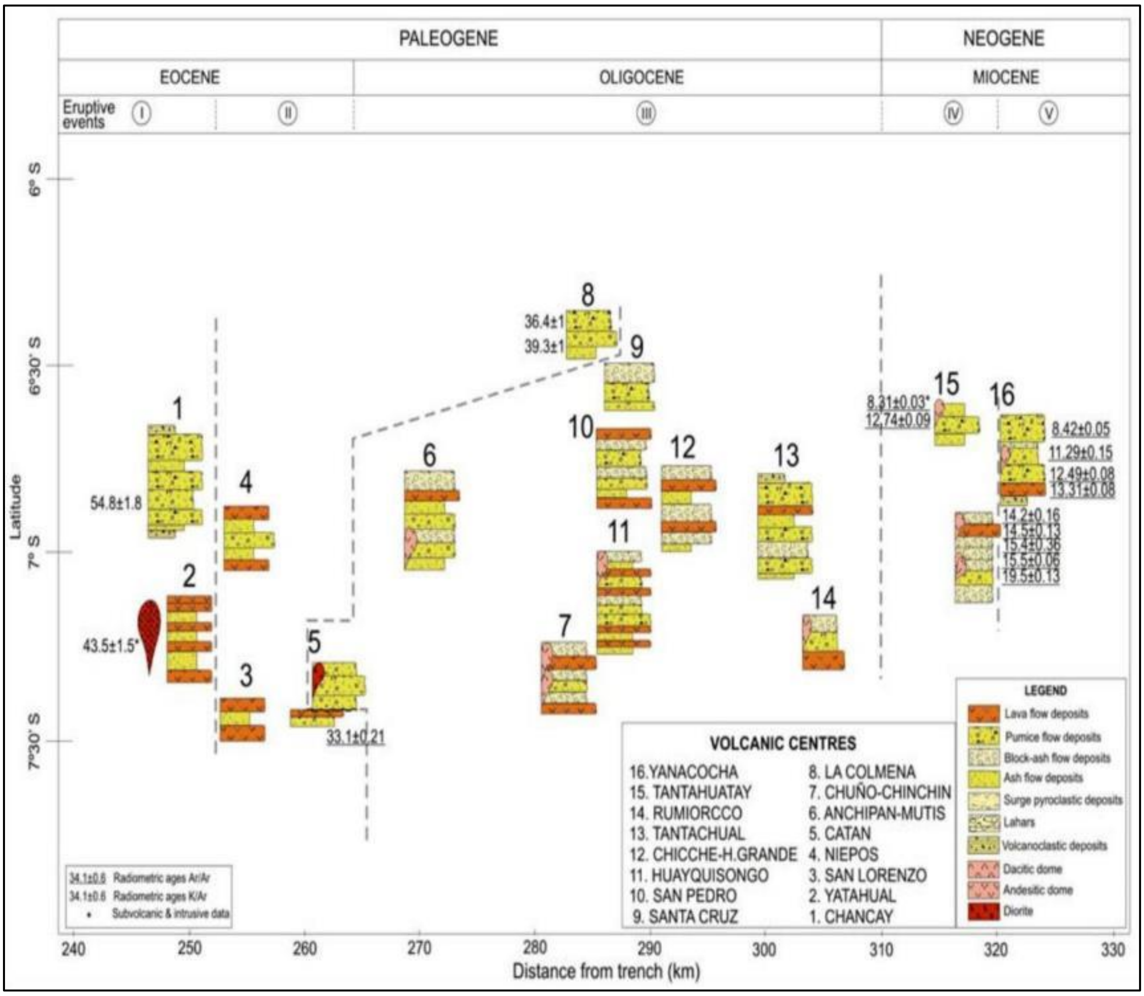


Figure 6-2: Schematic diagram showing the spatial and temporal evolution of Calipuy Group volcanics in the Cajamarca are.

Source: (Navarro, Cereceda, & Rivera, 2008)

6.2.11 Quaternary

The fluvioglacial deposits are exposed in the Hualgayoc river valley; they are located on top of the Cretaceous rocks and partially cover the surface of the intrusive (granodiorite). A small fluvioglacial deposit has been located in the foothills of Cerro Coimolache and in the pampas of Quilcate, as well as in Cuyucpampa. The recently formed wetlands are originated by the accumulation of organic matter in a humid reducing environment. In the work area, deposits are located in the pampas of Cuyucpampa, Muyoc and Quilcate.

Figure 6-3 presents a stratigraphic column of Tantahuatay since the Cretaceous, highlighting the lithologies and intrusive events.

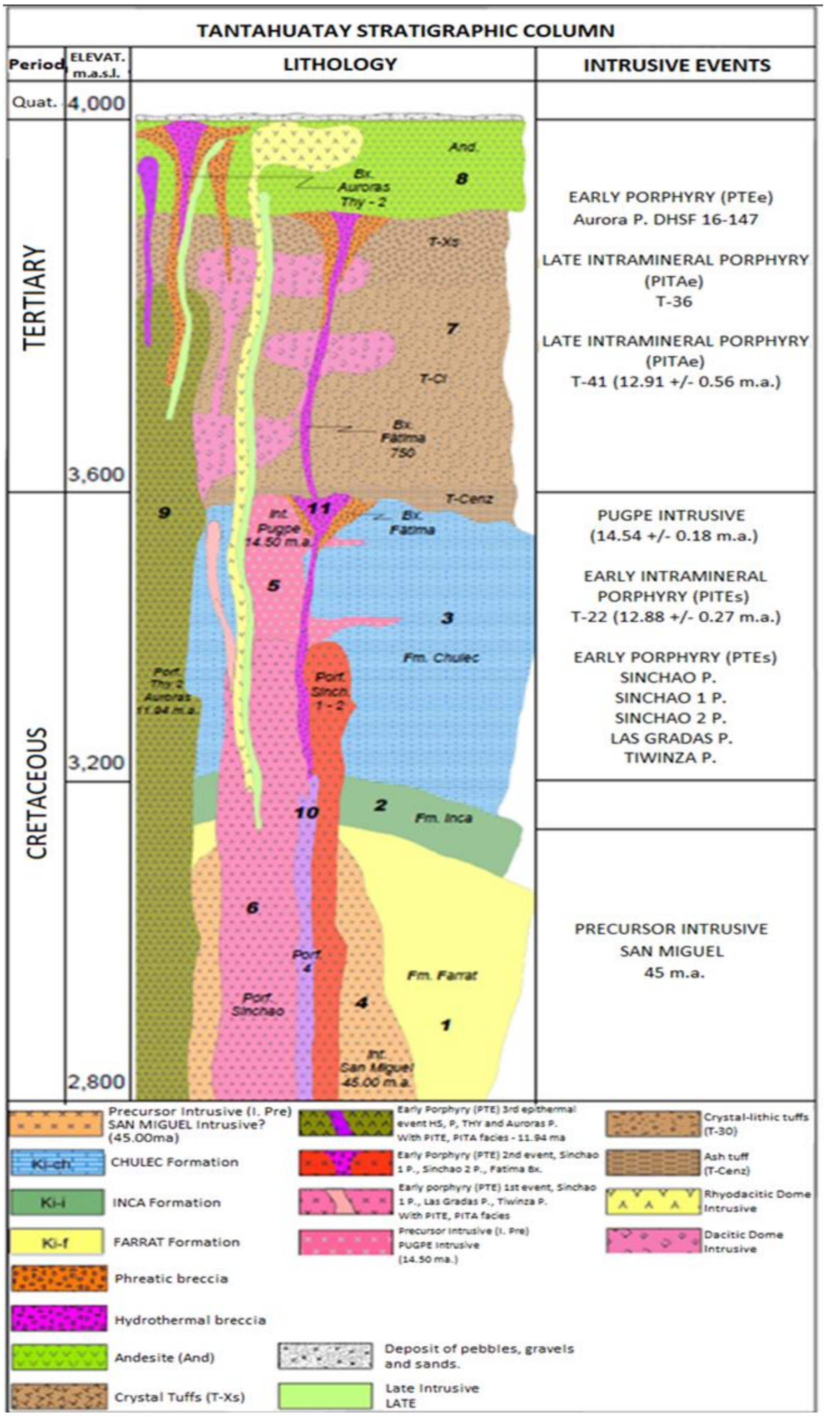


Figure 6-3: Stratigraphic column of Tantahuatay volcanic complex.

Source: (Buenaventura, 2019)

6.3 Intrusives

Several small to sub-volcanic Tertiary stocks and intrusive bodies (5) are recognized in the Cordillera Occidental (i.e., Hualgayoc, La Granja, Cerro Corona, Chailhuagon, and El Galeno). Their composition is generally dacitic but varies to dioritic and some are associated with polymetallic and copper mineralization.

Intrusives in the Hualgayoc district are divided into 2 groups: Lower Tertiary and Middle to Upper Tertiary. Lower Tertiary intrusives have a granodioritic to dioritic composition and include: Cerro San Miguel, Cerro San José (13.00 ± 0.24 My (K/Ar)), Cerro Jesús (10.29 ± 0.20 My (K/Ar)), Cerro Corona (13.35 ± 0.27 My (K/Ar) and 14.4 ± 0.1 Ma (U/Pb)) and Cerro Coimolache (45 ± 3.4 My (Rb/Sr) and 14.3 ± 0.1 My (U/Pb) ((Macfarlane & Petersen, Pb isotopes of the Hualgayoc area, northern Peru; implications for metal provenance and genesis of a Cordilleran polymetallic mining district., 1990); (Macfarlane, Prol-Ledesma, & Conrad, 1994); (James, 1998)). See Figure 6-4 for a dating summary.

Middle to upper Tertiary intrusives have smaller volumes than those in the lower Tertiary with a dioritic to monzonite composition and include Cerro Hualgayoc (9.05 ± to 0.21 My (K/Ar)) and Cerro Tantahuatay (12.4 ± 0.4 My (K/Ar) and 13.2 ± 0.2 My (U/Pb)). Other smaller bodies (at least 4) are mapped within the Coimolache concessions.

Sample	Location	Sample Type	Mineral	Age (Ma)	Reference[1]	Method
87009	Yanacancha Sill	Propylytized andesite	K-feldspar	16.8 ± 0.4	1	K-Ar
86027	Cerro Hualgayoc	Rhyodacite	Biotite (magmatic)	9.05 ± 0.21	1	K-Ar
86039	Cerro Corona	Potassically altered felsic pluton	Biotite (hydrothermal)	13.35± 0.27	1	K-Ar
85019	Cerro San Jose	Seriticized andesite	Muscovite	13.00 ± 0.4	1	K-Ar
86011	Atahualpa mine	argillically altered felsic sill	Muscovite	13.48 ± 0.19	1	K-Ar
87007	Cerro Jesus	Argillically altered andesite	Muscovite	10.29 ± 0.20	1	K-Ar
	Cerro Tantahuatay	Acid-sulphate alteration	Coarse hypogene alunite	12.4 ± 0.4	1	K-Ar
	Cerro Hualgayoc	Rhyodacite	Biotite (magmatic)	7.9 ± 0.3	1	K-Ar
	Cerro Jesus	Argillically altered andesite	Whole-rock	14.3 ± 0.7	2	K-Ar
	Cerro Coymolache	Propylytized andesite	Whole-rock	11.8 ± 0.6	2	K-Ar
	Los Mantos	Argillically altered andesite	Whole-rock	10.5 ± 0.5	2	K-Ar
	Cerro Hualgayoc	Rhyodacite	Whole-rock	7.2 ± 0.35	2	K-Ar
9602	Cerro Corona	Quartz dioirte	Zircon	14.4 ± 0.1	3	U-Pb
9605	Cerro Coymolache	Andesite	Zircon	14.3 ± 0.1	3	U-Pb
9699	Cerro Tantahuatay	Anedsite	Zircon	13.2 ± 0.2	3	U-Pb

[1]References are: 1 = Macfarlane (1989), 2 = Borredon (1982), and 3 = Mortensen (1997).

Figure 6-4: Radiogenic dating of intrusives in the Hualgayoc district.

Source: (James, Geology, alteration and mineralization of the Cerro Corona porphyry Cu-Au deposit, Cajamarca, 1998)

New data on U/Pb in zircons have provided valuable information in the temporal evolution of the region’s magmatism. According to this data, magmatism in the area began 14.8 million years My back and occurred continuously to 9.7 My but was marked by a pause in magmatic activity between 11 and 10 My. This chronological information is essential to understanding the sequence of geological events in the area.

6.4 Regional Tectonic Framework

Extracted from: Auditoría de Estimacion de Recursos y Reservas de la Mina Tantahuatay, Regíón Cajamarca, Perú (SRK, 2020).

The deformation events/phases described below are summaries based mainly on authors such as (Mégard, 1984); (Jaillard & Soler, 1996); (Benavides, 1999) and their included references.

6.4.1 Inca Deformation (I & II)

The deformation events of the Inca I (59-55 My) and II (43-42 My) phases were concentrated in the Cordillera Occidental domain (i.e., between the MTFB and the Coast batholith) and associated with upright folds and convergence to the east, concentric or angular (Inca belt of folds and reverse faults). Due to geological contrasts, folds were generated by flexural movements and are disharmonic (Benavides, 1999). Some reverse faults, dipping to the west, were generated within the anticline axis. This phase of deformation represents significant compression, shortening and sub-horizontal displacement. Benavides (1999) considers that the curvature of the Andean trend from NW-SE to E-W (Chimu Andean trend) in Cajamarca is associated with the movement of the Coastal Domain to the north-northeast. In contrast, (Mitouard, Laj, Mourier, & Kissel, 1992) states that the NW-SE to E-W Andean trend curvature would be associated with the closed geometry of Chicama basin, bounded, to the east, by the N160-trending western edge of the Marañón geanticline and, at Cajamarca latitude, by a NE-SW paleogeographic boundary (Figure 6-5).

6.4.2 Quechua I Deformation

The Quechua I phase deformation (17 My) represents another significant compression event, which includes the reactivation of NNW-SSE oriented faults (Paleozoic normal faults), which is overprinted over the Inca belt area of folds and reverse faults (Benavides, 1999).

6.4.3 Post-Quechua I Phase

Since the middle Miocene, after the Quechua I deformation phase, an extension and uplift event, associated with the formation of inter-mountain basins, is recognized. Exhumation occurred with a rate between 0.2 to 0.3 mm/y ((Laubacher & Naeser, 1994); (Gregory-Wodzicki, 2000) ; (Michalak, 2013)).

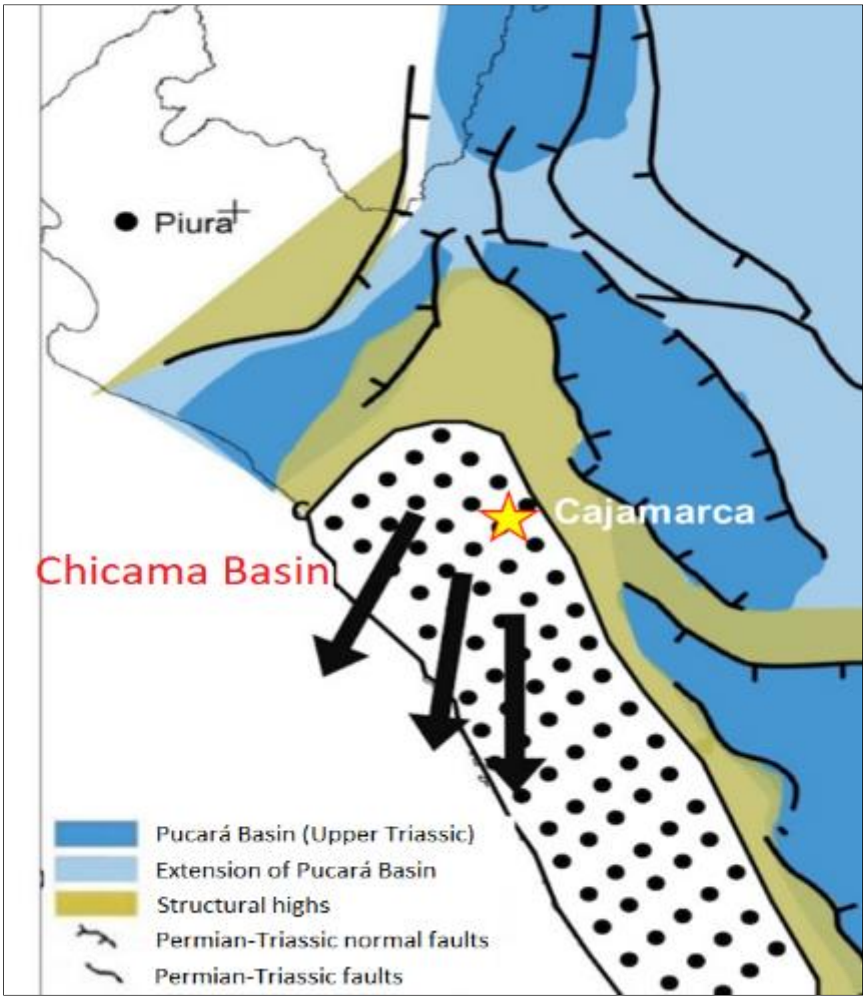


Figure 6-5: Paleogeographic map of the Chicama basin bounded eastward by the N160 trending western edge of the Marañón anticline and, at Cajamarca latitude, by a NE-SW paleogeographic boundary.

Source: (Modified from (Carlotto, y otros, 2009) by (SRK, 2020))

6.5 Local Geology

Extracted from : Auditoría de Estimación de Recursos y Reservas de la Mina Tantahuatay, Region Cajamarca, Perú (SRK, 2020).

The Tantahuatay deposit consists of four (4) main sectors: Tantahuatay, Mirador (Mirador Norte and Mirador Sur), Ciénaga (Ciénaga Norte and Ciénaga Sur) and Peña de Las Águilas (Figure 6-6).

The oldest rocks in Tantahuatay area belong to the Inca, Chúlec, Pariatambo and Yumagual formations (part of Pulluicana group), which mainly consist of limestones, and there is a minor presence of marls, shales, and sandstones. The Cretaceous sedimentary rocks are folded and oriented NW-SE to E-W, which reflects the impact of the Inca I and II deformation phases (i.e., Inca belt of folds and reverse faults).

The area's geology is characterized by the occurrence of mostly volcanic units that are found overlying the limestones of the Cretaceous Pulluicana Group, which outcrops east of Tantahuatay, where they are cut by a felsic, granodioritic to dioritic intrusive.

A thick volcanic sequence has developed in the central part of the project, consisting of aphanitic to hornblende basaltic andesites towards the base. This is followed by a sequence of porphyritic andesitic lavas, which are crowned by an andesitic pyroclastic sequence and lithic tuffs of dacitic composition that outcrop very discontinuously. No Quaternary tuffs and ignimbrites have been recognized.

These sequences of volcanic units are intruded by hydrothermal breccia bodies, and locally by dacitic-rhyodacitic domes found as erosion remnants. Breccias in specific originate diverse zones and types of hydrothermal demonstrate considerable alterations.

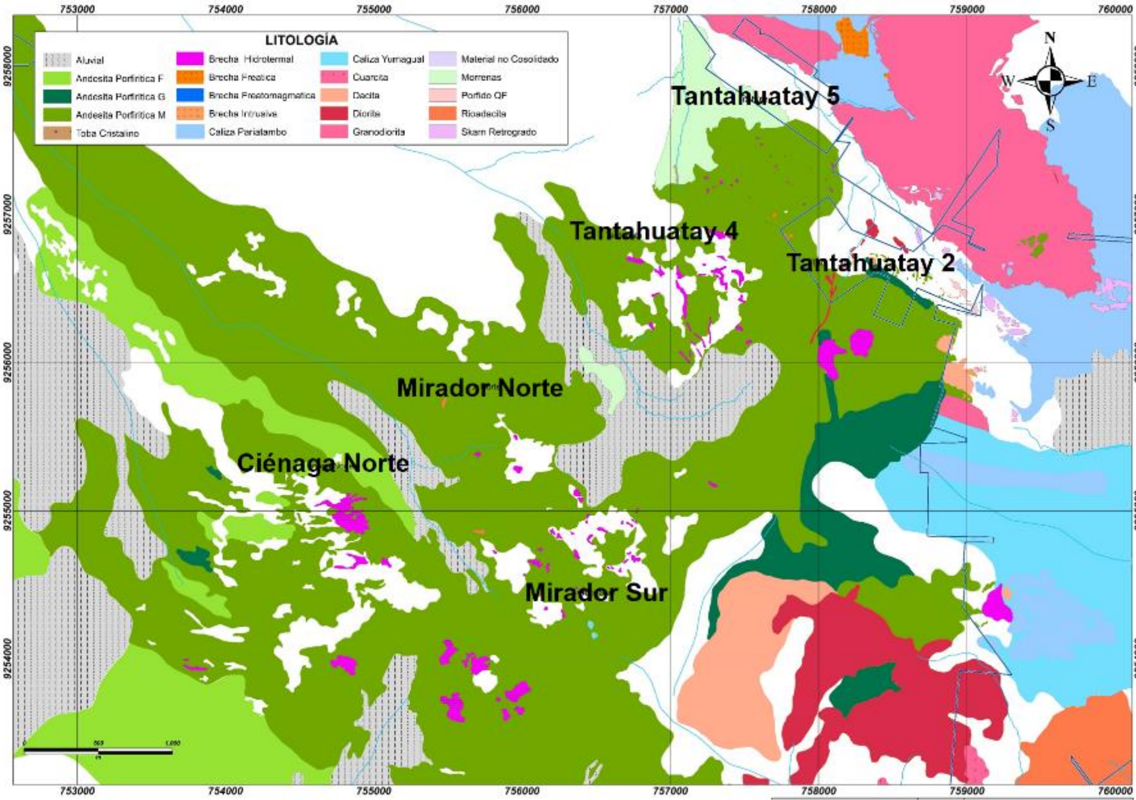


Figure 6-6: Lithological map at 10,000 scale for the Tantahuatay Sulfuros project

Source: (Buenaventura, 2019)

6.6 Hydrotermal alteration

Extracted from the internal report: Marco Geológico del Yacimiento Tantahuatay (Paredes, 2023).

6.6.1 Epithermal alteration (HS)

The following types of alteration have been recognized:

Silicification: this alteration is not very developed, and is composed of massive silica, granular silica and vuggy silica. It corresponds to silica-pyrite-enargite channels and is situated in the matrix of the hydrothermal breccias.

Advanced argillic: this appears as an external halo to the silica zone and the assembly is alunite-pyrophyllite-diaspore-dickite. Patchy and wormy textures are observed in some drillholes. This alteration is strong to intense in the fragmental and coherent volcanics, moderate in the early porphyritic intrusives (PITEe), weak to moderate in the intermineral porphyritic intrusives (PITAe), and weak in late porphyritic intrusives (LATE). In the discordance, there is a superposition of the advanced argillic alteration over retrograde skarn alteration.

Argillic: reflects kaolinite-illite-montmorillonite-pyrite assembly and is recognized at the edges of the system and in the matrix of the phreatic breccias and in the upper levels of the late intrusives.

Propylitic: associated with late dikes, the assemblage is chlorite-epidote-pyrite-calcite.

Phyllic: is superimposed by the advanced argillic alteration, sericite-quartz assembly. Additionally, new Terraspec measurements indicate muscovite-paragonite-fengite.

6.6.2 Porphyry alteration (Au-Cu)

The following types of alteration have been recognized:

Phyllic: The assembly consists mainly of white mica (muscovite-paragonite-phengite) quartz. It appears to be more intense in the early porphyries.

Intermediate argillic: is widely distributed in the drillings of Sinchao's zone; the assemblage is chlorite-white micas-smectite. This alteration overprints potassic alteration.

Potassic: Identified in drillholes that intercept the El Sinchao porphyries, the dominant assemblage is secondary biotite-magnetite and to a lesser extent, secondary biotite - potassic feldspar.

Propylitic: has been recognized in the San Miguel intrusive near to the Quebrada Las Coloradas (Sinchao). It consists of an epidote domain over chlorite that to the east becomes a chlorite domain.

6.6.3 Skarn alteration

Exoskarn: prograde alteration is observed in the vicinity of the Sinchao – Las Gradas faults, with abundant brown (grossular) and green (andradite) garnets and a lower proportion of pyroxenes (diopside). In the central part of the deposit retrograde alteration predominates with an epidote domain on chlorite-magnetite-actinolite-clays. The retrograde alteration is contemporary with the phyllic alteration that develops in copper-gold porphyries.

Endoskarn: has generated from the early porphyritic intrusives that intrude the calcareous sediments of the Chulec Formation, which have prograde and retrograde alteration, intermediate argillic alteration and overimposition of phyllic alteration.

Figure 6-7 shows a map with the previously mentioned alterations.

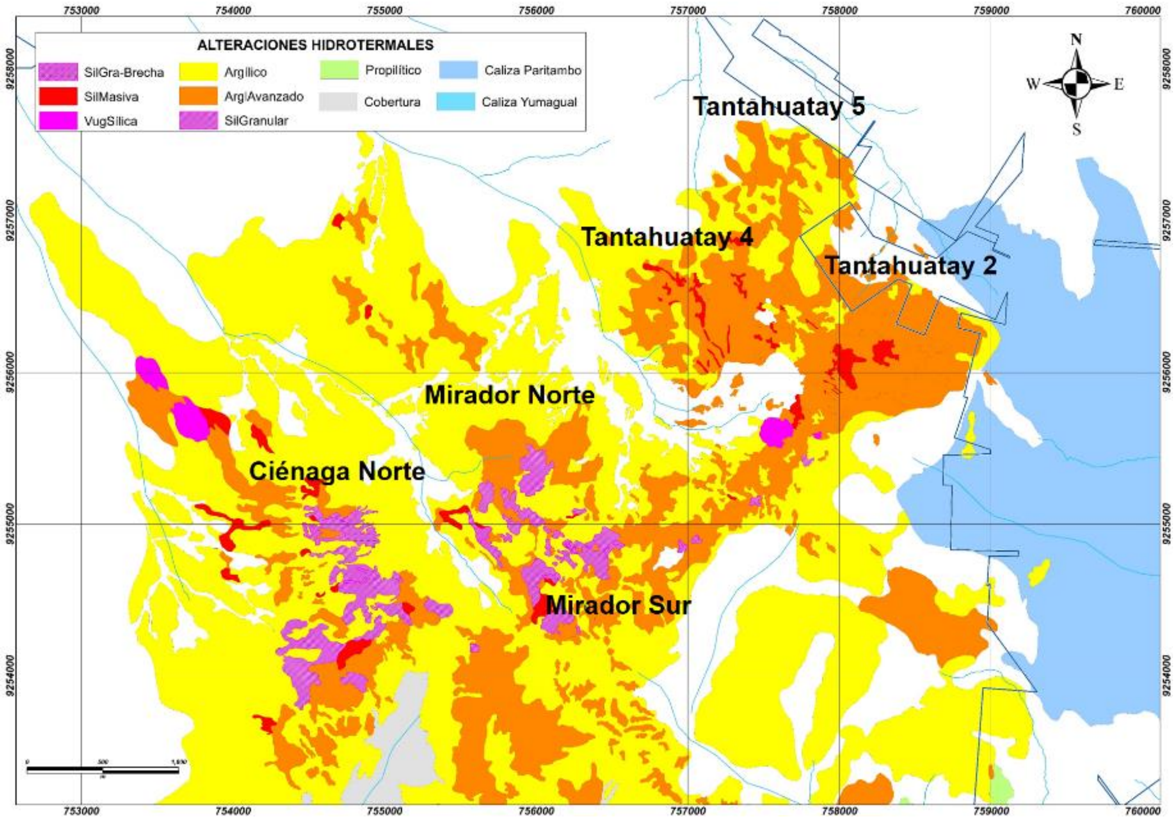


Figure 6-7: Hydrothermal alterations map

Source: (Coimolache, 2022)

6.7 Mineralization

Extracted from the internal report: Marco Geológico del Yacimiento Tantahuatay (Paredes, 2023).

Two large mineralization type domains have been differentiated:

Arsenical copper: The first corresponds to the mineralization in the high sulfidation epithermal system with enargite domain and vertical zoning to chalcosine-coveline and chalcopyrite in contact with exoskarn.

Non-arsenical copper: related to the chalcopyrite-sphalerite mineralization that is hosted in the copper porphyries and exoskarn.

Both domains demonstrate a transition to the mineralization of the intermediate sulfidation type with gray copper mineralization, cadmium-rich sphalerite, bismuthinite, galena, stibnite, orpiment.

Mineralization of intermediate to low sulfidation type has been differentiated, related to the emplacement of a diatreme.

6.8 Deposit Types

Tantahuatay region shows various styles of mineralization including: high-sulfidation epithermal, porphyry, and skarn (Bissig, Clark, Rainbow, & Montgomery, 2015). Tantahuatay Sulfuros project includes those three deposits types.

6.8.1 High sulfidation epithermal deposit

High sulfidation (HS) epithermal deposits are of great interest in mining due contents of precious metals such as gold and silver. These deposits are formed by the interaction of hot acidic fluids with the host rock, which leads to a series of hydrothermal alteration processes.

An important aspect of high sulfidation deposits is that over time, the hydrothermal system tends to evolve toward less reactive and more oxidized fluids. Some models suggest that precious metal mineralization in these deposits is subsequently introduced through the transit of low-sulfidation geothermal fluids into previously formed zones of high-sulfidation alteration of magmatic origin.

Tantahuatay is a high sulfidation epithermal deposit that contains gold and silver mineralization in oxides, which is associated with hydrothermal and phreatomagmatic breccias, along with strong hydrothermal silicification (current operation). Below the oxide level, mineralization is dominated by sulfides, including minerals such as silica, pyrite, enargite, chalcosine and covelline (Tantahuatay Sulfuros project).

6.8.2 Porphry-skarn type deposits

Skarn deposits (Cu) are an important type of mineral deposits that typically form in carbonate box rocks adjacent to porphyry copper type deposits (Figure 6-8). Copper porphyries may or may not contain economic grades of copper and other metals, and their size may vary from a few million tons to several billion tons.

Skarns are usually divided into zones of proximal garnet and distal pyroxene, followed by zones of wollastonite, vesuvianite, sulfides and/or oxides near the contact between the skarn and the host rock, called the marble front. As these zones propagate outward from the source of magmatic fluids, they may undergo a transition from initial thermal metamorphism to later metasomatism, resulting in relatively coarse-grained mineralized skarn.

Skarn deposits can be very large, and their formation is closely related to porphyry intrusion in the region. These deposits can contain not only copper, but also other metals such as gold, molybdenum and silver. Porphyry copper systems and their associated deposits may have mineral and alteration zoning that includes early sodic-calcic through potassic, chlorite-sericite and sericitic alteration, and advanced argillic alteration.

Some examples of copper skarn deposits include Cerro Corona and Antakori in the Cajamarca metallogenetic zone. These deposits are of significance economic importance due to their valuable metal contents; the genesis of these deposits is related to complex geological processes spurred by the interaction of fluids and rocks in underground environments.

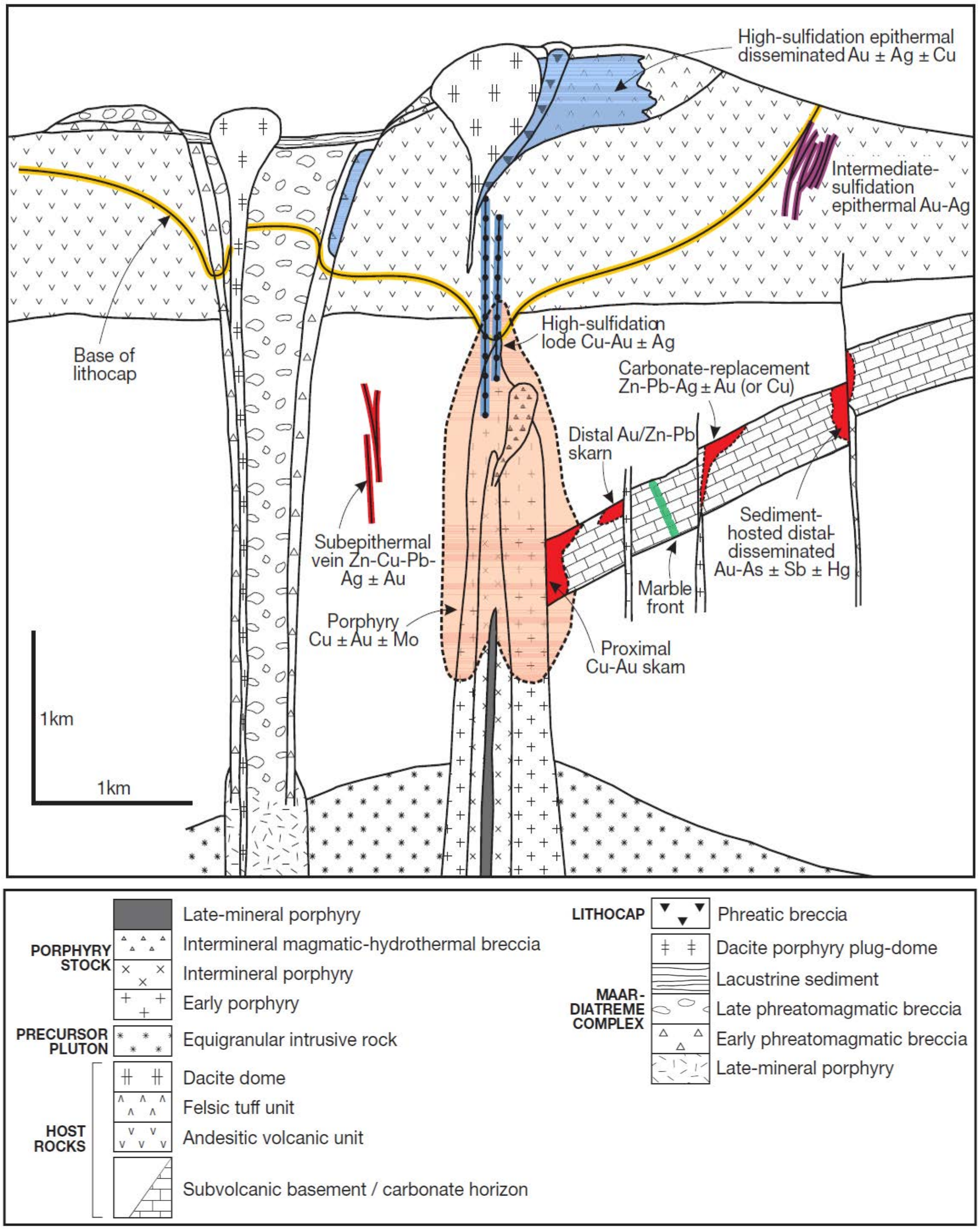


Figure 6-8: Schematic model of the Porphyry copper system and its interrelation with the epithermal and skarn mineralization systems

Source: (Sillitoe, 2010)

7 Exploration

The main exploration method in Tantahuatay Sulfuros Project, which is part of the Tantahuatay mining unit, has been the diamond drilling. However, other exploration methods in different stages, including surface geological mapping, surface geochemical sampling, and geophysics, have also been used on the project. The concessions that are located in Tantahuatay area and its surroundings were mapped and sampled many years ago. Other exploration targets have been identified and evaluated throughout the years, but have not been included in the mineral resource estimation in this document given that SRK believes that they are not relevant to this report.

7.1 Exploration Work (Other Than Drilling)

Limited non-drilling surface exploration work has been conducted at Tantahuatay Sulfuros Project. At the beginning of the exploration of Tantahuatay mining unit, surface geochemical and geophysical techniques were used. At present, given that this is a part of an operating deposit (Oxide zone) with an adequate level of geological knowledge, no other non-drilling exploration work is being carried out within the mining unit lately.

In the opinion of the Qualified Person (QP), this information is not relevant as it only supported the initial planning of exploration.

7.2 Significant Results and Interpretation

SRK notes that the property is not at an early stage of exploration, and that results and interpretation of exploration data have been subsequently supported by data from extensive drilling and by active mining of orebody in pits.

7.3 Exploration Drilling

The Tantahuatay Sulfuros Project has conducted drilling campaigns since 1995. The drilling database includes diamond drilling information from the company Regulus. A summary of this data is presented in the Table 7-1.

Table 7-1: Drilling Database Summary by Operator

Operator	Surveys	Length (m)	Samples
Compañía de Minas Buenaventura S.A.A.	534	128,372	68,918
Regulus Resources Inc.	81	51,432	32,369
Total	**615**	**179,804**	**101,287**

Source: (SRK, 2023)

Table 7-2 presents a summary of the estimation database by year of drilling, meters drilled and number of samples. Figure 7-1 shows the spatial distribution of the drillholes that were used to estimate the mineral resources of Tantahuatay Sulfuros.

Table 7-2: Historical record of drilling in Tantahuatay Sulfuros

Year	Type	Operator	Longitud (m)	Meterage
1995	DDH	Buenaventura	6	1,565
1996	DDH	Buenaventura	4	1,705
1997	DDH	Buenaventura	33	11,809
2002	DDH	Buenaventura	2	288
2006	DDH	Buenaventura	1	57
2007	DDH	Buenaventura	5	783
2011	DDH	Buenaventura	17	2,383
2012	DDH	Buenaventura	9	410
2013	DDH	Buenaventura	74	10,884
2014	DDH	Buenaventura	28	2,920
2015	DDH	Antakori	36	13,004
	DDH	Buenaventura	34	3,652
2016	DDH	Buenaventura	48	9,541
2017	DDH	Antakori	7	5,507
	DDH	Buenaventura	58	24,446
2018	DDH	Antakori	24	19,513
	DDH	Buenaventura	99	24,809
2019	DDH	Antakori	14	13,408
	DDH	Buenaventura	12	1,848
2021	DDH	Buenaventura	27	8,027
2022	DDH	Buenaventura	57	17,440
2023	DDH	Buenaventura	20	5,808
	Total		**615**	**179,804**

Source: (SRK, 2023)

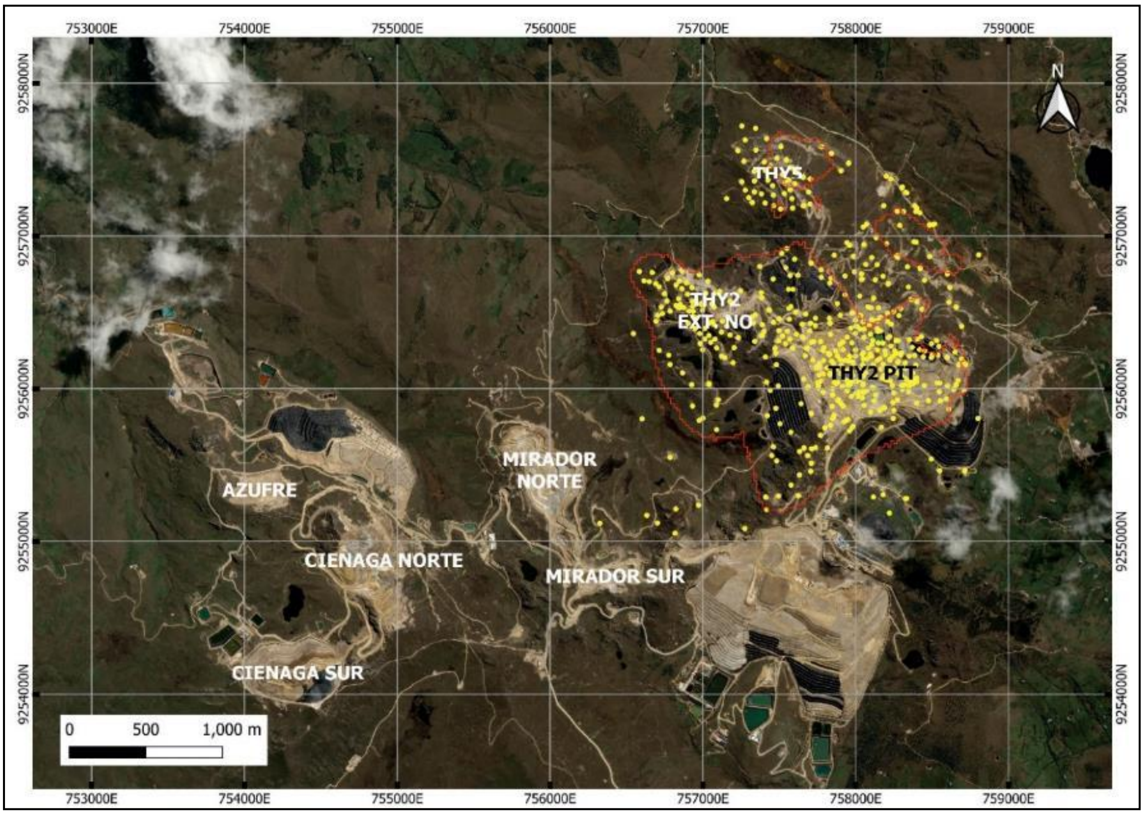


Figure 7-1: Distribution of diamond drilling (yellow points) in the Tantahuatay Sulfuros Project (red polygons). The current pits correspond to Tantahuatay high-sulphidation epithermal deposit (oxidation zone) and it is composed of the following deposits: Tantahuatay 2, Tantahuatay 4 (or Tantahuatay 2 EXT. NO), Cienaga Norte, Cienaga Sur, Mirador Norte, Mirador Sur and Tantahuatay 5. Datum: UTM PSAD56 zone 17S.

Source: (Buenaventura, 2023)

7.3.1 Collar Surveys

Buenaventura's survey department is responsible for surveying the collar locations using a total station or a differential GPS instrument. Upon completion, a monument is used to mark the collar location.

7.3.2 Sampling Methods and Sample Quality

Core size is either HQ, NQ, and PQ. Prior to splitting, samples are selected for density measurements, Terraspec (Pima), point load testing and petrography.

Core samples are cut or split into two equal parts using diamond saws or splitters. One half of the core is sent for analysis and the other half is stored in the core box.

During logging, the geologist assigned to the drill hole marks sample intervals on the core box. The sampling interval is nominally 2 meters, but samples are broken at major contacts by lithology and mineralization type. Samples are divided so that the minimum sample length is approximately 0.3 m. The drill core is washed in the core box and dried in open air prior to photography.

7.3.3 Downhole Surveying

Buenaventura performs downhole survey measurements through the gyroscope instrument (Gyro Master).

SRK observed that most of the measurements were conducted every 5 m (using Reflex). Vertical drillholes (90°) with depths of less than 50 m were not downhole surveyed.

7.3.4 Geological Logging

All the cores were logged by Coimolache Geologists. All information was collected through GVMapper software, which utilizes a customized library of lithology as well as alteration and mineralization codes. This data is then imported to AcQuire.

7.3.5 Diamond Drilling Sampling

Diamond drillholes are considered the most reliable and representative data. The samples of these drillholes are collected in trays, which indicate the corresponding drillhole ID and the drillhole depths at the start and end of each run. A symmetrical line is drawn along the core for the cutting.

The drillhole intervals are marked and sampled by Coimolache's Geologist. The samples have variable length (minimum: 0.3 m and maximum: 2 m). The sampling procedure of Buenaventura considers the following:

- Each core section is marked by little wooden milestones.
- The recovery is measured in each section.
- A sampling card is completed for each sample. The sampling cards have two parts: one accompanies the sample to the laboratory, and the other remains in the core box.
- A unique sample value is assigned to each sample. This allows its identification throughout the sampling process, assay, and validation processes (in case of duplicates).
- A photographic record of each drillhole section is kept.
- The collection of the geological information is conducted in a detailed logging form.
- The core is cut by using an electric saw.
- Samples are divided into two halves: one of them is sent to the laboratory for assay, and the other is stored in the box.
- Blank, standard, and duplicate samples are inserted systematically.
- Samples are packed in sacks (with the corresponding coding) and sent to the laboratory. All the samples arrive at the laboratory with a list generated in the geology department, describing the sample quantity and the assay type are described.
- Pulps are returned to the laboratory and stored by the Geology team.

In SRK's opinion, core sampling is appropriate for resource estimation purposes.

7.3.6 Drilling Type and Extent

Diamond drilling is the main method used.

7.3.7 Drilling, Sampling, or Recovery Factors

The drill core recovery is appropriate, generally over 90%. SRK is not aware of any material factor of the drilling that might affect the results.

SRK considers that the quality of the information collected by Buenaventura through drilling is adequate and is most robust for drilling conducted after 2012. Although information is available for years prior to 2012, no QA/QC program or deviation data registration during these periods. These drilling areas, however, are generally located in zones that have already been mined or are currently in operation.

7.3.8 Drilling Results and Interpretation

SRK used available geological and drill hole data to review geological models with Leapfrog software.

SRK believes that the procedures used by the Tantahuatay team for drilling, logging, drillhole sampling and information gathering are adequate. Also, they follow the best practices of the international codes.

8 Sample Preparation, Analyses, and Security

The estimation database of the Tantahuatay Sulfuros Project includes diamond drilling information from Regulus. The summary of this data is presented in the Table 8-1.

Table 8-1: Summary of estimation database according to information source

Period	Source	Drillholes	Length (m)	Samples
1995 - 2023	Compañía Minera Coimolache S.A.	534	128,372	68,918
2015, 2017-2019	Regulus Resources Inc.	81	51,432	32,369
	Total	**615**	**179,804**	**101,287**

Source: SRK (2023)

SRK's current audit evaluated the quality control of the samples with laboratory certificates dating from January 2020 to June 2023 and the results obtained are described throughout this Chapter.

In February 2020, SRK audited the database and Mineral Resources estimate of the Tantahuatay Sulfuros project to develop a declaration of Mineral Resources with information from the diamond drilling campaigns executed to 2019. This audit assessed the quality control of the samples analyzed to December 2019 and the results obtained are described in the corresponding report. The assessment of quality control data from Regulus was executed during the audit conducted in February 2020.

Table 8-2 summarizes the results of the quality control evaluation carried out by SRK in the report "Mineral Resources Update and Database Audit of the Tantahuatay Sulfuros Primarios Project" (SRK, 2020) Quality control evaluation focused on Au and Cu because they were the main elements for mineral resource estimation and SRK concluded that there was no evidence of cross contamination and, overall, the analytical accuracy was within acceptable limits; however, sample preparation processes were found to reflect low levels of precision.

Table 8-2: Quality Control evaluation results summary for Au and Cu from Tantahuatay Sulfuros Primarios Project (Historical Data – 2019)

Laboratory	Evaluation	SRK Comments	Primary samples distribution by laboratory	Primary samples distribution by laboratory (%)
ALS	Contamination	There was no evidence of cross contamination.	15,897	24%
	Precision	Pulp duplicates and twin samples results for Au and Cu were within acceptable limits. However, coarse duplicates results were not within acceptable limits for both elements.		
	Accuracy	Analytical accuracy was within acceptable limits for Au and Cu.		
SGS	Contamination	There was no evidence of cross contamination.	27,158	41%
	Precision	Pulp duplicates and twin samples results for Au and Cu were within acceptable limits. However, coarse		

Laboratory	Evaluation	SRK Comments	Primary samples distribution by laboratory	Primary samples distribution by laboratory (%)
		duplicates results for Cu were not within acceptable limits.		
	Accuracy	Analytical accuracy was within acceptable limits for Au and Cu, except SRM PUL-04 Cu results (12% of total SGS samples) that were not within acceptable limits.		
Coimolache	Contamination	There was no evidence of cross contamination.	847	1%
	Precision	Pulp duplicates and twin samples results for Au and Cu were within acceptable limits.		
	Accuracy	Could not be evaluated because SRMs were not inserted.		
Unidentified Laboratory*	Contamination	Quality control evaluation could not be performed.	21,634	33%
	Precision			
	Accuracy			
		Total	**65,536**	**100%**

*Unidentified Laboratory: Samples belonging to historical databases and do not have registered the name of Laboratory where they have been analyzed.

Source: (SRK, 2022)

8.1 Sample Preparation Methods and Quality Control Measures

8.1.1 Sampling

Sampling is supervised by the Field Geologist and/or the Ore Control Geologist. The core is removed from the holes on the drilling platform and placed in plastic core boxes, which are transported to the logging room at the end of the drilling shift.

Drillhole sampling is carried out in the core warehouse, which located on the mining project site. Prior to sampling, the core is cut longitudinally into two halves with a diamond disc cutter, following the cutting line marked by the geologist. The cut drillcore is placed in the core box.

The core boxes are organized on sampling tables. Each sampling ticket has three labels, and the sampling interval and quality control (QC) codes are noted. Two sample labels and one of the sample halves are placed in a polyethylene bag, and the remaining label is stapled to the outside of the polyethylene bag. The other half of the sample remains in the core box. After completing drillhole sampling, the samples are placed in bags for transport to the Certimin sample preparation laboratory located in the city of Cajamarca.

For bulk density sampling, representative samples are selected based on geology and mineralization. Bulk density samples are 15 cm to 20 cm long and are taken at 5 m intervals along the drillhole, regardless of whether the interval is in a mineralized zone or not. The samples are wrapped in plastic film and labeled. The geologist creates a database with all the samples taken; this information is sent to the person responsible for the geology database and subsequently recorded on the bulk density sample form. The bulk density measurement technician takes a photograph of the sample outside the core box and sends it to the internal or external laboratory for bulk density determination. Once the results are obtained, the samples are stored in the core room and the results are uploaded to the database.

8.1.2 Sample Preparation

The samples included in the evaluation period were analyzed primarily at the Certimin laboratory; for this reason, only this laboratory's sample preparation is described (Figure 8-1). In this case, the supervisor receives, orders and verifies the samples (quantity, condition of the bags, codes) according to the analysis request. Next, a batch code is created and the data described in the service request is entered. Samples are then weighed and recorded in the Laboratory Information Management System (LIMS) and/or on a weighing form. Then, the samples are dried at a temperature of 100°C +/- 10°C, 60°C +/- 10°C, or at temperatures pre-specified by the client. Subsequently, samples are subjected to primary crushing to 90% - 1/4" (6.3 mm). After that, the samples are subjected to secondary crushing to 90% - 2 mm (#10 ASTM). Then, the samples are subdivided using a sample splitter to obtain sample weight of 200 g to 300 g and the rest of the sample is labeled and stored as "rejected." Subsequently, the samples are pulverized to 85% - 75 µm (#200 Tyler). Finally, the laboratory reviews the results of the internal quality control in the preparation of samples and, if the results are satisfactory, the pulps are stored in envelopes and sent to headquarters in Lima for analysis.

Preparation of bulk density samples includes the following processes: first, the electronic balance is calibrated, and then the initial weight of the samples is recorded. Subsequently, samples are placed in the drying oven at a temperature of 105°C. The samples are weighed every 30 minutes until a constant weight is obtained (thus obtaining the drying time). Buenaventura uses the paraffin method to determine the bulk density in geological units.

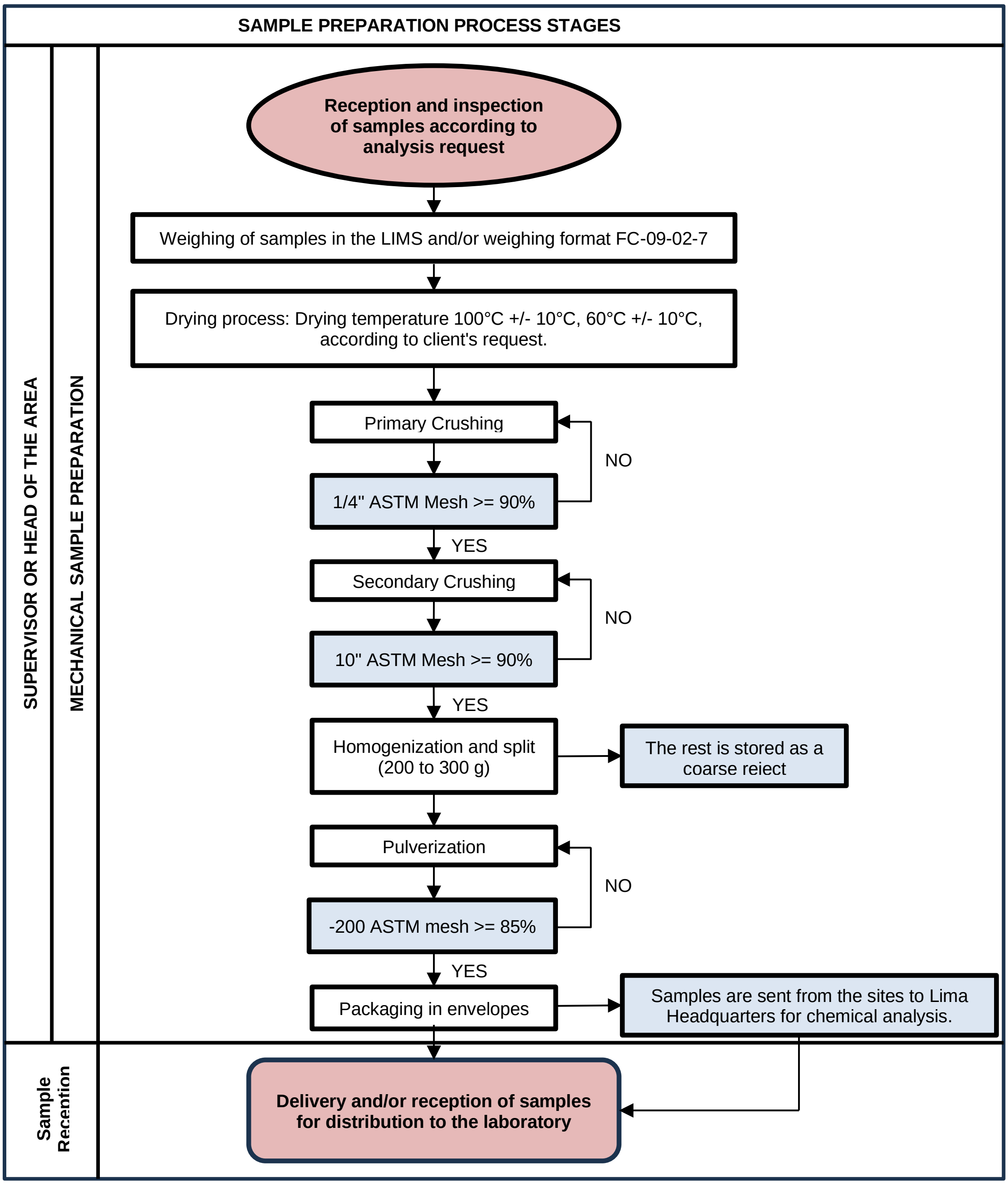


Figure 8-1: Certimin laboratory sample preparation flowchart

Source: Certimin

8.1.3 Chain of Custody

The chain of custody is supervised by project geologists and includes the following procedure: samples are grouped in consecutive order and then placed in bags to be transported to the external laboratory.

During transfer to the laboratory, permanent communication is maintained with the transporter to monitor sample transfer. The mobile unit has a custody person. After samples are delivered to the external laboratory, the sample submission and chain of custody form are submitted, which are signed by the person responsible for receiving samples. The results are issued by the laboratory through reports in digital format and received by the database administrator of the mining project, who validates the information.

8.2 Sample Preparation, Assaying, and Analytical Procedures

The Tantahuatay Sulfuros samples were analyzed in the SGS laboratories, Coimolache internal laboratory, ALS and Certimin; this information is summarized in Table 8-3.

Table 8-3: Distribution of samples according to laboratory and period

Laboratory	1994 - 2019	2020	2021	2022	2023	N° Samples
Certimin			2,084	4,475	11,540	18,099
ALS	33,618	196				33,814
Coimolache	7,880	45				7,925
SGS	34,187					34,187
Unknown*	7,262					7,262
Total	**82,947**	**241**	**2,084**	**4,475**	**11,540**	**101,287**

*Historical samples from migration process.

Source (SRK, 2023)

The Certimin, ALS and SGS laboratories are external and independent of the Compañía Minera Coimolache and Buenaventura.

Samples from the 2020 – 2023 period were primarily analyzed in the Certimin Laboratory. The samples preparation processes (crushing, splitting, and pulverization) took place in Certimin Laboratory located in Cajamarca. Later, the samples are sent to Certimin headquarters located in Lima for chemical analysis. The Certimin Laboratory is internationally recognized and has obtained ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 certifications.

8.2.1 Sample Analysis

The analytical methods utilized by the laboratory for the 2020-2023 period are shown in Table 8-4.

Table 8-4: Analytical methods and detection limits according to laboratory

Laboratory	Element (unit)	Detection limit	Method	Method description
ALS	Au (ppm)	0.005	Au-AA24	Au by fire assay with AAS finish; 30g aliquot
	Ag (ppm)	0.5	ME-ICP61	ICP-AES 33 element, Multi-acid digestion
	As (ppm)	5		
	Bi (ppm)	2		
	Cd (ppm)	0.5		
	Cu (ppm)	1		
	Pb (ppm)	2		

Laboratory	Element (unit)	Detection limit	Method	Method description
	Sb (ppm)	5		
	Zn (ppm)	2		
	Hg (ppm)	1	Hg-MS42	ICP-MS – digestion by aqua regia, Hg ultra trace
Coimolache	Au (ppm)	0.01	AAFA	Fire assay with AAS finish
	Ag (ppm)	0.3	AAR	AAS – digestion by aqua regia
	Cu (ppm)	2	AA_TO2	
Certimin	Au (ppm)	0.005	G0107	Determination of gold by fire assay with AAS finish
	Ag (ppm)	0.2	G0153R5+	ICP-OES, multi acid digestion (HF, $HClO_4$, HNO_3 y HCl)
	As (ppm)	3		
	Bi (ppm)	5		
	Cd (ppm)	1		
	Cu (ppm)	0.5		
	Hg (ppm)	0.005		
	Pb (ppm)	2		
	Sb (ppm)	5		
	Zn (ppm)	0.5		

Source (SRK, 2023)

8.3 Quality Control / Quality Assurance Procedures

QA/QC procedures included the control sample insertion: blank control, duplicates, standard reference materials, and check assay samples for sampling, sample preparation, and analytical processes monitoring.

8.3.1 Insertion Rate

The Quality Control program implemented in the 2020-2023 period presented an insertion rate of 20.5% and consisted of blanks, duplicates, SRMs and external control samples. Table 8-5 summarizes the insertion rate of control samples by year and laboratory, and Table 8-6 is a summary of insertion according to the type of control sample.

Table 8-5: Control sample insertion rate by year and laboratory

Year	Lab.	Primary samples	Blanks		Duplicates			SRM	External Control	Total control samples	Total insertion rate
			BF	BG	DF	DG	GM	STD			
2020	ALS	196		8	5	3	5	12		33	16.80%
	Coimolache	45	2	2	1	1	1	3		10	22.20%
2021	Certimin	2,084	46	45	46	48	48	133		366	17.60%
2022	Certimin	4,475	99	105	100	103	121	295		823	18.40%
2023	Certimin	11,540	284	273	336	361	356	861	60	2,531	21.90%

Year	Lab.	Primary samples	Blanks		Duplicates			SRM	External Control	Total control samples	Total insertion rate
			BF	BG	DF	DG	GM	STD			
Total		**18,340**	**431**	**433**	**488**	**516**	**531**	**1,304**	**60**	**3,763**	**20.50%**

Control samples: BF=Pulp blanks, BG=Coarse blanks, DF=Pulp duplicates, DG=Coarse duplicates, GM=Twin samples, SRM=Standard Reference Material

Source: (SRK, 2023)

Table 8-6: Control sample insertion summary

Samples	Total	Insertion rate
Primary samples	**18,340**	
Blanks		
Coarse blanks	433	2.36%
Pulp blanks	431	2.35%
Subtotal	**864**	**4.71%**
Duplicates		
Twin samples	531	2.90%
Coarse duplicates	516	2.81%
Pulp duplicates	488	2.66%
Subtotal	**1,535**	**8.37%**
Standard reference material		
AuOx18	8	0.04%
CMLA-003	9	0.05%
CMLA-09	70	0.38%
CMLB-001	12	0.07%
CMLB-04	1	0.01%
CMLB-07	109	0.59%
CMLM-002	18	0.10%
CMLM-08	86	0.47%
M2AL20	56	0.31%
OREAS 151a	307	1.67%
OREAS 151b	19	0.10%
OREAS 153a	275	1.50%
OREAS 153b	8	0.04%
OREAS 504c	315	1.72%
OREAS 502b	1	0.01%
OREAS 503b	1	0.01%
OREAS 600	2	0.01%
OREAS 601	4	0.02%
OREAS 602	2	0.01%
OREAS 603	1	0.01%
Subtotal	1,304	7.11%

Samples	Total	Insertion rate
External control samples		
External control samples	60	0.33%
Subtotal	**60**	**0.33%**
Total control samples	**3,763**	**20.52%**

Source: (SRK, 2023)

SRK believes that the use of many different SRMs makes it difficult to assess accuracy and suggests that in the future this number be limited (or three or four at most). Regarding duplicates and blanks, insertion rates are adequate. However, SRK suggests that the insertion of external control samples be increased to 3% or 4%.

8.3.2 Contamination Evaluation

SRK evaluated the Ag, As, Au and Cu content in the pulp and coarse blanks inserted in diamond drill samples. Three laboratories were used to evaluate the blank control samples from drilling campaigns: ALS, the internal laboratory of Coimolache and Certimin.

A total of 97% of the inserted blanks were certified by Target Rocks (Peru), which the remaining 3% correspond to blanks extracted from a quarry near the Tantahuatay Sulfuros mining project that were prepared and analyzed by the internal Coimolache Laboratory (see Table 8-7)

Table 8-7: Summary of inserted blanks

Type of sample	Laboratory	Blank Code	Samples	
			Total	Insertion rate
Pulp blanks	Coimolache	CTBLKF	10	0.05%
	Target Rocks	TR-18137	421	2.30%
Coarse blanks	Antakori	BLANK-AK	8	0.04%
	Coimolache	CTBLKG	10	0.05%
	Target Rocks	TR-17130	20	0.11%
	Target Rocks	TR-17131	38	0.21%
	Target Rocks	TR-18134	122	0.67%
	Target Rocks	TR-18136	137	0.75%
	Target Rocks	TR-19138	98	0.53%
		Subtotal	**864**	**4.71%**

Source: (SRK, 2023)

When evaluating results, SRK considers that there is evidence of significant contamination in pulp blanks when the value of the blank is five times above the practical limit of detection (LPD) of the element; and in the case of coarse blanks, significant contamination is determined in cases where the blank value is 10 times higher than the LPD of the element. Under SRK's standards, at least 90% of the samples must be within the acceptance limits.

An LPD was defined for Certimin's precision and contamination evaluations (see Table 8-8). Figure 8-2 presents the relative error (RE) and the definition of the LPD of Ag (ppm) for the Certimin laboratory.

Table 8-8: Practical detection limits used for the Certimin laboratory.

Laboratory	Element (unit)	LPD
Certimin	Ag (ppm)	0.5
	As (ppm)	30
	Au (ppm)	0.02
	Cu (%)	0.003

Source: (SRK, 2023)

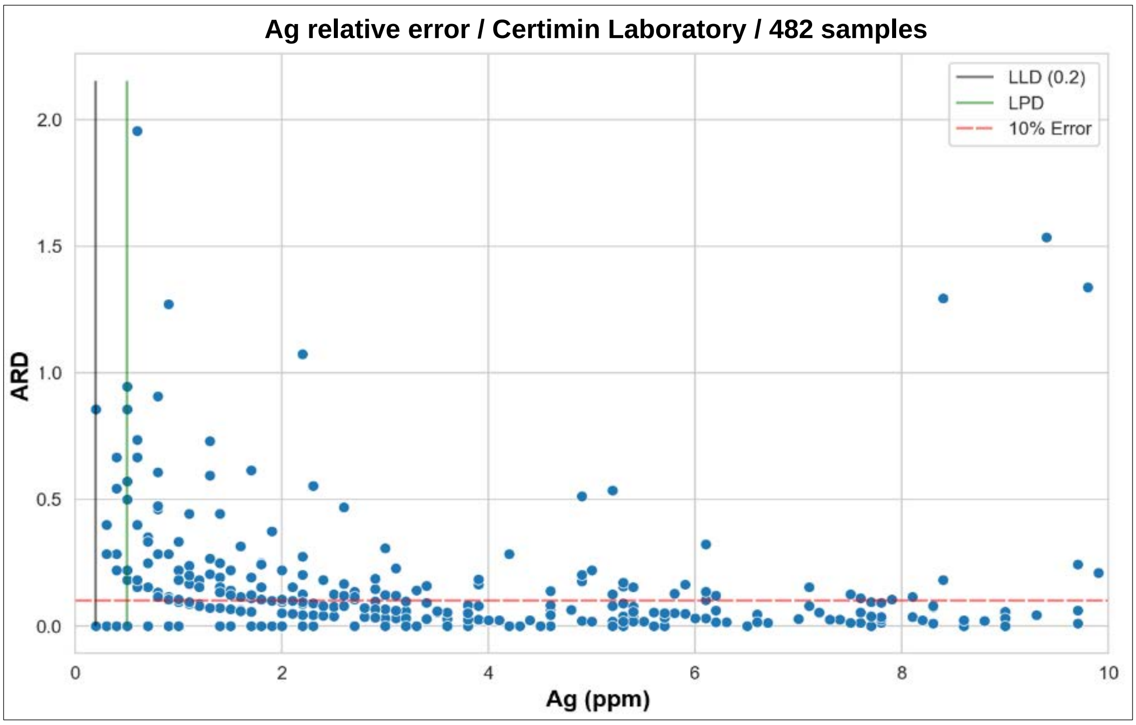


Figure 8-2: Calculation of LPD for Ag from the Certimin laboratory.

Source: (SRK, 2023)

In the case of the ALS and Coimolache laboratories, no LPD could be determined given that a very limited number of duplicate samples of pulps were inserted during this period. As such, SRK considered the laboratory detection limit as a practical limit for the elements under evaluation (See Table 8-4).

The results of the contamination evaluation are listed in Table 8-9. SRK did not evaluate the results from the Coimolache laboratory because only a few blank samples had been inserted and the results were not sufficiently representative.

Table 8-9: Contamination evaluation results Summary

Laboratory	Blank Type	Element	Samples	Samples within parameters	Samples within parameters (%)
ALS	Coarse blanks	Ag (ppm)	8	8	100%
		As (ppm)	8	8	100%

Laboratory	Blank Type	Element	Samples	Samples within parameters	Samples within parameters (%)
		Au (ppm)	8	8	100%
		Cu (%)	8	8	100%
Certimin	Pulp blanks	Ag (ppm)	429	429	100%
		As (ppm)	429	429	100%
		Au (ppm)	429	429	100%
		Cu (%)	429	429	100%
	Coarse Blanks	Ag (ppm)	423	420	99%
		As (ppm)	423	421	100%
		Au (ppm)	423	422	100%
		Cu (%)	423	419	99%

Source: (SRK, 2023)

8.3.3 Precision Evaluation

To evaluate precision, twin samples; coarse duplicates; and Pulp duplicates were inserted into the diamond drilling lots. These samples were inserted in 2020 – 2023 and were analyzed at the Certimin and ALS laboratories and at Coimolache's internal laboratory.

SRK used the hyperbolic method (Simon, 2004) in its precision analysis to incorporate the effect of distortions generated by the low precision levels at values close to the detection limit. This method entails calculating the relative error, which is obtained as the absolute value of the difference between the values of the original sample and the duplicate, divided by the average of the two values.

Each pair of samples is then evaluated using the quadratic equation of a hyperbola:

$$y^2 = m^2x^2 + b^2$$

Where:

y: Maximum value of the pair of samples (original – duplicate)

x: Lower value of the pair of samples (original – duplicate)

m: Constant according to type of duplicate based on ER limit values of 10%, 20% and 30% for pulp duplicates, coarse and twin samples, respectively.

b: Constant according to practical limit of detection (LPD) and type of duplicate (Table 8-10).

The hyperbola hereto defined is considered as the acceptance limit of duplicate pairs. For SRK, at least 90% of the samples must be within acceptable limits.

Table 8-10: Constants used in the hyperbolic method quadratic equation

Duplicate type	Constants	
	m	b
TS	~1.35	10 x LPD
CD	~1.22	5 x LPD
PD	~1.11	3 x LPD

Source: (SRK, 2023)

In the case of the ALS laboratory, no LPD could be determined given that a limited number of pulp duplicate samples had been inserted in the period under evaluation. Accordingly, the limit of detection was taken as the LPD. The LPDs used in the precision evaluation are shown in the Table 8-11.

Table 8-11: Summary of LPDs used in precision evaluation

Laboratory	Element (unit)	LPD
Certimin	Ag (ppm)	0.5
	As (ppm)	30
	Au (ppm)	0.02
	Cu (%)	0.003
ALS	Ag (ppm)	0.5
	As (ppm)	5
	Au (ppm)	0.005
	Cu (%)	0.0001

Source: (SRK, 2023)

SRK did not evaluate the results from the Coimolache laboratory because very few duplicate samples had been inserted; additionally, the results were not sufficiently representative.

Table 8-12 summarizes the results of the analysis of duplicates using the hyperbolic method for Ag, As, Au, and Cu for the ALS and Certimin laboratories.

Table 8-12: Results of the duplicate samples analysis

Laboratory	Duplicate type	Element	Samples	Samples within parameters	Samples within parameters (%)
ALS	Pulp duplicates	Ag (ppm)	5	5	100%
		As (ppm)	5	5	100%
		Au (ppm)	5	5	100%
		Cu (%)	5	5	100%
	Coarse duplicates	Ag (ppm)	3	3	100%
		As (ppm)	3	3	100%
		Au (ppm)	3	3	100%
		Cu (%)	3	1	33%
	Twin samples	Ag (ppm)	5	5	100%
		As (ppm)	5	5	100%
		Au (ppm)	5	5	100%
		Cu (%)	5	5	100%
Certimin	Pulp duplicates	Ag (ppm)	482	430	89%
		As (ppm)	482	405	84%
		Au (ppm)	482	450	93%
		Cu (%)	482	391	81%
	Coarse duplicates	Ag (ppm)	512	486	95%
		As (ppm)	512	456	89%
		Au (ppm)	512	488	95%
		Cu (%)	512	446	87%
	Twin duplicates	Ag (ppm)	525	494	94%
		As (ppm)	525	445	85%
		Au (ppm)	525	514	98%
		Cu (%)	525	419	80%

Source: (SRK, 2023)

In the case of the ALS laboratory, the results for pulp, coarse duplicates and twin samples were acceptable for Ag, Au and As. Cu had results not within acceptable limits for coarse duplicate samples; nonetheless, given the limited number of samples, the error rate was not significant. In the Pulp duplicates and twin samples, Cu had acceptable results.

In the Certimin laboratory, results from pulp, coarse duplicates and twin samples were acceptable for Ag and Au. Precision close to acceptable limits was detected for As and Cu in all types of duplicates (Figure 8-3).

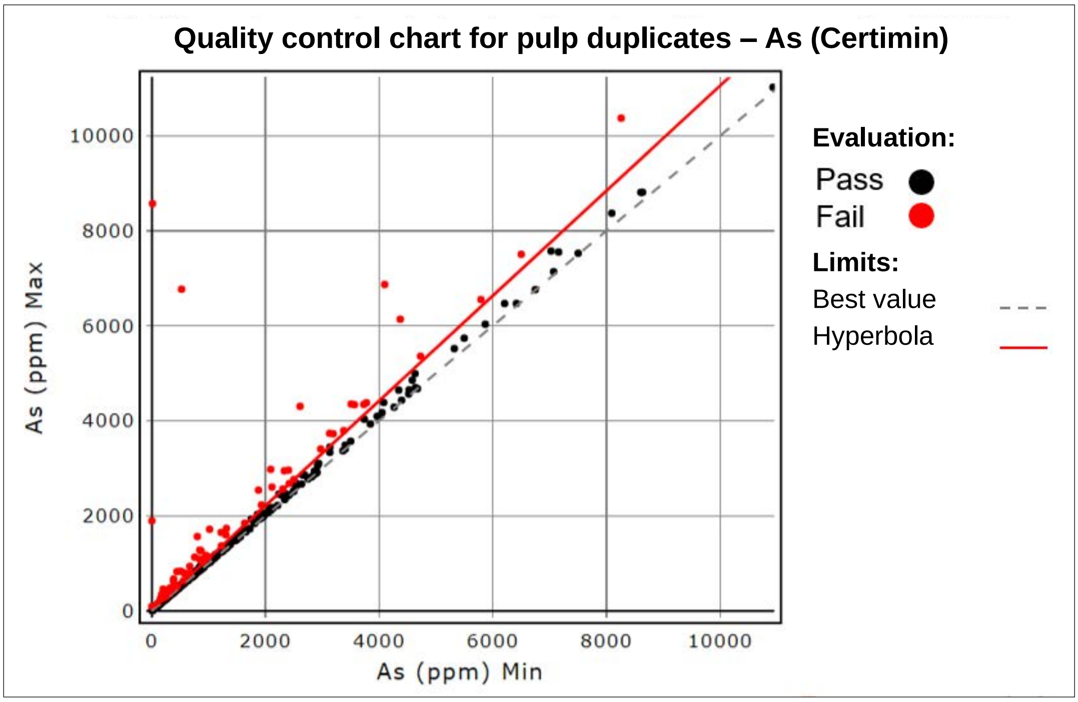


Figure 8-3: Graphic of the hyperbolic method of Pulp duplicates for As

Source: (SRK, 2023)

SRK found that sampling, sub-sampling and analytical precision were good in samples sent to the ALS laboratory. In the samples sent to the Certimin laboratory, Ag and Au have good sampling, sub-sampling, and analytical precision; As and Cu, however, demonstrated a precision close to acceptable limits for all duplicate types.

8.3.4 Accuracy Evaluation

Standard Reference Materials

The SRMs inserted during the 2020 – 2023 drilling campaigns were certified by Target Rocks and Ore Research & Exploration.

SRK did not evaluate results from the Coimolache laboratory because very few standard samples (SRMs) had been inserted and the results were not sufficiently representative.

Table 8-13 shows the summary of Ag, Au, As and Cu values of the SRMs inserted in the ALS and Certimin laboratories.

To evaluate accuracy, SRK utilizes bias analysis (once out-of-control values) as the main acceptance criterion. The bias must be within acceptable limits:

- Good: |Bias| < 5%
- Questionable: 5% ≤ |Bias| ≤ 10%
- Unacceptable: |Bias| > 10%

Additionally, to review the results of the standards, SRK uses the limit conventionally accepted by the industry, meaning that all SRMs outside the range of best value (BV) ± 3 standard deviations (SD), as well as contiguous samples between the limits of BV+3SD and BV+2SD or between BV-3SD and BV-2SD, are considered as falling out of the bounds of acceptable limits. For SRK, 90% of the samples must be within acceptable limits.

Table 8-14 shows a summary of the SRM results for Ag, As, Au, and Cu for the ALS and Certimin laboratories.

In the case of the ALS laboratory, analytical accuracy for Ag, Au, As and Cu was within acceptable limits. The biases ranged from -2.9% to 4.2%.

For the Certimin laboratory, analytical accuracy for Au and Cu was within acceptable limits. In Ag and As, unacceptable results were observed in the M2AL20 (Ag), OREAS 151b and OREAS 153b standards. In the OREAS 504c SRM, which represents approximately 80% of the inserted SRMs, the Ag and As results were acceptable, with biases ranging from -0.2% to 2.9%.

SRK recommends that Coimolache verify that the inserted SRMs are subjected to same chemical analysis digestion as that used for the primary samples; for example, the SRM M2AL20 (inserted in 2023) has been analyzed with aqua regia while the primary samples were analyzed with 4 acids.

SRK found that ALS laboratory's analytical accuracy for Ag, Au, As and Cu was within acceptable limits. For the Certimin laboratory, the analytical accuracy of Au and Cu was acceptable. In the case of Ag and As, accuracy is close to acceptable.

Table 8-13: Summary of SRM certificates for Ag, Au, As and Cu

Laboratory	Insertion year	SRM	Ag (ppm)		Au (ppm)		As (pm)		Cu (%)	
			Best value	Std. Dev.	Best Value	Std. Dev.	Best Value	Std. Dev.	Best Value	Std. Dev.
Ore Research & Exploration	2020	OREAS 600	24.8	1.01	0.2	0.006	89	7.2	0.0482	0.0023
		OREAS 601	49.2	2.02	0.78	0.031	307	22.9	0.101	0.004
		OREAS 602	120	2.3	1.95	0.066	649	45.9	0.515	0.017
		OREAS 603	293	12.9	5.18	0.151	1,801	119.1	1	0.034
		OREAS 502b	2.09	0.17	0.495	0.015	19.1	3.3	0.773	0.02
		OREAS 503b	1.54	0.19	0.695	0.021	18.9	2.6	0.531	0.531
	2020 - 2021	OREAS 151b	0.551	0.068	0.065	0.006	30.7	3.01	0.182	0.005
	2021	OREAS 153b	1.4	0.09	0.313	0.009	79	5.4	0.678	0.015
	2021 - 2023	OREAS 151a			0.043	0.002			0.166	0.005
		OREAS 153a			0.311	0.012			0.712	0.025
		OREAS 504c	4.22	0.288	1.48	0.045	30.7	3.01	1.11	0.03
Target Rocks	2020, 2022 - 2023	CMLM-08			0.491	0.012				
		CMLB-07			0.165	0.006				
	2021 - 2022	CMLA-003			1.053	0.058				
		CMLB-001			0.175	0.006				
		CMLM-002			0.51	0.016				
	2022 - 2023	CMLA-09			0.947	0.02				
	2023	AuOx18	77.8	2.55	2.876	0.101				
		M2AL20	2.7	0.1	0.465	0.014			0.0117	0.0002

Table 8-14: Summary of SRM results from the Certimin laboratory

Laboratory	Element	SRM	Samples	Outliers	Mean	Best Value	Bias (%)	Coefficient of variation (%)	Samples within parameters	Samples within parameters (%)
ALS	Ag (ppm)	OREAS 600	2		24.1	24.8	-2.80%	0.60%	2	100%
		OREAS 601	4		48.33	49.2	-1.80%	2.50%	4	100%
		OREAS 602	2		120	120	0.00%	1.20%	2	100%
		OREAS 600	2		92.5	89	3.90%	11.50%	2	100%
	As (ppm)	OREAS 601	4		317.25	307	3.30%	2.30%	4	100%
		OREAS 602	2		676	649	4.20%	5.60%	2	100%
	Au (ppm)	OREAS 600	2		0.205	0.2	2.50%	2.00%	2	100%
		OREAS 601	4		0.791	0.78	1.40%	4.20%	4	100%
		OREAS 602	2		2.025	1.95	3.80%	1.70%	2	100%
	Cu (%)	OREAS 600	2		0.047	0.048	-2.90%	3.80%	2	100%
		OREAS 601	4		0.097	0.101	-4.40%	3.50%	4	100%
		OREAS 602	2		0.51	0.515	-1.00%	0.50%	2	100%
Certimin	Ag (ppm)	AuOx18	8		79.213	77.8	1.80%	4.70%	7	88%
		M2AL20	56	1	2.429	2.7	-10.00%	6.40%	38	69%
		OREAS 151b	18	1	0.453	0.551	-17.80%	22.20%	16	94%
		OREAS 153b	8		1.275	1.4	-8.90%	17.70%	4	50%
		OREAS 504c	315	3	4.212	4.22	-0.20%	4.40%	312	100%
	As (ppm)	OREAS 151b	18	1	28.765	30.7	-6.30%	29.70%	13	76%
		OREAS 153b	8		35.875	79	-54.60%	37.60%		0%
		OREAS 504c	315	7	35.912	34.9	2.90%	9.80%	303	98%
	Au (ppm)	AuOx18	8		2.948	2.876	2.50%	3.60%	8	100%
		CMLA-003	9		1.014	1.053	-3.70%	4.70%	9	100%
		CMLA-09	70		0.952	0.947	0.50%	2.40%	69	99%
		CMLB-001	12		0.171	0.175	-2.30%	4.80%	12	100%
		CMLB-07	108	1	0.159	0.165	-3.70%	2.80%	107	100%

Laboratory	Element	SRM	Samples	Outliers	Mean	Best Value	Bias (%)	Coefficient of variation (%)	Samples within parameters	Samples within parameters (%)
		CMLM-002	18	1	0.505	0.51	-1.10%	2.10%	17	100%
		CMLM-08	85		0.497	0.491	1.10%	2.60%	85	100%
		M2AL20	56		0.472	0.465	1.50%	1.40%	56	100%
		OREAS 151a	307	7	0.043	0.043	0.90%	5.30%	299	100%
		OREAS 151b	18	1	0.064	0.065	-1.50%	5.60%	17	100%
		OREAS 153a	275	3	0.315	0.311	1.30%	1.80%	272	100%
		OREAS 153b	8		0.33	0.313	5.40%	6.60%	5	63%
		OREAS 504c	315	1	1.491	1.48	0.80%	1.30%	314	100%
	Cu (%)	M2AL20	56		0.012	0.012	3.40%	2.50%	43	77%
		OREAS 151a	307		0.167	0.166	0.50%	2.00%	307	100%
		OREAS 151b	18	1	0.185	0.182	1.60%	1.20%	17	100%
		OREAS 153a	275		0.712	0.712	0.00%	1.50%	275	100%
		OREAS 153b	8		0.694	0.678	2.40%	2.90%	8	100%
		OREAS 504c	315	4	1.108	1.11	-0.20%	1.00%	311	100%

Source: (SRK, 2023)

External Control Samples

In 2023, Buenaventura sent 60 external control samples, which included an adequate proportion of control samples (Table 8-15). The primary laboratory for this analysis was Certimin, and the secondary laboratory was SGS. The analytical methods of these laboratories are summarized in Table 8-16.

Table 8-15: Insertion of control samples into the external control sample submission (2020-2023)

Primary laboratory	Secondary laboratory	Year	External control samples	Pulp Blanks		SRMs		Total control samples
				#	%	#	%	
Certimin	SGS	2023	60	3	5.00%	5	8.33%	8

Source: (SRK, 2023)

Table 8-16: Analytical methods of Certimin and SGS laboratories

Laboratory	Element	Method	Lower limit	Upper limit	Method description
Certimin	Au (ppm)	G0107	0.005	10	Determination of gold by fire assay with AAS finish
	Ag (ppm)	G0153R5+	0.2	100	ICP-OES, multi-acid digestion (HF, HClO4, HNO3 and HCl)
	As (ppm)		3	10,000	
	Cu (ppm)		0.5	10,000	
SGS	Au (ppm)	FAA313	0.005	10	Determination of gold in exploration samples
	Ag (ppm)	ICM40B	0.02	50	ICP-MS multi-acid digestion
	As (ppm)		1	10,000	
	Cu (ppm)		0.5	10,000	

Source: (SRK, 2023)

Subsequently, SRK evaluated the results of Au, Ag, As and Cu by performing a regression analysis using the RMA "Reduced Major Axis" method (Long, 2005). This method facilitates the calculation of a coefficient of determination (R2), which is an indicator of the goodness of fit of the regression between both laboratories (secondary laboratory versus primary laboratory). In addition, the bias of the primary laboratory in relation to the secondary laboratory is determined after eliminating erratic values (outliers). For SRK, the bias is acceptable if the absolute value of the same is less than 5%. Table 8-17 shows the evaluation results, considering total data and excluding the outliers.

Table 8-17: Evaluation of external control samples by the RMA method (2020-2023)

Tantahuatay Sulfuros Project - RMA Parameters – SGS vs Certimin - Total Data								
Element	**R2**	**N (total)**	**Pairs**	**m**	**Error (m)**	**b**	**Error (b)**	**Bias**
Au (ppm)	0.99	60	60	0.968	0.015	0.002	0.006	3.20%
Ag (ppm)	1	60	60	1.008	0.009	0.617	1.461	-0.80%

Tantahuatay Sulfuros Project - RMA Parameters – SGS vs Certimin - Total Data								
As (ppm)	1	60	60	1.015	0.006	10.047	27.291	-1.50%
Cu (%)	1	60	60	0.976	0.005	0.005	0.009	2.40%

Tantahuatay Sulfuros Project - RMA Parameters – SGS vs Certimin - No Outliers									
Element	**R2**	**Accepted**	**Outliers**	**Outliers (%)**	**m**	**Error (m)**	**b**	**Error (b)**	**Bias**
Au (ppm)	1	59	1	1.70%	0.968	0.008	0	0.003	3.20%
Ag (ppm)	1	60	0	0.00%	1.008	0.009	0.617	1.461	-0.80%
As (ppm)	1	59	1	1.70%	1.013	0.004	5.603	20.404	-1.30%
Cu (%)	1	60	0	0.00%	0.976	0.005	0.005	0.009	2.40%

Source: (SRK, 2023)

The inter-laboratory bias results (SGS versus Certimin) are acceptable for Au, Ag, As, and Cu.

Additionally, SRK analyzed the control samples inserted in the external control samples and found acceptable results for the inserted pulp blanks and SRMs.

8.4 Opinion on Sample Preparation, Security, and Analytical Procedures

As part of the revision of the preparation, security and analytical procedures used for the samples, SRK fully reviewed available QA/QC data from 2020 to 2023. SRK considers that QA/QC protocols from Coimolache are consistent with the best practices accepted in the industry. SRK is of the opinion that the sample preparation, chemical analysis, quality control, and the security procedure are sufficient to provide reliable data to support resource estimation and mineral reserve estimation. The assessment of quality control data from Regulus was executed in the audit conducted by SRK in February 2020.

SRK finds that the insertion rate of control samples in 2020 – 2023 period were adequate.

SRK considers that there is no evidence of significant contamination for Au, Ag, Cu and As.

SRK considers that there is good sampling, sub-sampling and analytical precision in the samples sent to the ALS laboratory. In the samples sent to the Certimin laboratory, Ag and Au have good sampling, sub-sampling and analytical precision; however, As and Cu have precision close to acceptable limits and the percentage of samples within parameters varies from 80% to 87% in the three types of duplicates.

SRK found that the ALS laboratory's analytical accuracy for Ag, Au, As and Cu was within acceptable limits. In the case of the Certimin laboratory, the analytical accuracy of Au and Cu was acceptable while the accuracy of both, Ag and As was close to acceptable.

Inter-laboratory bias results (SGS versus Certimin) were acceptable for Au, Ag, As and Cu.

SRK recommends that Coimolache increase the insertion of external control samples, as established in its Quality Control protocol (2020). Sending external control samples to the secondary laboratory must include a review of the granulometry in 10% of the samples, as well as the insertion of pulp blanks and SRMs in said lots.

SRK recommends that Coimolache verify that inserted SRMs have the same chemical analysis digestion as that of primary samples. For example, the SRM M2AL20 (inserted in 2023) was analyzed via aqua regia digestion, while the primary samples were analyzed by digestion via four acids.

Additionally, SRK recommends that Coimolache investigate the origin of the error rates in the results of pulp, coarse, and twin duplicates samples of As and Cu from the Certimin laboratory by reviewing the processes used for sampling, preparation and subsequent analysis.

SRK suggests frequently reviewing the behavior of the quality control results and informing the laboratory about any problems detected to opportunely establish corrective measures.

9 Data Verification

SRK reviewed and verified the Tantahuatay Sulfuros Project drilling database provided by Coimolache, which consisted of 12 tables in CSV format (Table 9 1). Coimolache also provided SRK with the certificates of collar measurements, survey, tests, as well as the results of the control samples (SRM, duplicates and blanks). The Tantahuatay Sulfuros Project database has an effective date of June 14th, 2023.

Table 9-1: Summary of files provided by Coimolache

N	Table	File
1	Collar	THY_collar_26062023.csv
2	Survey	THY_survey_13062023.csv
3	Assay	THY_assay_13062023.csv
4	Assay + control samples	THY_assay_control_27062023.csv
5	External control samples	THY_check_13062023.csv
6	Density	THY_densidad_13062023.csv
7	Lithology	THY_litologia_13062023.csv
8	Alteration	THY_alteracion_13062023.csv
9	Mineralization	THY_mineralizacion_13062023.csv
10	Structural data	THY_estructural_13062023.csv
11	RQD & Recovery	THY_RQD_Recuperacion_13062023.csv
12	Diameter	THY_diametro_13062023.csv

Source: (SRK, 2023)

9.1 Internal Data Verification

Coimolache uses a systematic database administration program (acQuire) to ensure data integrity and reduce data entry errors by meeting certain requirements to properly enter data using SIGEO (Coimolache internal database software) and GVMapper, where the geologist in charge performs a visual validation before entering the data. However, Coimolache has no documentation of the internal database verification procedure. SRK suggests developing a procedure that restricts data entry to permitted codes and identifies inconsistencies or errors, especially in the control sample database.

9.2 External Data Verification

External validation is carried out through audits by independent external consultants. In February 2020, SRK developed the report "Mineral Resources Update and Database Audit of the Tantahuatay Sulfuros Primarios Project" which included a review of relevant information for resource estimation such as collar, grades, cross-validation, QA/QC, etc. SRK utilized data verification routines to validate overlapping intervals; negative intervals; drillholes that lack important information such as lithology, recovery or sampling; and detection of intervals that are greater than the total depth of the drillhole, among other factors.

9.3 Data Verification

9.3.1 Tantahuatay Sulfuros Project Estimation Database

To obtain the database for resource estimation, filters were applied to the fields “ZONE = Zone2” and “VF_HLC_ESTIMACION = 1” of the Collar table, as indicated by Coimolache; these drillholes belong only to the sulfide zone. The total estimation database consists of 615 drillholes, 179,804 m drilled and 101,287 samples.

The Tantahuatay Sulfuros Project database included diamond drilling information from the company Regulus Resources Inc. (Figure 9-1), whose data were considered for the geological modelling and mineral resource estimation. The summary of this data is presented in the Table 9-2.

Table 9-2: Summary of estimation database according to information source

Period	Source	Drillholes	Length (m)	Samples
1995 - 2023	Compañía Minera Coimolache S.A.	534	128,372	68,918
2015, 2017 - 2019	Regulus Resources Inc.	81	51,432	32,369
	Total	**615**	**179,804**	**101,287**

Source: (SRK, 2023)

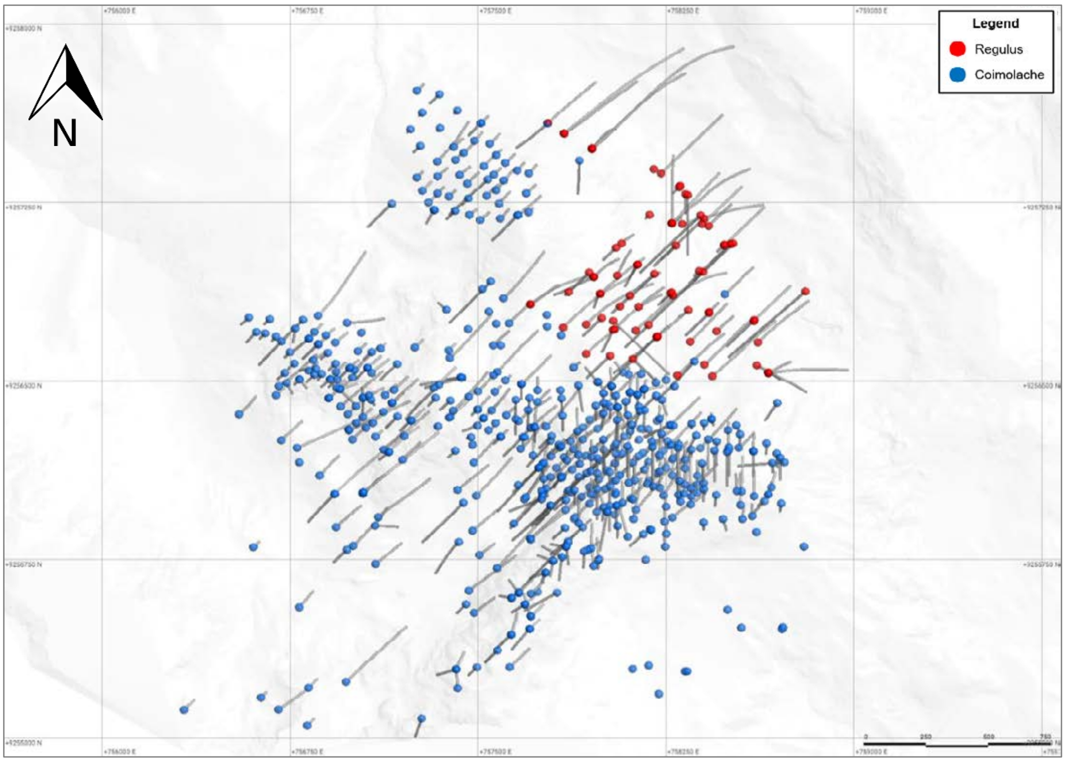


Figure 9-1: Spatial distribution of drillholes considered for estimation according to information source.

Source: (SRK, 2023)

In Table 9-3 and Table 9-4, a summary of the estimation database is presented according to Regulus and Coimolache sources of information. Figure 9-2 shows the spatial distribution of the drillholes that were used to estimate the mineral resources of Tantahuatay Sulfuros Project according to the drilling year.

Table 9-3: Database summary from Regulus drilling information

Source	Year	Drillholes	Length (m)	Samples
Regulus	2015	36	13,004	7,262
	2017	7	5,507	3,439
	2018	24	19,513	12,387
	2019	14	13,408	9,281
	Total	**81**	**51,432**	**32,369**

Source: (SRK, 2023)

Table 9-4: Database summary from Coimolache

Source	Year	Drillholes	Length (m)	Samples
Coimolache	1995	6	1,565	773
	1996	4	1,705	893
	1997	33	11,809	6,342
	2002	2	288	226
	2006	1	57	31
	2007	5	783	400
	2011	17	2,383	1,408
	2012	9	410	161
	2013	74	10,884	5,692
	2014	28	2,920	1,483
	2015	34	3,652	1,793
	2016	48	9,541	4,887
	2017	58	24,446	12,605
	2018	99	24,809	13,151
	2019	12	1,848	974
	2021	27	8,027	4,759
	2022	57	17,440	10,092
	2023	20	5,808	3,248
	Total	**534**	**128,372**	**68,918**

Source: (SRK, 2023)

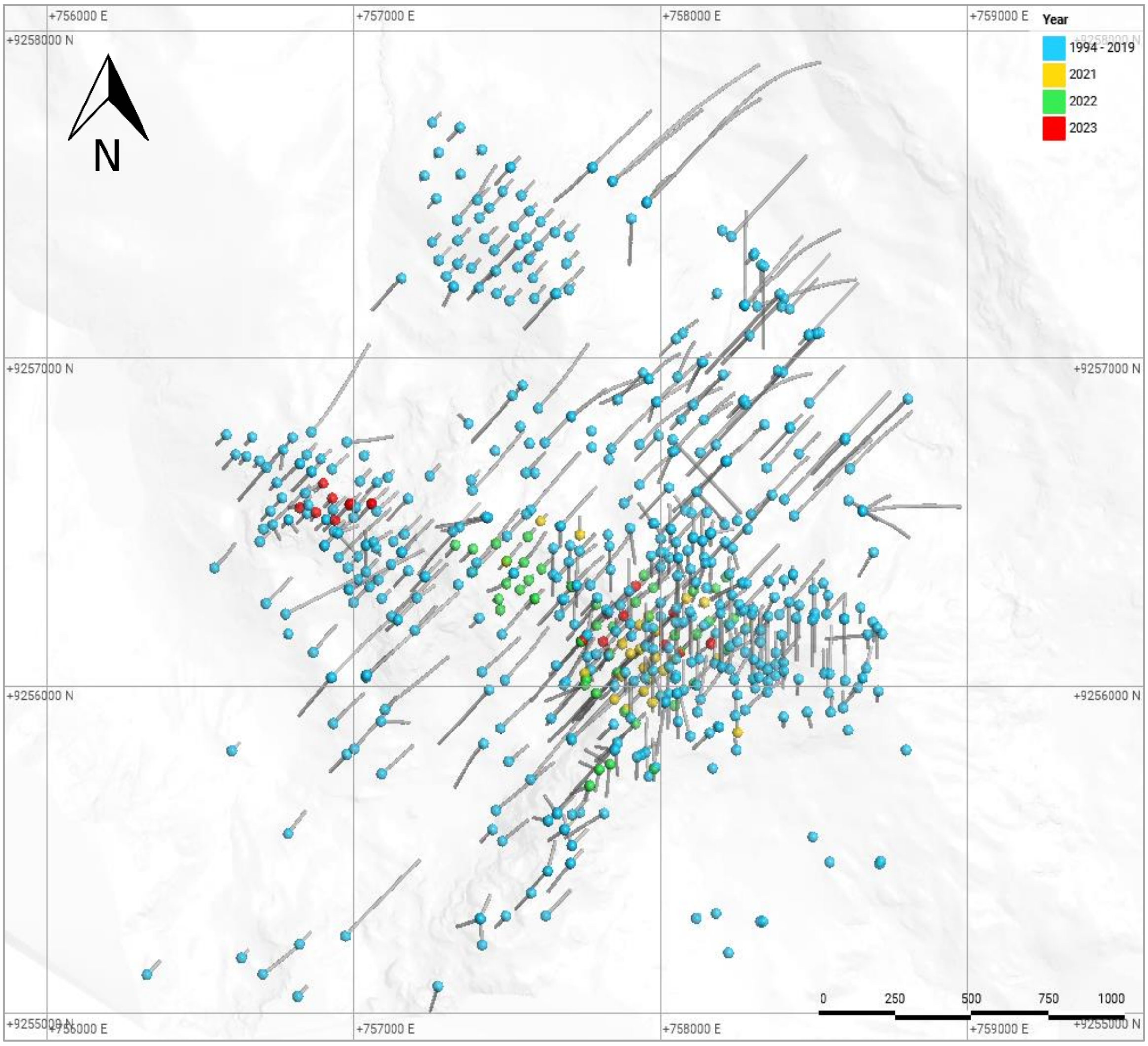


Figure 9-2: Spatial distribution of the drillholes considered for estimation by drilling year.

Source: (SRK, 2023)

9.3.2 Data Verification Procedures

The verification of the resource estimation database was carried out considering the following processes:

- Reception of the information provided by Coimolache.
- Organization of all information in a database in MS Access.
- Data modeling (assignment of relationships between tables).
- Construction of the Tracker table (control table for sample shipments for chemical analysis).
- Compilation of laboratory test certificates and link with samples in the database.
- Cross validation between the database and the laboratory certificates and generation of the occurrence table.
- Report significant findings such as empty records, variations and inconsistencies or errors.

- Validation of other aspects:
  - Blank collar coordinates
  - Collar without deviation measurements
  - Deviation measurements greater than the total length of the drillhole
  - Survey measurement angles greater than 10° azimuth or 10° inclinations.
  - Superposition of intervals
  - Negative values
  - Intervals greater (from the Assay or logging tables) than the total length of the drilhole
  - Log data that does not extend to the total length of the drillhole.
  - Absence of data at the bottom of the well.

9.3.3 Database verification results

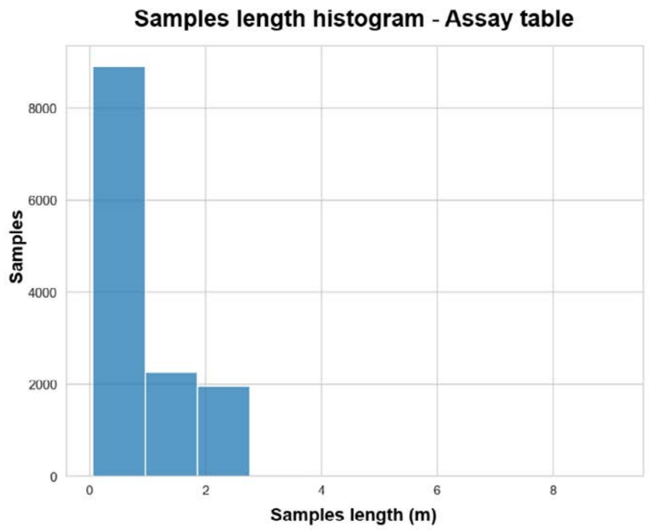
SRK carried out the validation of the main tables of the Tantahuatay Sulfuros Project database. Table 9-5 shows a summary of the occurrences found in the database verification process.

Table 9-5: Database verification summary

Table	SRK's observations
Collar	▪ No problems found.
Survey	▪ 198 non-vertical drillholes* (32.2% of the total) present a single deviation measurement reading; 130 of these drillholes (21.1% of the total) exceed 100 m in length. This occurs mainly in historical data and in drillholes drilled until 2018.
Assay	▪ The cross-validation of the database against the laboratory certificates presents acceptable results. (See item 9.3.4). ▪ 13 samples are less than 0.3 m length, and 143 samples are more than 3 m length (See Figure 9-3). ▪ A group of samples not analyzed due to overlimit was found. However, this involves a small number of samples (0.35% of the total) and as such, does not represent a risk in the estimation process (See Table 9-6).
Lithology	▪ 601 records (1.9% of the total) of the "Geointerpretation" field, which is used for the lithological model, are empty in the database. The distribution of the occurrence is given in the following types of lithology: Vol frag (0.5%), Obl (0.4%), Bx (0.3%), Cuat (0.2%), NoRcp (0.2%), others (0.3%).
Alteration	▪ 1,041 records (2.3% of the total) indicate having alterations in the “SUBTYPE” field; however, they do not present data on minerals and/or intensities. ▪ 4,858 records (10.8% of the total) present “Deb” (weak) alteration in the “INTENSITY1” field; however, they present “Fte” (strong) alteration in the “INTENSITY2” field”.
Mineralization	▪ No problems found.
Drillhole diameter	▪ No problems found.
Recovery & RQD	▪ 84 holes (14% of total holes, drilled during 1995 - 2016) do not contain recovery information and 92 holes (15% of total holes, mainly in drillholes from years 1995, 2014-2018 and 2022) have less than 90% recovery.
Structural data	▪ No problems found.

*A drillhole is considered vertical if its maximum inclination value is less than or equal to -75°.

Source: (SRK, 2023)



Measure	Value (m)
Mean	0.65
Standard deviation	0.80
Minimum	0.05
Median	0.10
Maximum	**9.10**

Figure 9-3: Sample length statistics from the database Assay table

Source: (SRK, 2023)

Table 9-6: Summary of the number of samples not analyzed above the limit

Element (unit)	Upper limit	Number of samples	Proportion of total samples (%)
Ag (ppm)	1,000	3	0.02%
As (ppm)	10,000	11	0.06%
Au (ppm)	10	2	0.01%
Cu (ppm)	10,000	16	0.09%
Hg (ppm)	100	4	0.02%
Pb (ppm)	10,000	26	0.14%
Sb (ppm)	10,000	2	0.01%

Source: (SRK, 2023)

SRK found that the database had only a few minor findings and no significant findings. However, it was observed that several drillhole lacked recovery data.

9.3.4 Assay cross-validation (Assay table versus laboratory certificates)

SRK cross-validated the Assay table data from the estimation database with the certificates from the ALS, Certimin and Coimolache laboratories. This evaluation was carried out only for primary samples that have a laboratory certificate date from January 2020 to June 2023.

Samples prior to 2020 (including available Regulus data) were reviewed and validated in the audit conducted by SRK in February 2020. The results were included in the report “Mineral Resources Update and Database Audit of the Tantahuatay Primary Sulfides Project” (SRK, 2020).

In Table 9-7 results of the cross-validation of Ag, As, Au, Bi, Cu, Hg, Pb, Sb and Zn are consolidated by laboratory.

Table 9-7: Laboratory cross-validation results

Laboratory	Element	Samples	Correct data (%)	Observations (%)		Total data (%)
				Values do not match	Rounding	
Certimin	Ag (ppm)	18,099	100%	0%	0%	100%
	Au (ppm)	18,099	100%	0%	0%	100%
	As (ppm)	18,099	100%	0%	0%	100%
	Bi (ppm)	18,099	100%	0%	0%	100%
	Cd (ppm)	18,099	100%	0%	0%	100%
	Cu (%)	18,099	100%	0%	0%	100%
	Hg (ppm)	18,099	100%	0%	0%	100%
	Pb (ppm)	18,099	100%	0%	0%	100%
	Sb (ppm)	18,099	100%	0%	0%	100%
	Zn (ppm)	18,099	100%	0%	0%	100%
Coimolache	Ag (ppm)	45	100%	0%	0%	100%
	Au (ppm)	45	100%	0%	0%	100%
	Cu (%)	45	100%	0%	0%	100%

Source: (SRK, 2023)

The findings obtained in the cross-validation are detailed below:

- The database has fewer decimal places than that used in laboratory certificates (CSV format). SRK had to reduce the number of decimal places in the database to perform cross-validation.
- Cross validation could not be performed on the 196 samples from the ALS laboratory because the client did not provide certificates “CJ19323225” and “CJ19315841.
- No significant finding was found in the elements analyzed. SRK found the cross-validation results acceptable.

9.3.5 Bulk Density

The Tantahuatay Sulfuros Project database contains a total of 13,187 bulk density samples that have been analyzed in the Certimin, Coimolache and SGS laboratories using the Archimedes method. Bulk density database included Regulus data, as shown in Table 9-8.

Table 9-8: Bulk density database summary by source

Source	Laboratory	Drilling campaign	Bulk density sampling	
			Drillholes	Samples
Regulus	UNK*	2015	26	4,688
	SGS	2017-2019	36	2,984
Subtotal Regulus density data			**62**	**7,672**
Coimolache	SGS	1995-2013	82	994
	Coimolache	2006, 2013-2023	294	3,611

Source	Laboratory	Drilling campaign	Bulk density sampling	
			Drillholes	Samples
	CER	2021-2023	68	910
Subtotal Coimolache density data			**444**	**5,515**
Total density data			506	13,187

UNK*: Unidentified laboratory

Source: (SRK, 2023)

Only 38% of the samples present bulk density measurement certificates.

SRK observed that 154 drillholes (25% of the total) have no bulk density samples. Nonetheless, the existing bulk density samples present a good spatial distribution in the areas of interest for resource estimation (Figure 9-4).

SRK observed that 349 samples (3% of the total) have a length that exceeds 2 m. SRK recommends that samples be taken respecting the lengths indicated in the Coimolache bulk density sampling protocol.

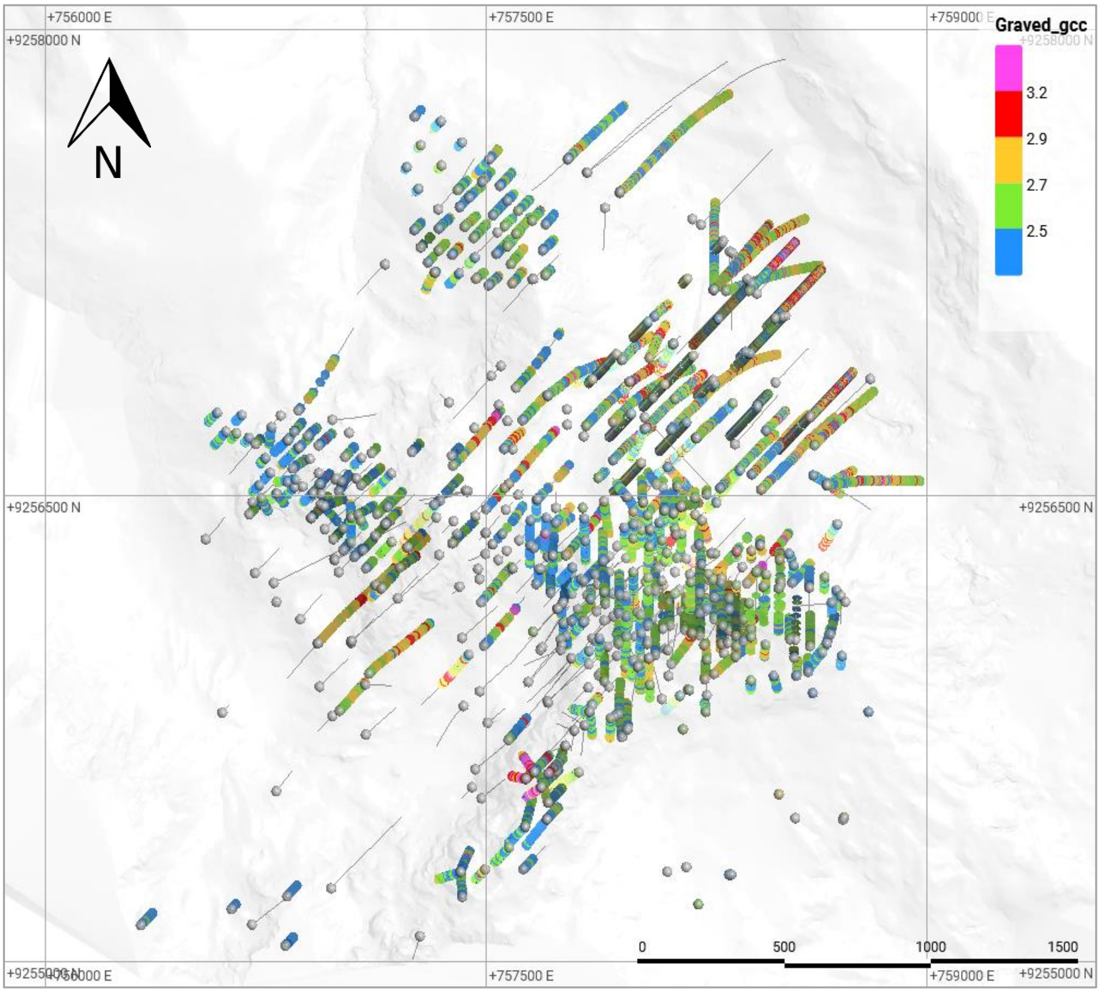


Figure 9-4: Plan view of bulk density samples from the Tantahuatay Sulfuros Project

Source: (SRK, 2023)

9.4 Limitations

SRK was not able to cross-validate the samples analyzed at the ALS laboratory (196 samples), because Coimolache did not provide the certificates.

9.5 Opinions and Recommendations on Data Adequacy

Only minor inconsistencies were detected in the data reviewed, the majority of which correspond to historical data.

It was observed that 14% of the total drillholes lack recovery data and 15% of the total drillholes present recovery percentages of less than 90% (including drillholes drilled in recent years).

Samples prior to 2020 (including available Regulus data) were reviewed and validated in the audit conducted by SRK in February 2020.

SRK finds the Tantahuatay Sulfuros Project database to be consistent and acceptable for resource estimation.

SRK recommends conducting deviation measurements at least every 10 m, especially in drillholes that are more than 100 m in length.

SRK recommends that Coimolache periodically monitor and/or review drillhole recovery results. SRK considers a recovery percentage greater than 90% acceptable.

SRK recommends that the minimum and maximum drillhole sampling length indicated in the Coimolache sampling protocol be respected in future drilling campaigns.

Finally, SRK recommends that the number of decimal places assigned in the database and those indicated in the laboratories' certificates of analysis coincide (given that this is a reflection of the precision of the methods used by each laboratory).

10 Mineral processing and metallurgical testing

Does not apply to this TRS.

11 Mineral Resource Estimation

11.1 Key assumptions, parameters and methods

Using the database provide by Buenaventura, which have a closing date of June 13, 2023, SRK and Buenaventura conducted the mineral resource estimate for Tantahuatay Sulfuros. The effective date for the mineral resources report is September 30, 2023.

The Tantahuatay mining unit is composed of three deposits: Tantahuatay, Cienaga and Mirador (Figure 11-1), which are open pit type operations. This work only includes the analysis of the Tantahuatay deposit in the sulfide zone, and for which a single block model has been prepared as support for the mineral resource estimation.

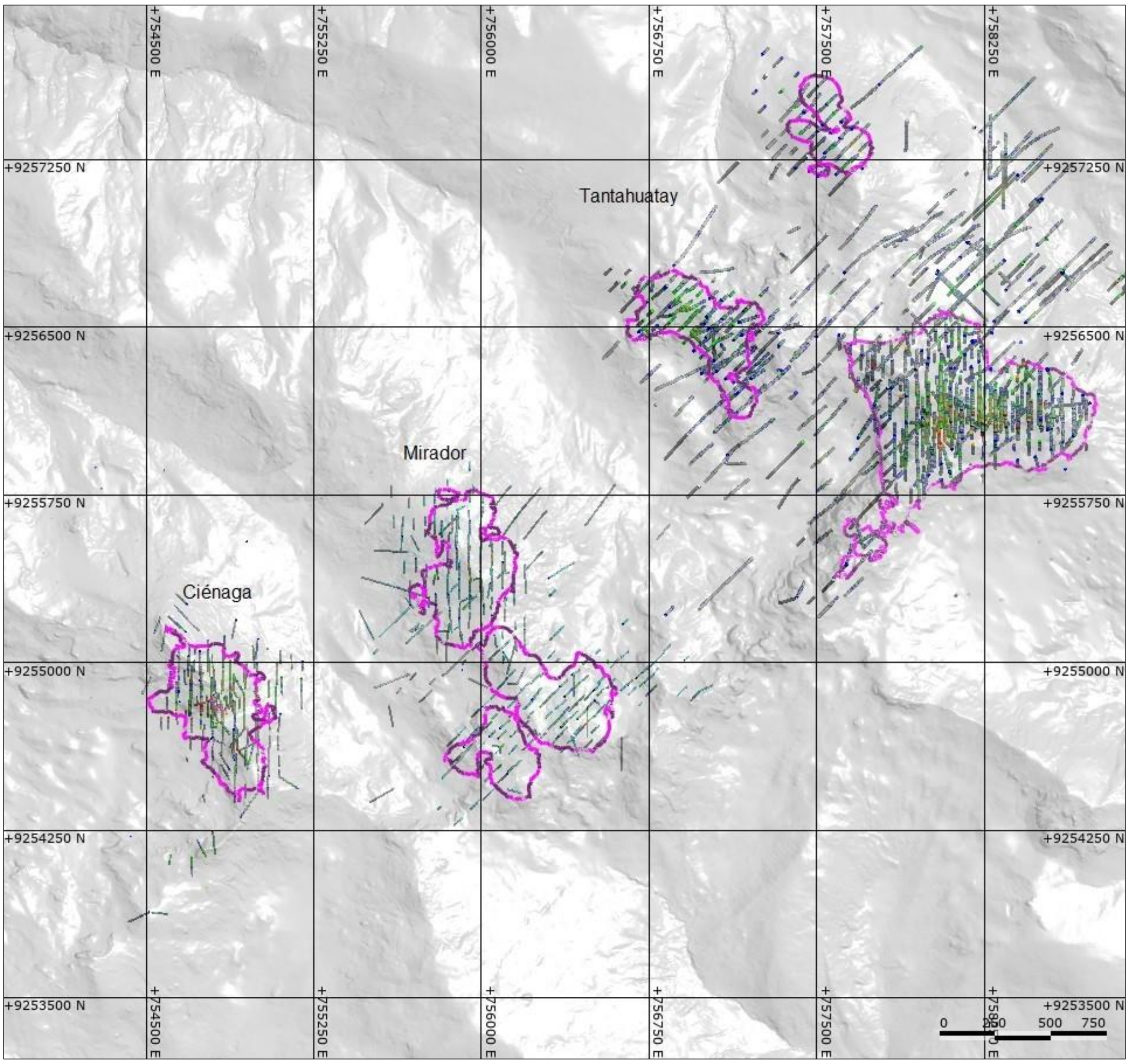


Figure 11-1: Location of the three deposits that make up the Tantahuatay mining unit.

Source: (Buenaventura, 2021)

The Tantahuatay Sulfuros mineral resource estimation process was carried out by both Buenaventura and SRK. It should be noted that the results presented by Buenaventura have been validated by SRK. Below is the list of software used by Buenaventura and SRK, and their respective responsibilities.

Regulus data was used in the creation of the geological model, estimation and categorization, but the report only considers the Coimolache concessions. The cone generated has the restriction of being within the Buenaventura concessions.

Buenaventura used Leapfrog Geo®, Supervisor® and Vulcan® to generate the geological model; conduct a geostatistical analysis for Cu; and build the block model and estimate Cu grades respectively.

SRK used the same combination of software to generate the mineralization and alteration models and the geostatistical analysis and to estimate grades of Cu, Au, Ag, As, Pb, Zn, Sb, Bi, Hg and Cd and the mineral resource report.

For the resource model, SRK followed the following steps:

- Database compilation and verification.
- Review of the interpretation of the lithological model and construction of alteration and mineralization models.
- Generation of the alteration and mineralization model.
- Definition of estimation domains.
- Top Cut and composition for geostatistical analysis and interpolation.
- Data modeling and grade interpolation, and
- Classification and validation of mineral resources.

The following sections describe the methodology, procedures and key assumptions considered for the mineral resource estimation of Tantahuatay Sulfuros.

11.1.1 Geological domains and modeling

The geological models developed at Tantahuatay were built to integrate the information and support the mineral resource model (including Regulus drillhole information). The geological model includes a lithology model to characterize the estimation domains, an alteration model, and a mineralization model.

The models were developed in Leapfrog Geo software (v 2023.1.1) and incorporate a variety of geological information including:

- Geological database (alteration, lithology, and mineralization).
- Geological maps.
- Interpreted cross-sections.
- Diamond drilling data.
- Interpreted polylines (3D surface and subsurface).

The lithological model was developed and updated by the Buenaventura geology and resources team and was validated by SRK Chile; the alteration and mineralization models were developed by SRK Peru in 2023.

The extension of the project in which the Lithological Model and subsequently the Alteration and Mineralization models were generated, used the following coordinates (Table 11-1):

Table 11-1: Coordinates that limit the models: Lithological, Alteration and Mineralization

	From (m)	To (m)
East	756,350	759,500
North	9,255,060	9,258,000
Elevation	2,400	4,060

Source: (SRK, 2023)

Within the description of the tools and processes that Leapfrog Geo software (v 2023.1.1) used during the construction of the model, the following terms were identified:

Interval Selection: Tool that facilitates generation of a new column in any table that makes up the Database (Lithology, Alteration or Mineralization); this column duplicates the information of a pre-existing column (for example, “Geointerpretation” column within the Table “Alteration”) and allows modifications to the new column, such as reassigning domains to specific sections (for example, a section coded with Phyllic Alteration that does not coincide with a geological section, which indicates that this section corresponds to Argillic Alteration; this section is subsequent recoded, changing from Phyllic to Argillic).

Evaluation Table: Tool that facilitates comparisons of the Database used and the Geological Model (Lithological, Alteration or Mineralization). This comparison is also known as Back Flagging, whose purpose is to define what percentage of the sections of a domain are within the solid modeled for the same domain, to demonstrate that the geological Model represents the Database used.

Geological Model: This is the Implicit modeling tool offered by Leapfrog Geo. It facilitates efforts to generate a model from a Database (“Lithology”, which may contain information on Alteration, Mineralization, Lithology, among others). Model generations requires specifying the limits of the coordinate axes (Boundary) and the resolution of the model.

Boundary: term also defined as extension of the project, refers to the limits used to create the Geological Model. The coordinates are expressed in the axes X (East), Y (North) and Z (Elevation); the interaction of these 3 axes generates a box, wherein the model will be developed.

Model resolution: In Leapfrog Geo, meshes (solids) are used to represent surfaces in the form of vertices and triangles that define the 3D shape of the surface. The resolution of a surface is controlled by the size of the triangles used to create a surface. A lower surface resolution value means smaller triangles and therefore finer resolution. A higher surface resolution value will take less time to process, but the surface may not show the required level of detail.

Lithology's: Section in the Geological Model Tool Menu that defines the domains that are going to be modeled; these domains are automatically identified from the Database that is loaded for the model. It is possible, however, to generate domains manually.

Surface Chronology: Section in the Menu of the Geological Model tool that allows users to model different domains. To accomplish this, different types of interpolation are used depending on the nature of the domain to be modeled (Intrusions, Deposits, Erosions, Veins, Vein System or Stratigraphic sequences). Additionally, this section allows user to generate a chronological sequence between the different modeled domains, indicating which are more recent and which are older. This helps identify intersections between domains.

Refined Model: Tool that allows modeling domains within a predefined domain (the domain that you want to refine). Below, in Figure 11-2: Wireframe of the "Advanced Argillic 2" domain of the alteration model. The Volcanic domain (pink solid) was generated within the Boundary of the Geological Model (green solid). In Figure 11-3, given that we wanted to model a domain (Phyllic, purple) that is only found in the Volcanic Domain, only the Refined Model tool was used.

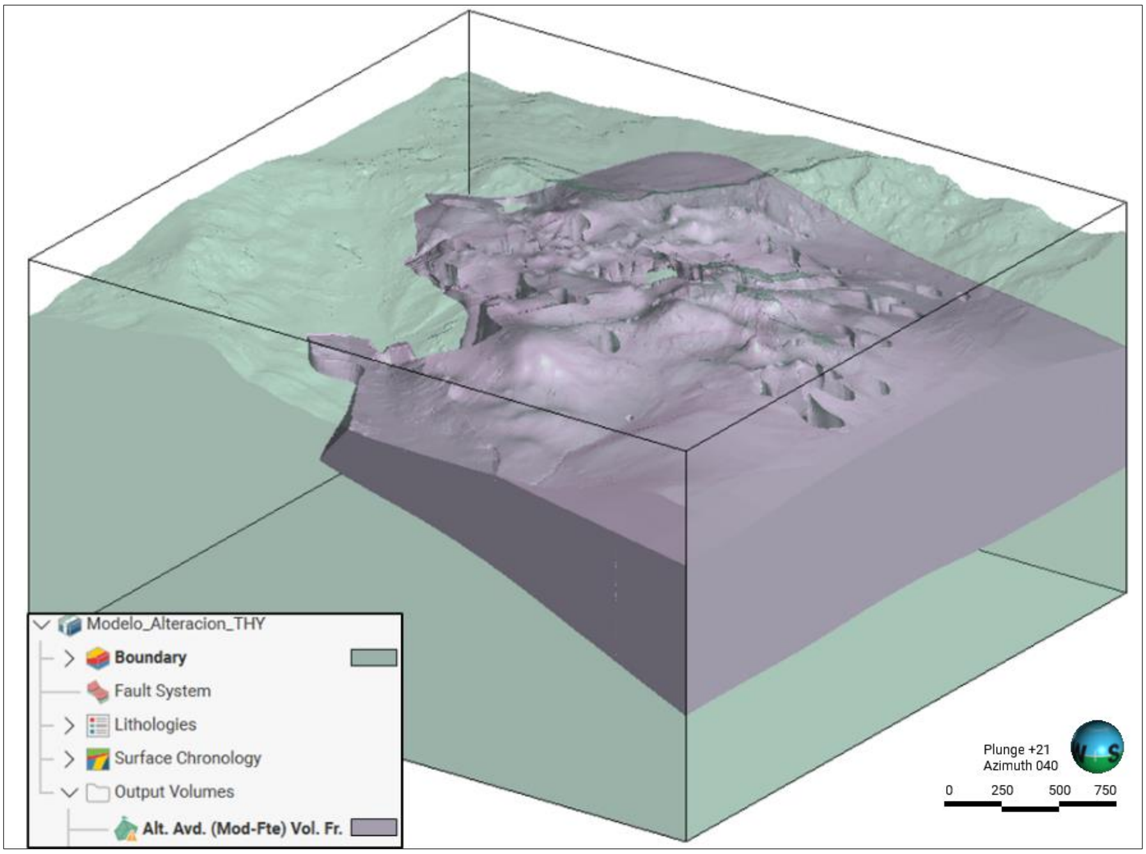


Figure 11-2: Wireframe of the "Advanced Argillic 2" domain of the alteration model.

Source: (SRK, 2023)

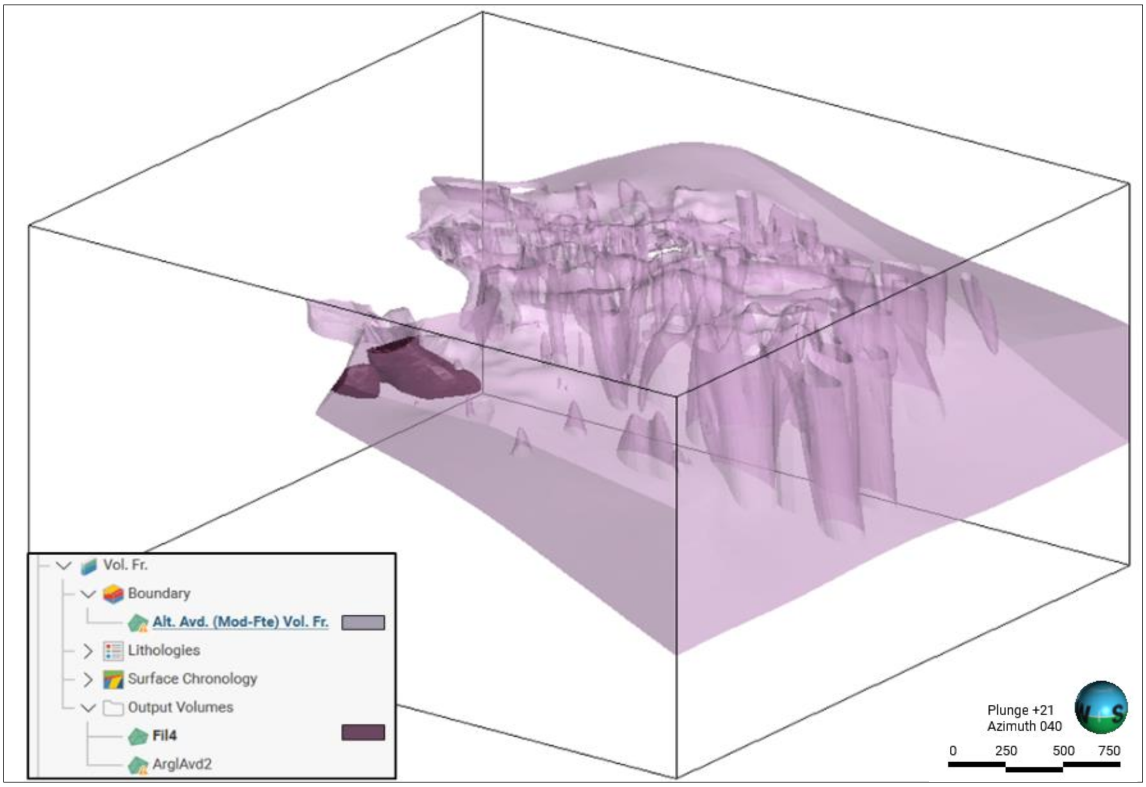


Figure 11-3: Wireframe of the “Phyllic” domain of the alteration model.

Source: (SRK, 2023)

Lithological Model

The audit of the Lithology Model prepared by the Buenaventura team consisted of a three-dimensional, sectional, and conceptual inspection of the solids. A recognition of the relationships, temporality and continuity of events was carried out. In addition, a review of the database was carried out with respect to the model by flagging the solids and back flagging.

The following images show plan views of the solids of different semi-transparent lithological units with the display of the samples found inside. Figure 11-4 allows us to visualize that in the Vein1 solid, some bodies lack sample support; it is likely that these sectors have been interpreted by polylines in sections. Additionally, samples for some of the solid’s sectors do not correspond to the interpreted lithology.

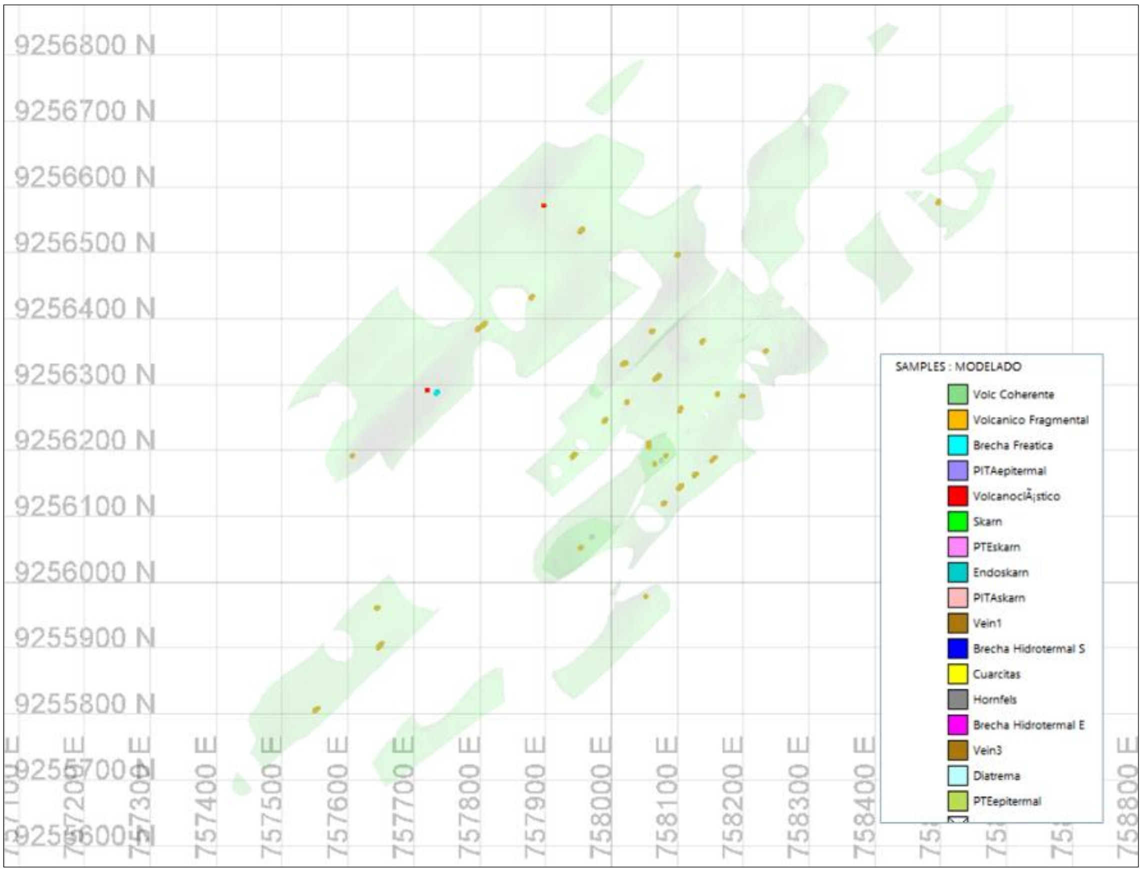


Figure 11-4: Plan view of the Vein1 domain, with the display of the samples found inside.

Source: (SRK, 2023)

Figure 11-5 shows the distribution of the samples with the CuT grade. This figure shows that when approaching the unsupported areas, there are grades with a medium to high CuT concentration; this can lead to an overestimation of results for these sectors.

Figure 11-6 shows the solid of Volcaniclastic rocks and their samples. In this case, a phenomenon like that described above occurs, where some sectors lack samples, or the samples have different lithologies.

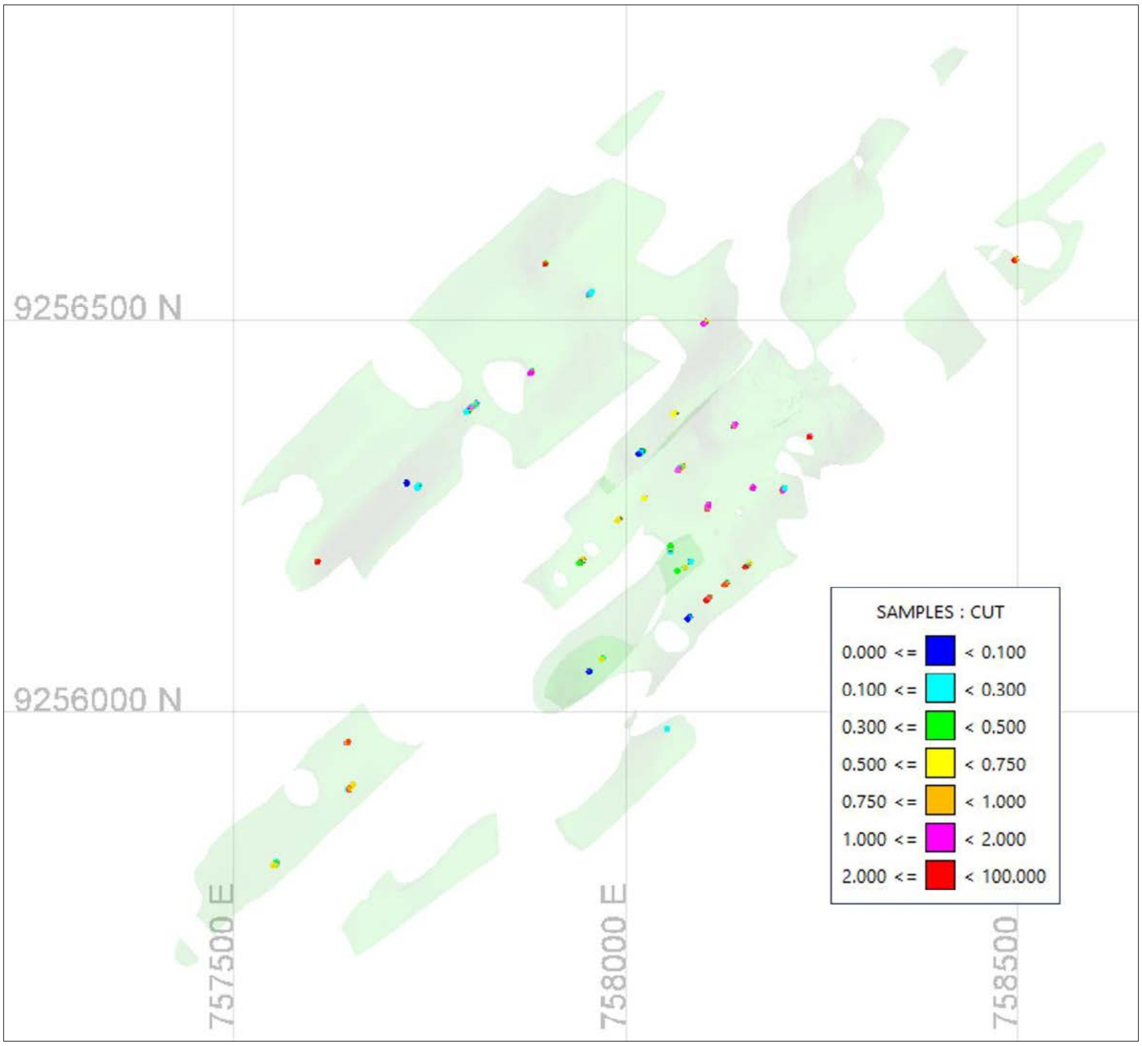


Figure 11-5: Plan view of the Vein1 domain with the display of the samples found inside and the associated CuT grade.

Source: (SRK, 2023)

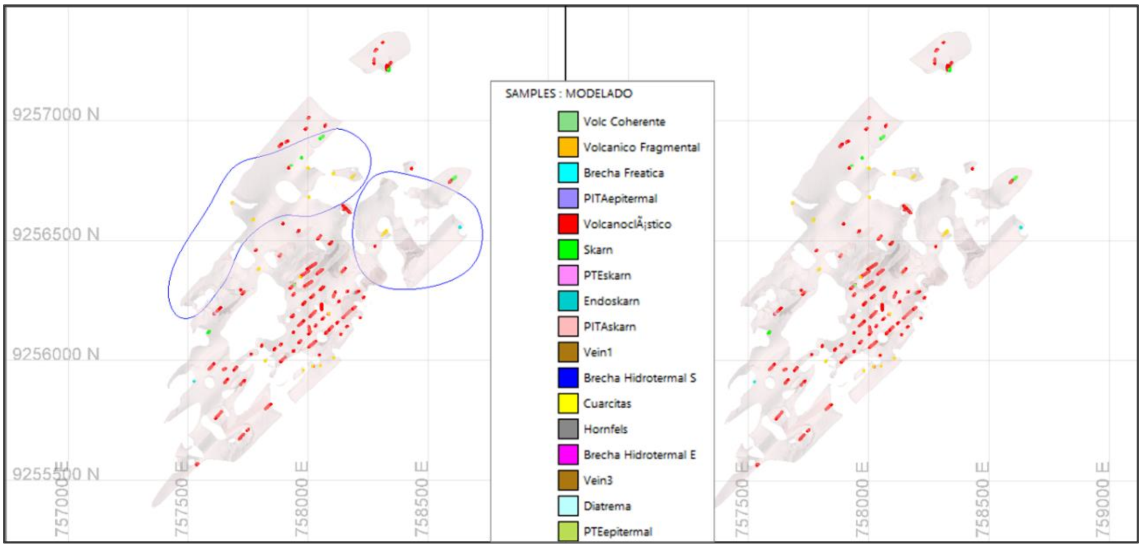


Figure 11-6: Plan view of the Volcaniclastic domain with the distribution of the samples found inside with the lithology legend. The blue line shows the sectors with little sample support, or with lithologies different from the modeled one.

Source: (SRK, 2023)

The following figures show the Epithermal Hydrothermal Breccia domain seen in plan and in a 3D view. This second view leads to the premise that a body has been interpreted without drillhole support (Figure 11-7). The CuT Log Probability Plot graph of the samples found within this solid shows the presence of two populations (Figure 11-8). Figure 11-9 with grade distribution-shows the same situation, with a low-grade population near the surface and a higher-grade population at depth. The remote unsupported bodies were estimated but not classified as mineral resources due to the absence or insufficiency of support.

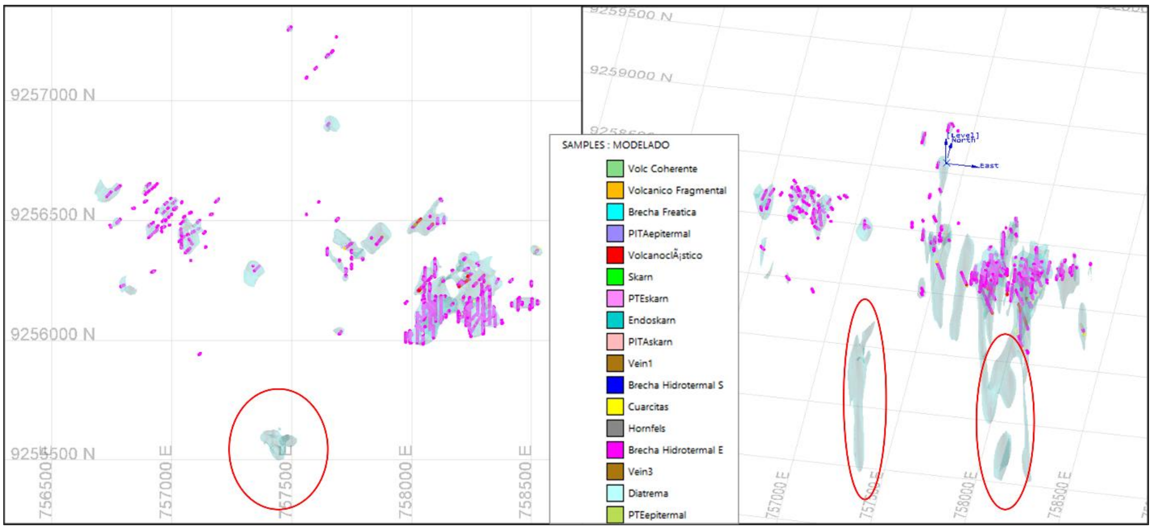


Figure 11-7: Epithermal Hydrothermal Breccia domain with the display of the samples found inside with the lithology legend. The red line shows the sectors without sample support. Left: Plan view. Right: 3D view towards North.

Source: (SRK, 2023)

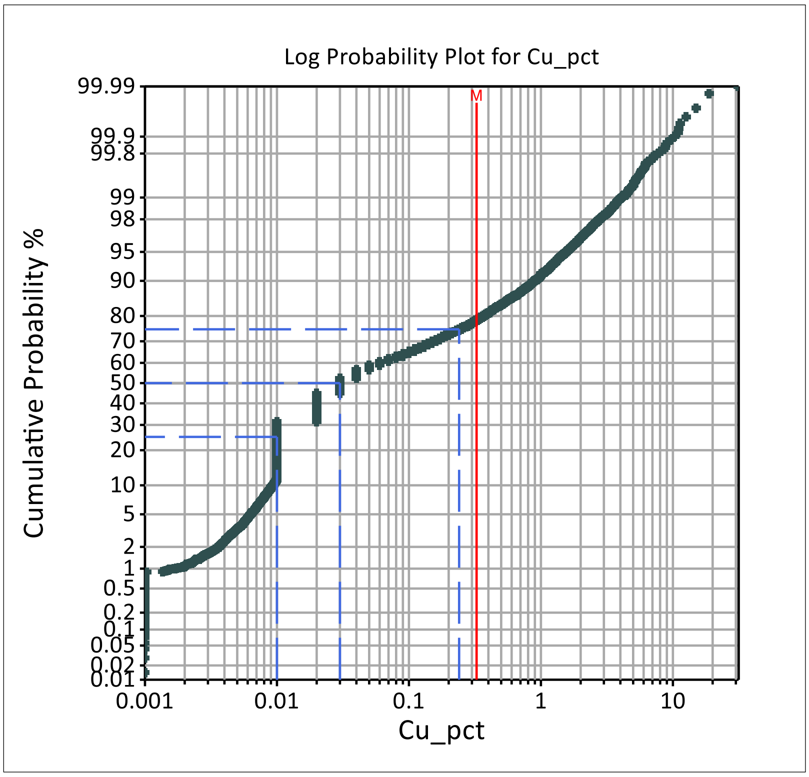


Figure 11-8: Log Probability Plot of CuT within the Epithermal Hydrothermal Breccia domain.

Source: (SRK, 2023)

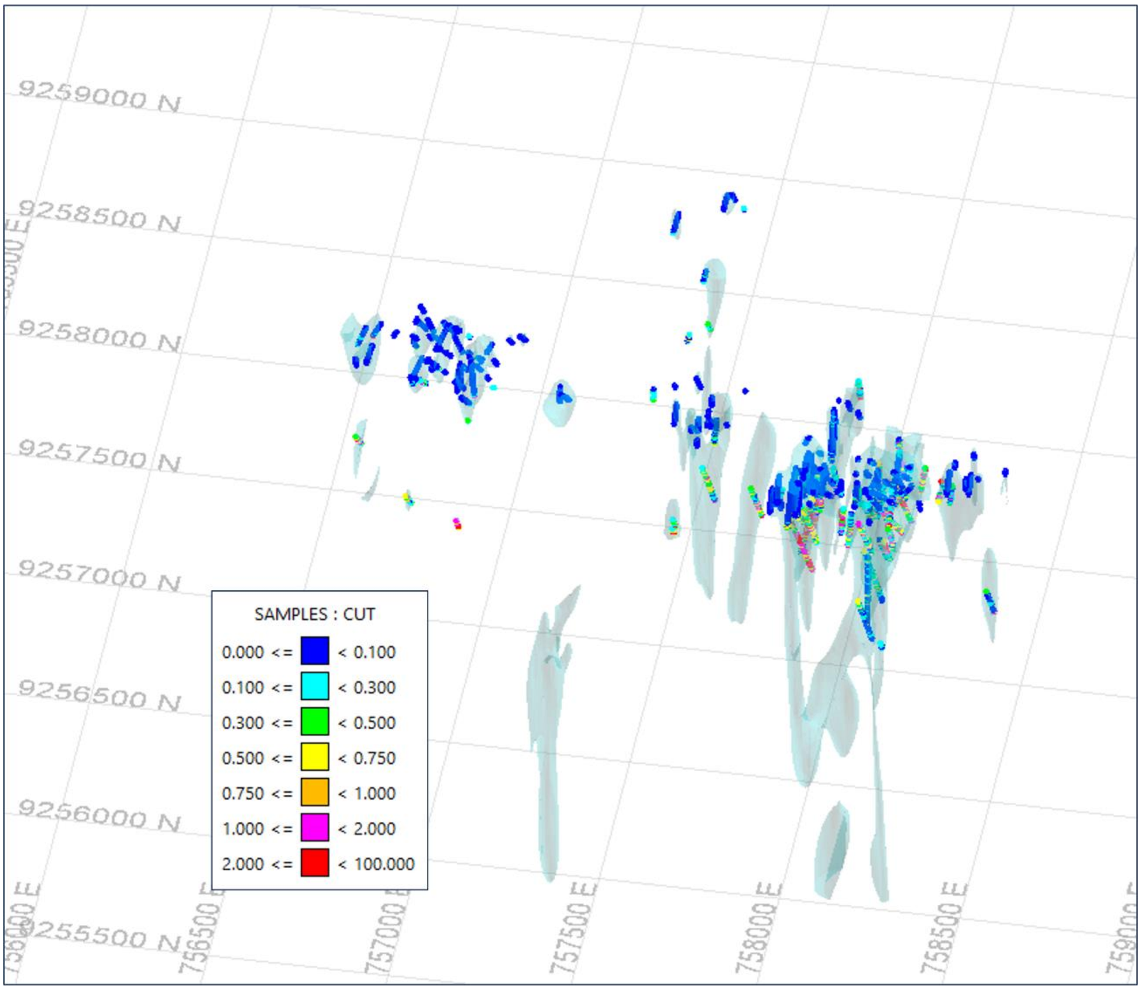


Figure 11-9: Epithermal Hydrothermal Breccia domain with the distribution of the samples found inside with the CuT legend.

Source: (SRK, 2023)

The plan and 3D view of the Phreatic Breccia domain, which was modeled with corresponding samples, show that some areas lack information (Figure 11-10). The graph and the display of grade also indicate that in this case, that there are two populations of CuT (Figure 11-11 and Figure 11-12).

The solids of the Volcanic Fragmental and Skarn domains are represented by very large powerful bodies, whose geological support decreases noticeably towards the edges of the model given that the information is concentrated in the central part. (Figure 11-13 and Figure 11-14). The interpretation towards the edges of the model is dependent on the continuity that exists in this type of rocks at the district level; in this sense, the evidence is very solid. However, within this chapter emphasis is placed on the fact that caution must be exercised in Resource Estimation in areas such as NE-SW section (Figure 11-14), where the modeled volume is large, but a limited amount of information is available for estimation purposes.

Another discovery corresponds to important sections of Quartzite within the solid PTE Skarn (Figure 11-15). In section two of Figure 11-16, it is possible to see that the Quartzite sections have grades lower than those of the modeled solid.

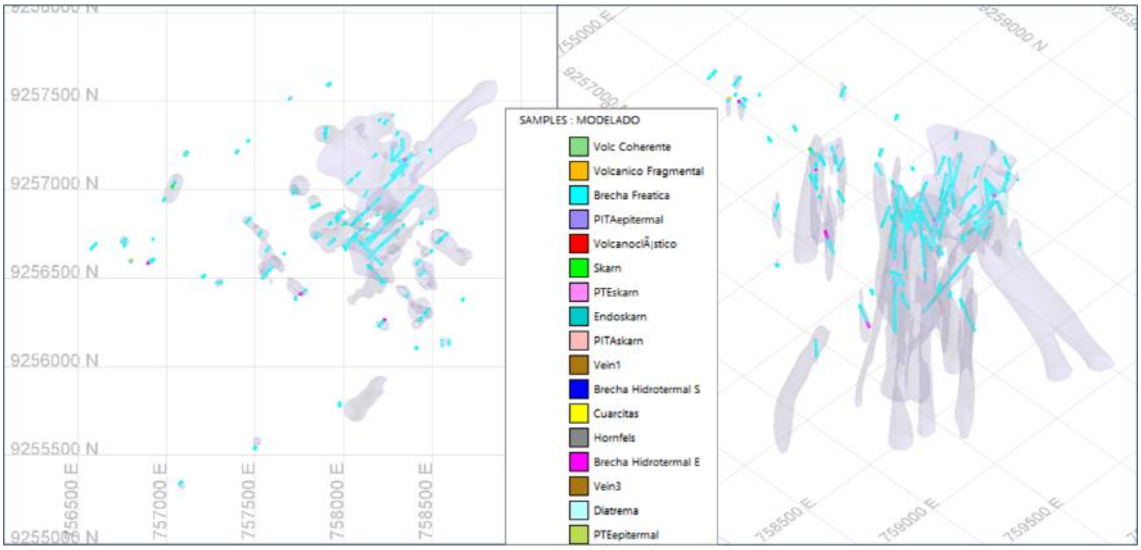


Figure 11-10: Phreatic Breccia domain with the distribution of the samples found inside with.

Source: (SRK, 2023)

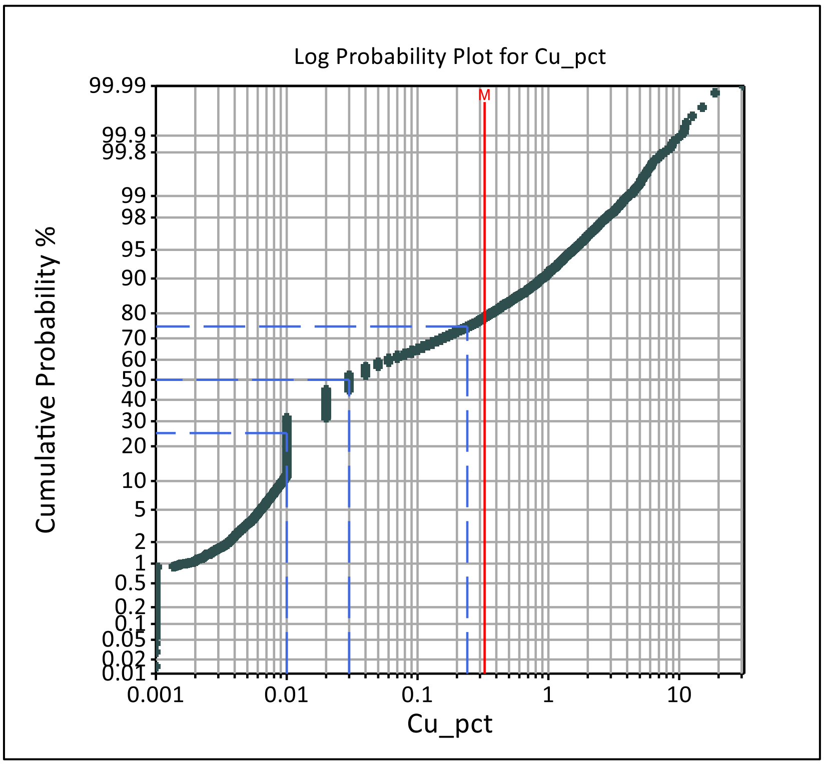


Figure 11-11: Log Probability Plot of CuT within the Phreatic Breccia domain.

Source: (SRK, 2023)

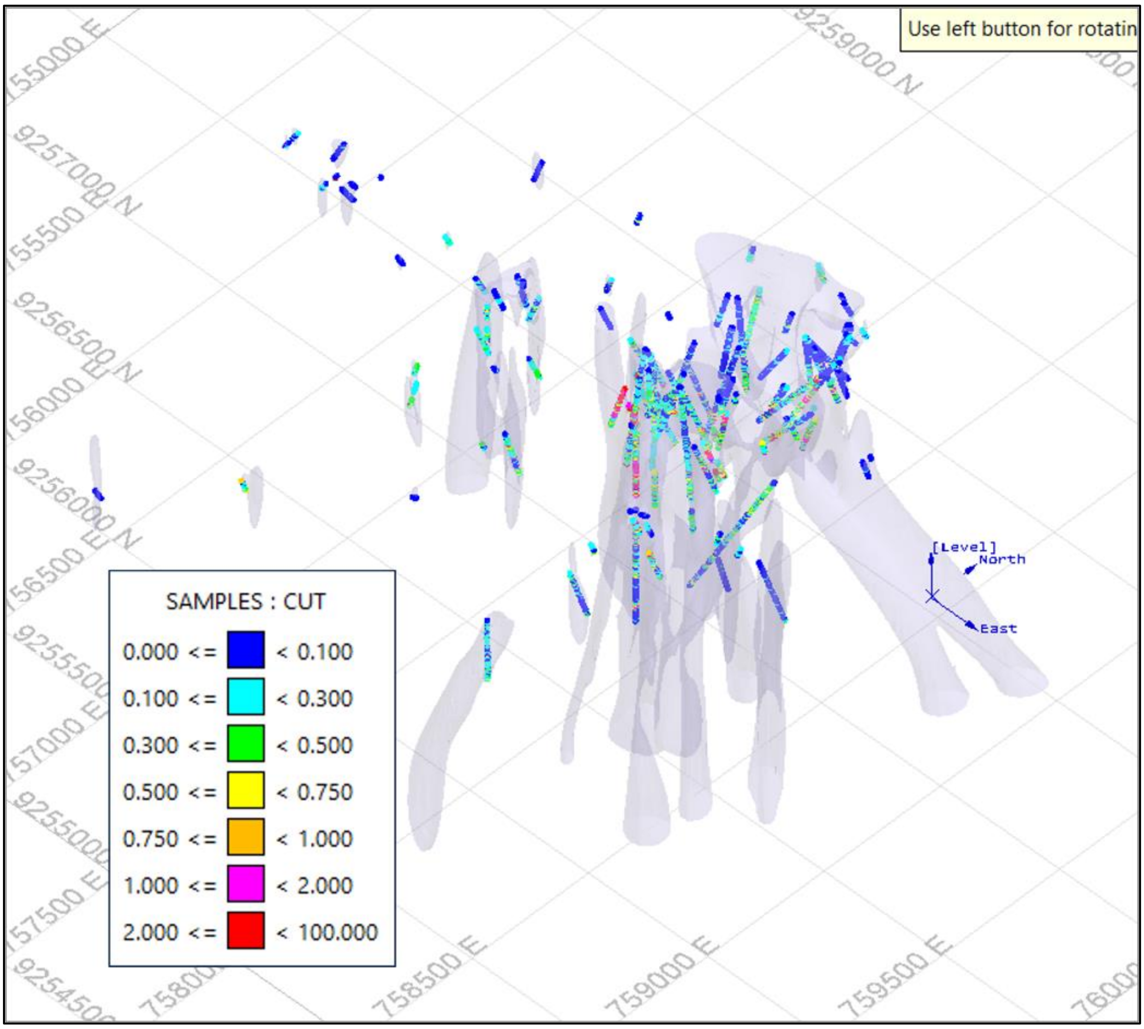


Figure 11-12: Phreatic Breccia domain with the distribution of the samples found inside with the CuT legend.

Source: (SRK, 2023)

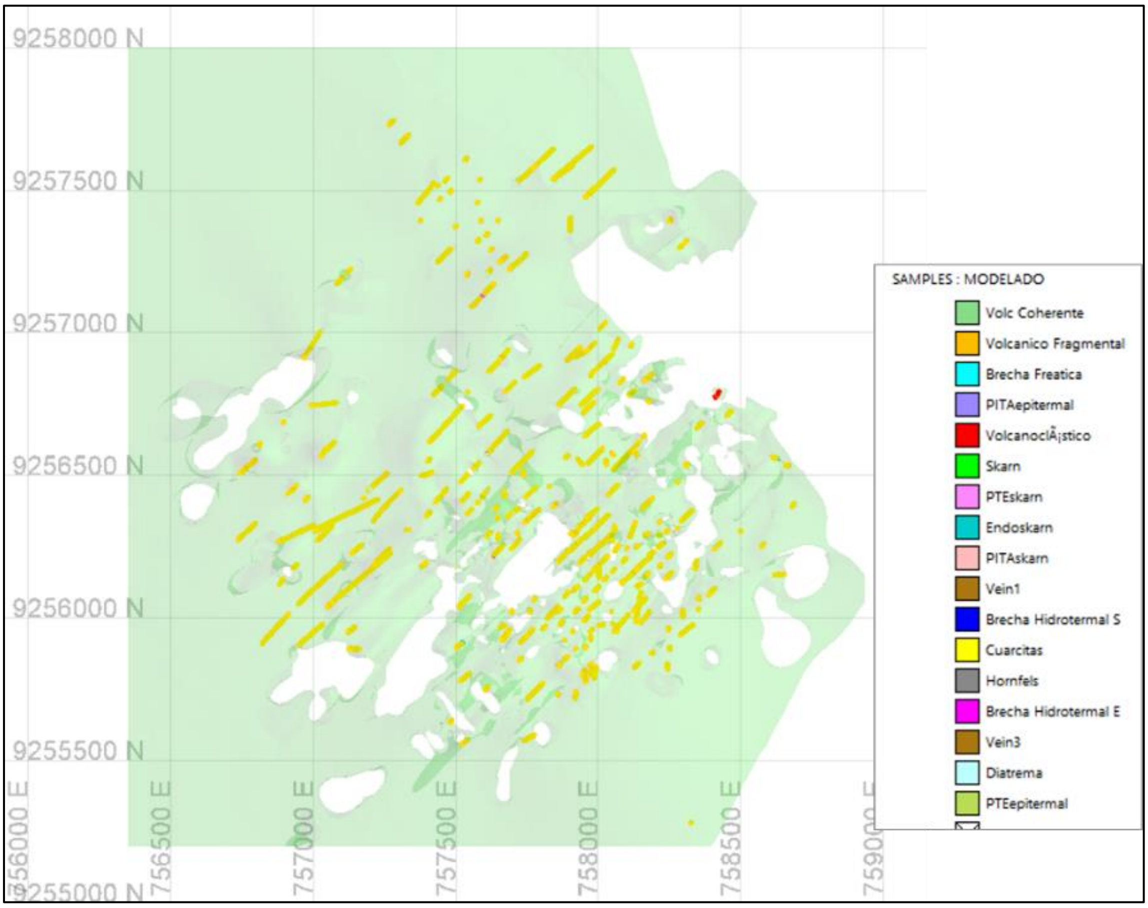


Figure 11-13: Plan view of the Fragment Volcanic domain with the distribution of the samples found inside with the lithology legend.

Source: (SRK, 2023)

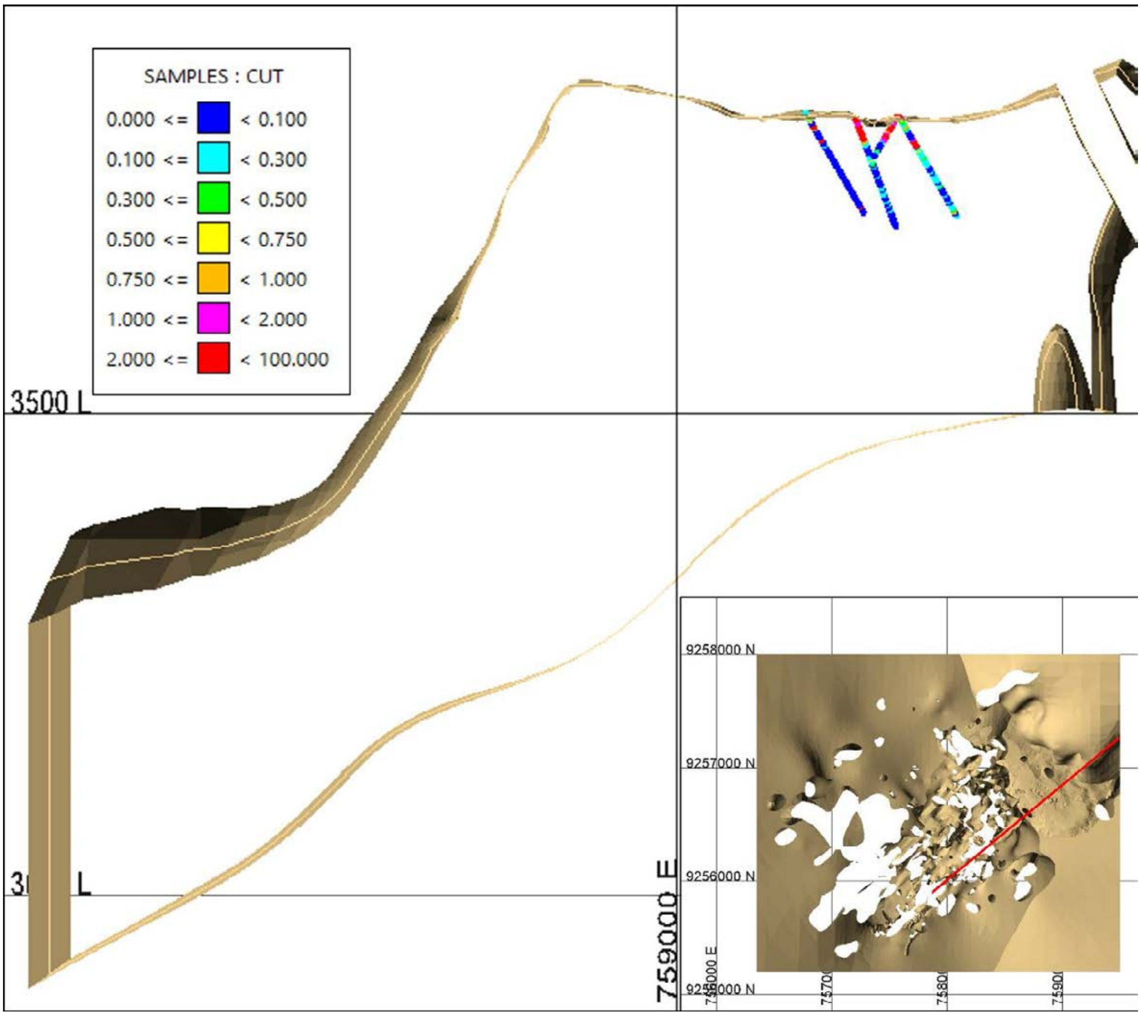


Figure 11-14: NE-SW section of the Skarn domain, with the distribution of the samples found inside with the CuT legend.

Source: (SRK, 2023)

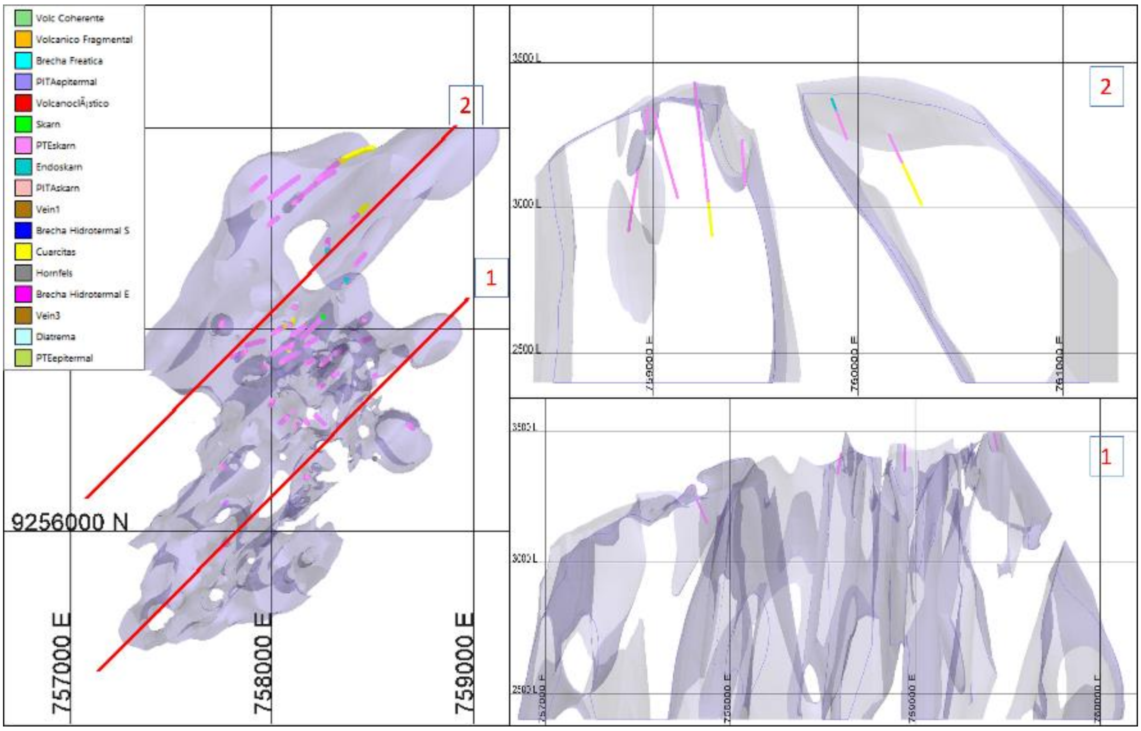


Figure 11-15: PTE Skarn domain: Plan view and NE-SW sections, with the distribution of samples found inside with the lithology legend.

Source: (SRK, 2023)

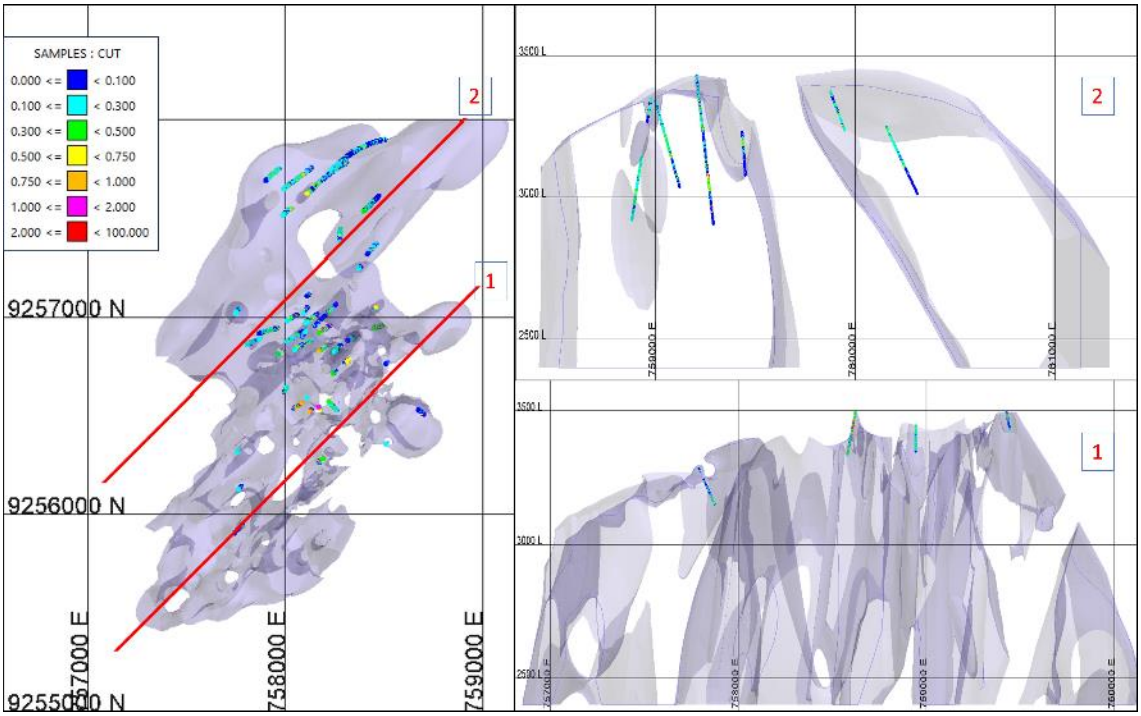


Figure 11-16: PTE Skarn domain: Plan view and NE-SW sections, with the distribution of samples found inside with the CuT legend.

Source: (SRK, 2023)

In general, the Lithological model of Tantahuatay is characterized by geological continuity and coherence; responds well to the input information; and demonstrates cross-sectional relationship that corresponds to the events represented. All these characteristics stand out when viewing the model in a SW-NE section (Figure 11-17). However, it is important to mention that the plan views shown above elucidate some biases due to the 2D interpretation in this orientation (Figure 11-4, Figure 11-6 and Figure 11-10).

Back flagging, in general, shows a good match between the database and the solids; however, for the specific case of quartzite and diatreme (domains of little relevance in size and grade) lower percentages of success were obtained (<70%).

The solids present a very good correspondence, given that the samples they contain correspond, in all cases, to more than 90% of modeled samples. This occurs in the solid Vein1 in the same way, since it was interpreted with the samples that contained the code Vein1, Vein2 and Vein3, whose sum is 91% correct.

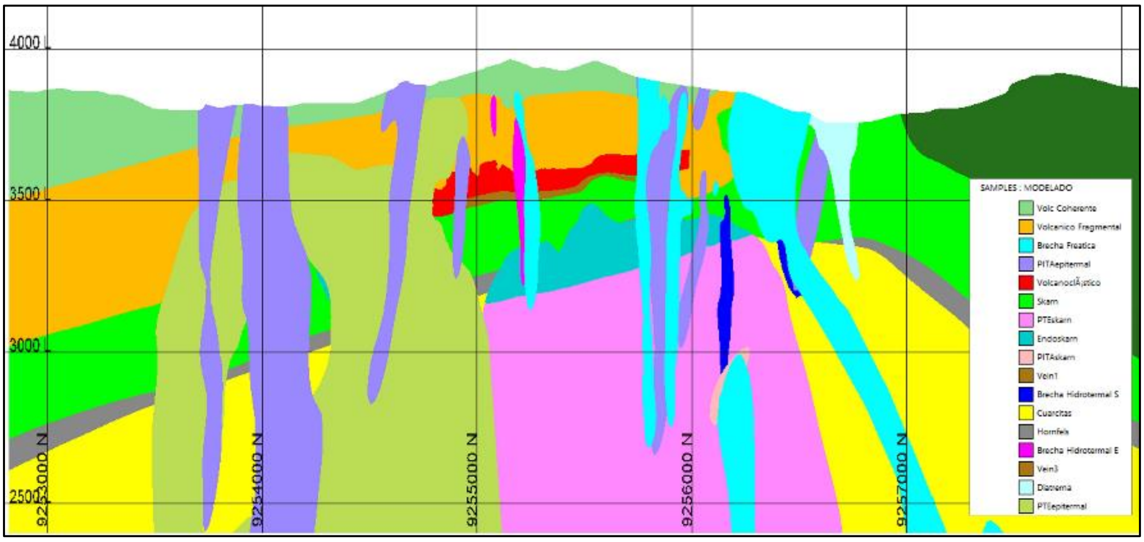


Figure 11-17: SW-NE Central Section of the Tantahuatay Lithology Model.

Source: (SRK, 2023)

Alteration Model

To construct the Alteration Model, a three-dimensional inspection of the samples, sections, and solids of the Lithological domains was conducted. A process was rolled out to recognize relationships, temporality and the continuity of events. Finally, the database was contrasted with the model by flagging the solids and back flagging.

SRK received the Leapfrog project utilized to generate the geological model, which included the Database that contained Collar, Survey, Assay, Lithology and Alteration information.

The Alteration information provided by Buenaventura is based on the analysis using Terraspec in conjunction with aiSIRIS™.

The Alteration table (THY_ALTERATION) contains columns related to the minerals, the style in which they are presented and the intensity; this information, in conjunction with the geological sections, was interpreted by the Coimolache exploration. Subsequently the column "GEOINTERP" (Geointerpretation) was obtained, which contains the alteration domains grouped by type in the case of the Advanced Argillic and Phyllic domains.

To identify the alteration domains based on chronological events, a reinterpretation of the Advanced Argillic and Phyllic domains was conducted and to create divisions denominated Advanced Argillic domains 1,2,3 and 4. In the same way, the Phyllic domain was divided into Phyllic domains 1, 2, 3 and 4; all this information was included in the "DESCRIPTION" column".

To create the Alteration model, a new Geointerpretation column was generated (which contains the initial information of the "DESCRIPTION" column but which, unlike this one, allows intervals to be selected and reassigned to other domains if any inconsistency is identified in the review of the Database (DB) and the sections; this new column was denominated "Descripcion_IS".

As part of the coordination between the SRK team and the Coimolache team, the following points were agreed upon:

Take as reference the solids of the Lithological model delivered.

Model the following alteration domains based on the Database:

- Silicification
- Advanced Argillic 1
- Advanced Argillic 2
- Advanced Argillic 3
- Advanced Argillic 4
- Phyllic 1
- Phyllic 2
- Phyllic 3
- Phyllic 4
- Argillic
- Propylitic
- Endoskarn Retrograde
- Exoskarn Prograde
- Exoskarn Retrograde

Adjust the solids of the alteration domains to the interpreted geological sections.

Construction of the alteration model

To generate the Tantahuatay Sulfuros alteration model, the following procedure was carried out:

Generate the Geological model "Modelo_Alteracion_THY Final" from the information in the column "Descripcion_IS".

The resolution used in the model was 50, and the extension of the Alteration model was adjusted to the extension of the Lithological model.

As mentioned previously, the SRK and Coimolache teams agreed to respect the limits of the lithological model when constructing the alteration model. Accordingly, the modeling strategy consisted of generating lithological domains within the alteration model and beginning to refine the alterations present within each lithological domain.

After generating the geological model “Modelo_Alteracion_THY Final”, in the Lithologies section the domains associated with the lithological solids were created.

In the Surface Chronology section, the Lithology solids from the lithological model “Refined Model_18LITOTHY expanded” were loaded and imported as an intrusion.

The chronological sequence was adjusted to what was already in the Lithological model “Refined Model_18LITOTHY expanded.”

The Refined Model “Refined Modelo_Alteracion_THY Final” was generated”.

The analysis was carried out by Lithology. This analysis consisted of loading the Database and interpreting sections and the Lithology solid to identify the alterations present in each lithological domain. These alterations are modeled individually and cover all of the solid. For modeling purposes, tools are used such as replicating the trend of the lithological solid and the interpolant parameters in the construction of the alteration domain, in addition to relying on polylines to adjust the alteration solids to the interpreted sections.

Details of the analysis carried out for each alteration domain are presented below.

Epithermal Porphyry (ArglAvd2)

The Advanced Argillic domain 2 (ArglAvd2) was identified within the lithological domains:

- Phreatic Breccia
- Epithermal Hydrothermal Breccia
- Skarn Hydrothermal Breccia

For each domain, a refined wireframe was obtained from ArglAvd2. In Figure 11-18 the wireframe generated for the ArglAvd2 domain is shown where all the solids refined by lithological domain are joined, while Figure 11-19 shows the support used to model the wireframe.

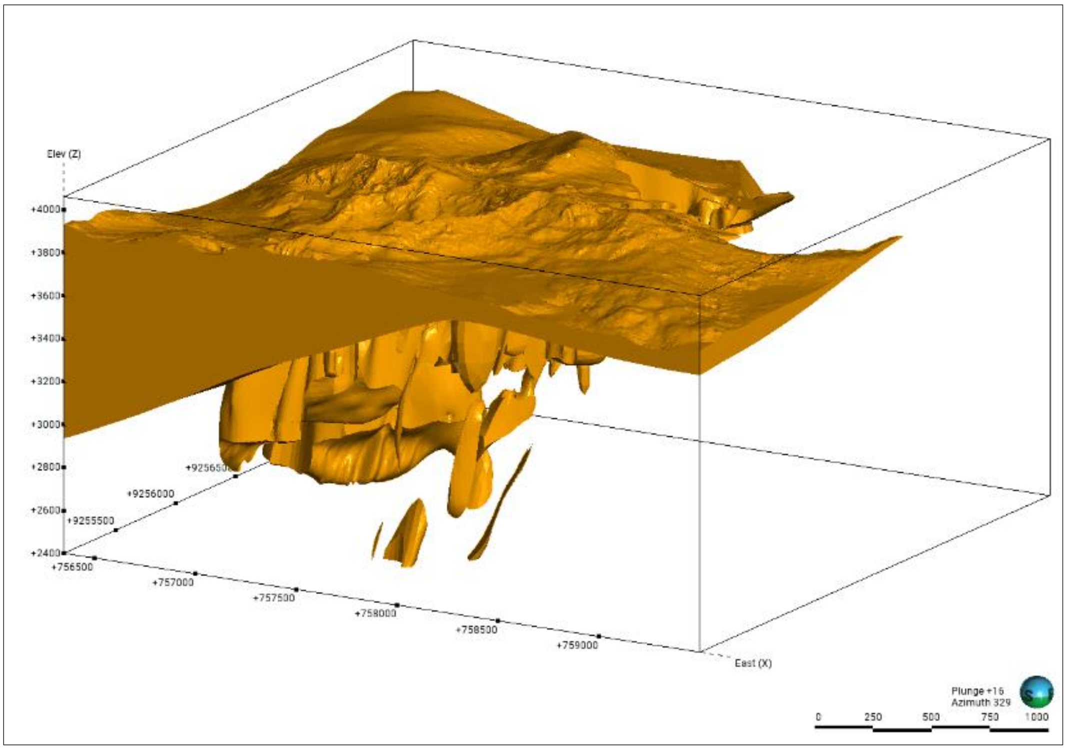


Figure 11-18: Wireframe of the "Advanced Argillic 2" domain of the alteration model.

Source: (SRK, 2023)

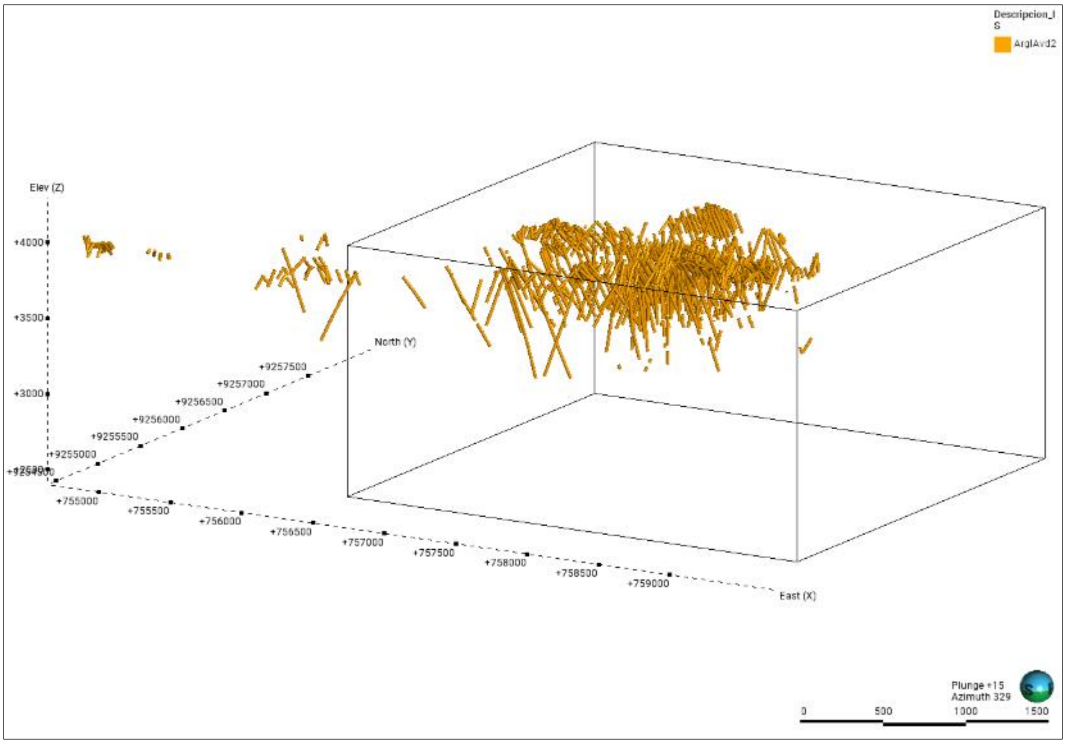


Figure 11-19: Sample support corresponding to the domain "ArglAvd2" in the "Descripcion_IS" column.

Source: (SRK, 2023)

Epithermal Porphyry (Fil2)

The Phyllic 2 (Fil2) domain was identified within the lithological domains:

- Phreatic Breccia
- Skarn Hydrothermal Breccia
- Quartzites
- PITAepitermal
- PITAskarn
- PTEepitermal
- Vein1

For each domain, a refined wireframe was obtained from Fil2. In Figure 11-20 the wireframe generated for the Fil2 domain is shown, where all the solids refined by lithological domain are joined; Figure 11-21 shows the support used for wireframe modeling.

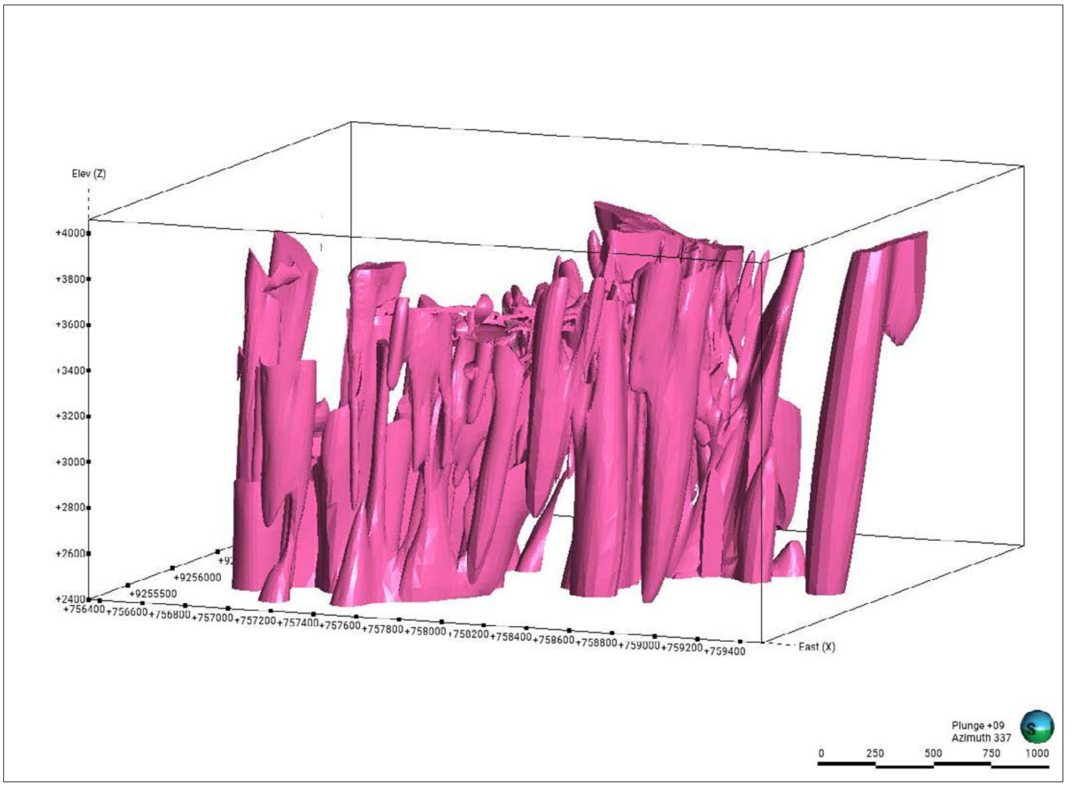


Figure 11-20: Wireframe of the Phyllic 2 domain of the alteration model.

Source: (SRK, 2023)

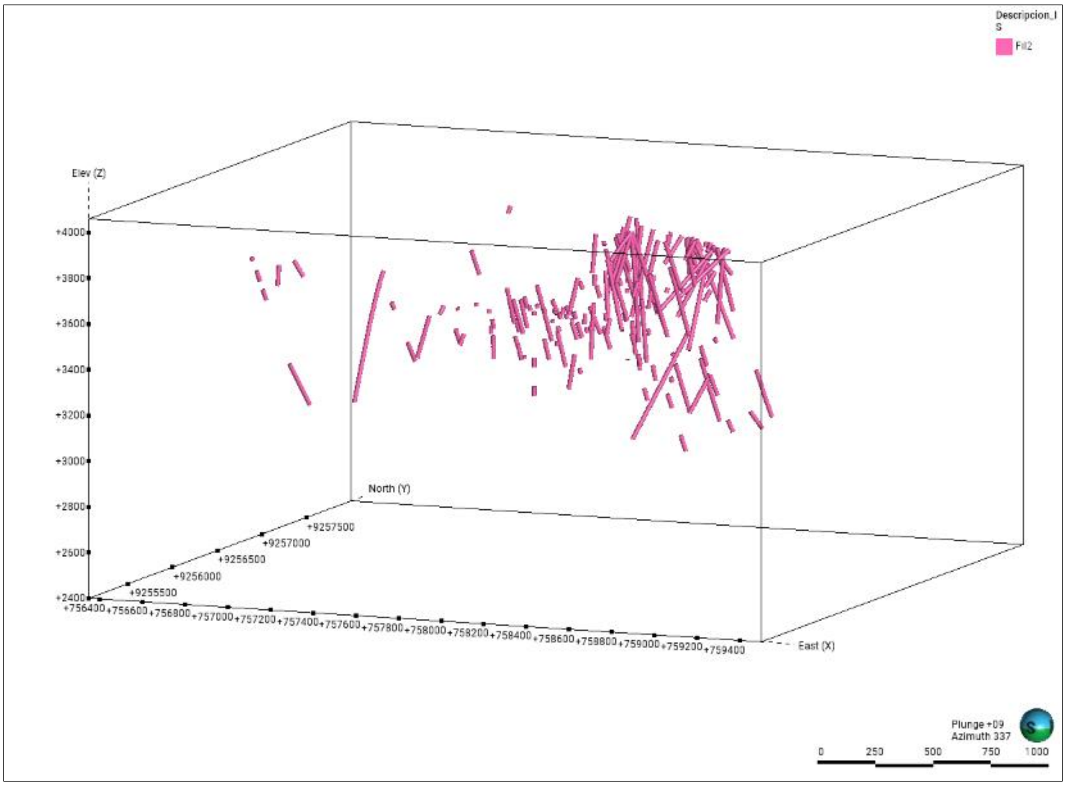


Figure 11-21: Sample support corresponding to the "Fil2" domain in the "Descripcion_IS" column.

Source: (SRK, 2023)

Porphyry Skarn (Fil1)

The Phyllic 1 (Fil1) domain was identified within the lithological domains:

- Phreatic Breccia
- Skarn Hydrothermal Breccia
- Retrograde Endoskarn
- Quartzites
- PITAscarn
- PTEskarn
- Skarn

For each domain, a refined wireframe was obtained from Fil1. In Figure 11-22 the wireframe generated for the Fil1 domain is shown, where all the solids refined by lithological domain are joined; Figure 11-23 shows the support used for wireframe modeling.

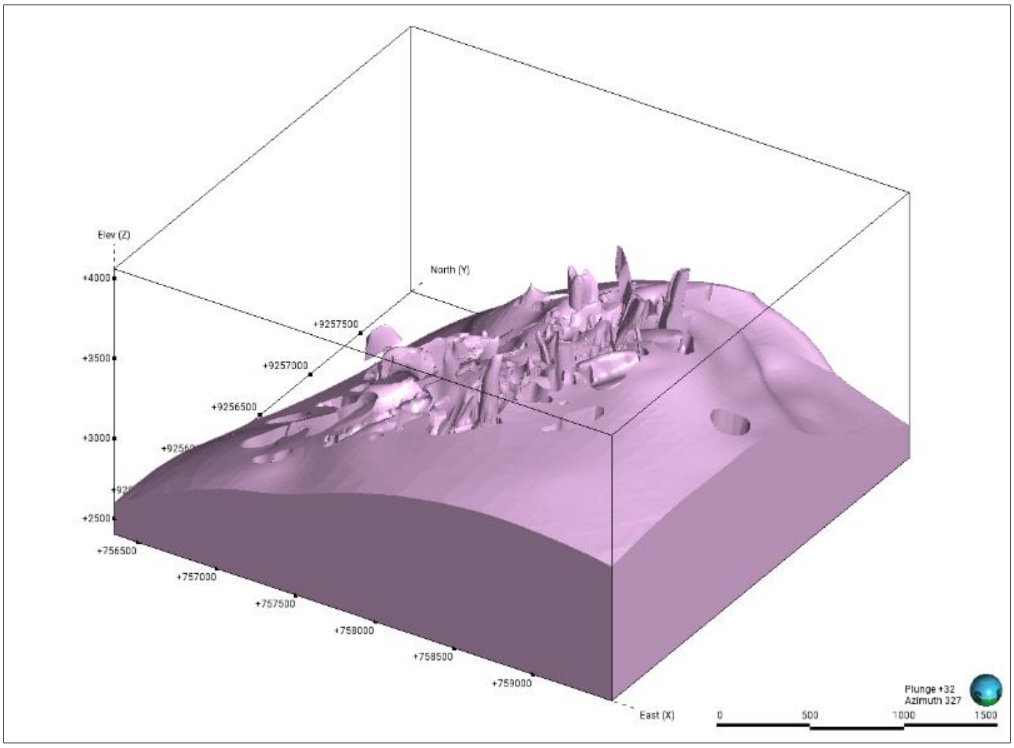


Figure 11-22: Wireframe of the Phyllic 1 domain of the alteration model.

Source: (SRK, 2023)

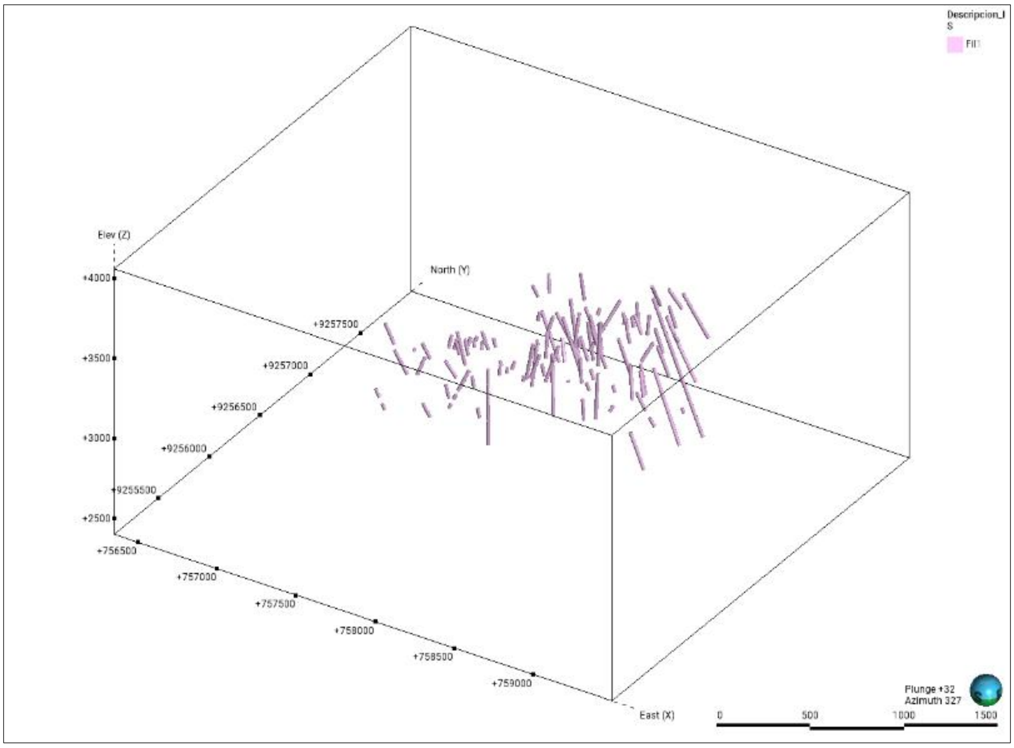


Figure 11-23: Sample support corresponding to the "Fil1" domain in the "Descripcion_IS" column.

Source: (SRK, 2023)

Argillic (Argl)

The Argillic domain (Argl) was identified within the lithological domains:

- Phreatic Breccia
- PITAepitermal
- PITAskarn

For each domain, a refined Argl wireframe was obtained. In Figure 11-24 the wireframe generated for the Argl domain is shown, where all the solids refined by lithological domain are joined; Figure 11-25 shows the support used for wireframe modeling.

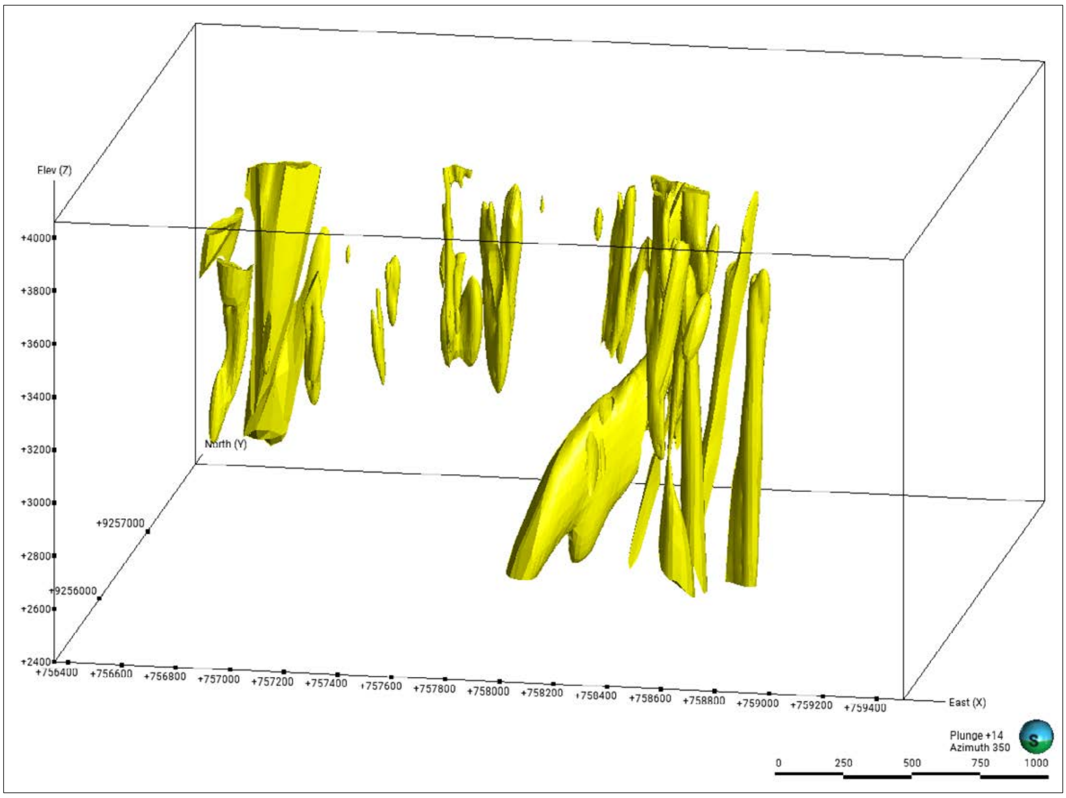


Figure 11-24: Wireframe of the "Argillic" domain of the alteration model.

Source: (SRK, 2023)

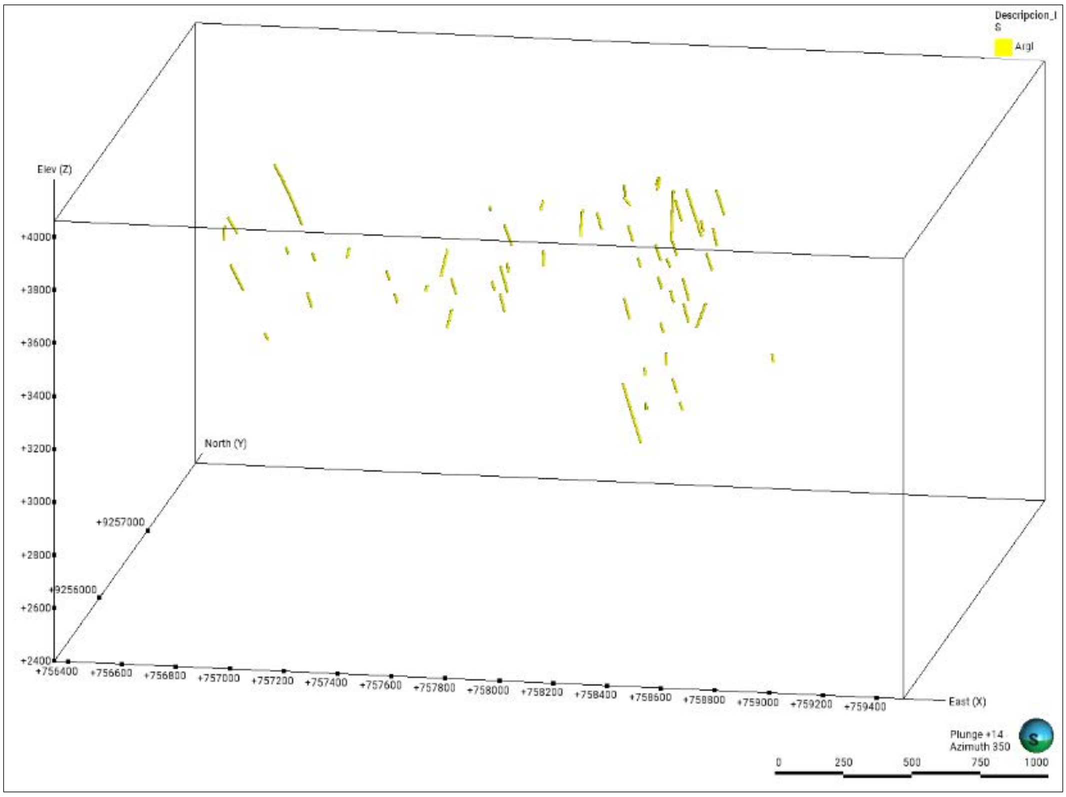


Figure 11-25: Sample support corresponding to the "Fil4" domain in the "Descripcion_IS" column.

Source: (SRK, 2023)

Retrograde Exoskarn (Sk-Re)

The Retrograde Exoskarn (Sk-Re) was identified within the lithological domain:

- Retrograde Exoskarn

For this lithological domain, a refined Sk-Re wireframe was obtained. In Figure 11-26 the wireframe generated for the Sk-Re domain is shown, and Figure 11-27 shows the support used for wireframe modeling.

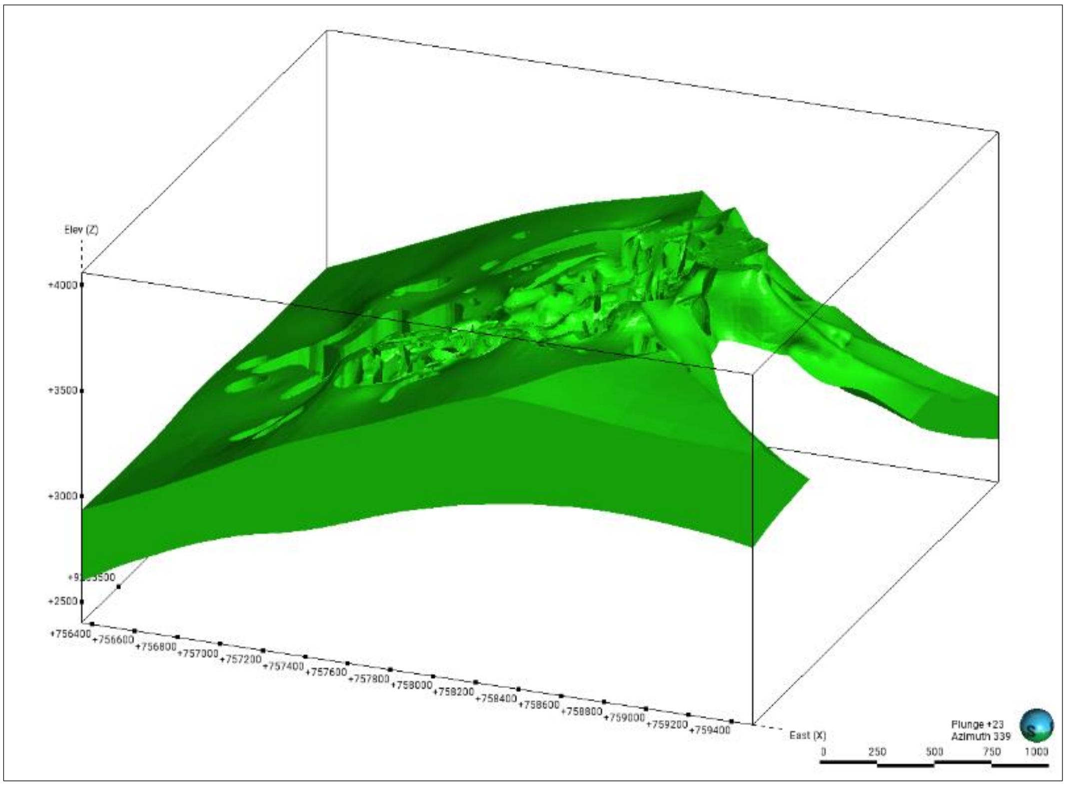


Figure 11-26: Alteration model Retrograde Exoskarn domain wireframe.

Source: (SRK, 2023)

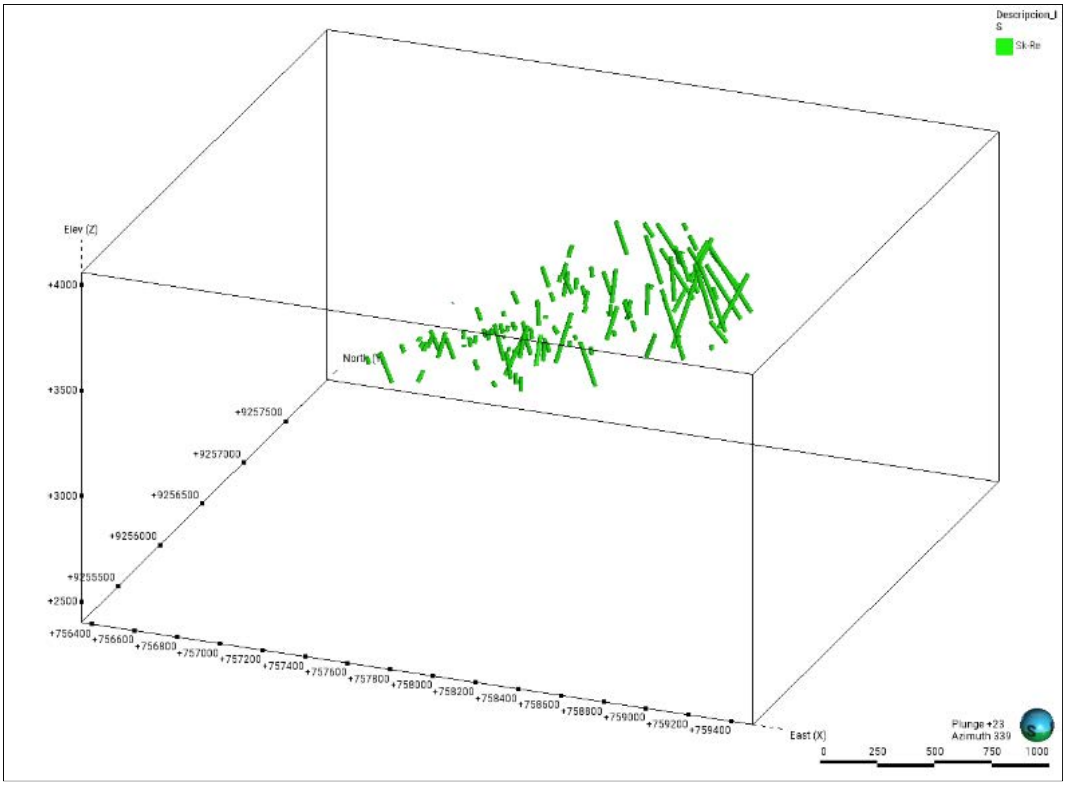


Figure 11-27: Sample support corresponding to the "Sk-Re" domain in the "Descripcion_IS" column.

Source: (SRK, 2023)

Back Flagging

Table 11-2 presents the percentage of samples per domain that are within each modeled domain, for example, in the case of the ArglAvd1 domain, 92.81% of the sections used to build that wireframe are coded as ArglAvd1 in the Database.

Table 11-2: Back flagging of the alteration domains modeled.

Domain	Length (m)	Match (%)
Argl	2,724	87.04
ArglAvd1	174	92.81
ArglAvd2	119,820	94.82
ArglAvd3	1,805	94.26
ArglAvd4	199	99.58
EnskR	4,226	88.24
Fil1	13,445	90.10
Fil2	15,988	87.13
Fil3	1,201	87.18

Domain	Length (m)	Match (%)
Fil4	4,226	99.93
Prpt	60	99.64
Silf	6,266	92.04
Sk-Pro	1,633	87.50
Sk-Re	9,261	98.89

Source: (SRK, 2023)

Comparative Model vs Sections

Figure 11-28 and Figure 11-29 present a comparative between the sections made by the project's geologists and the alteration model.

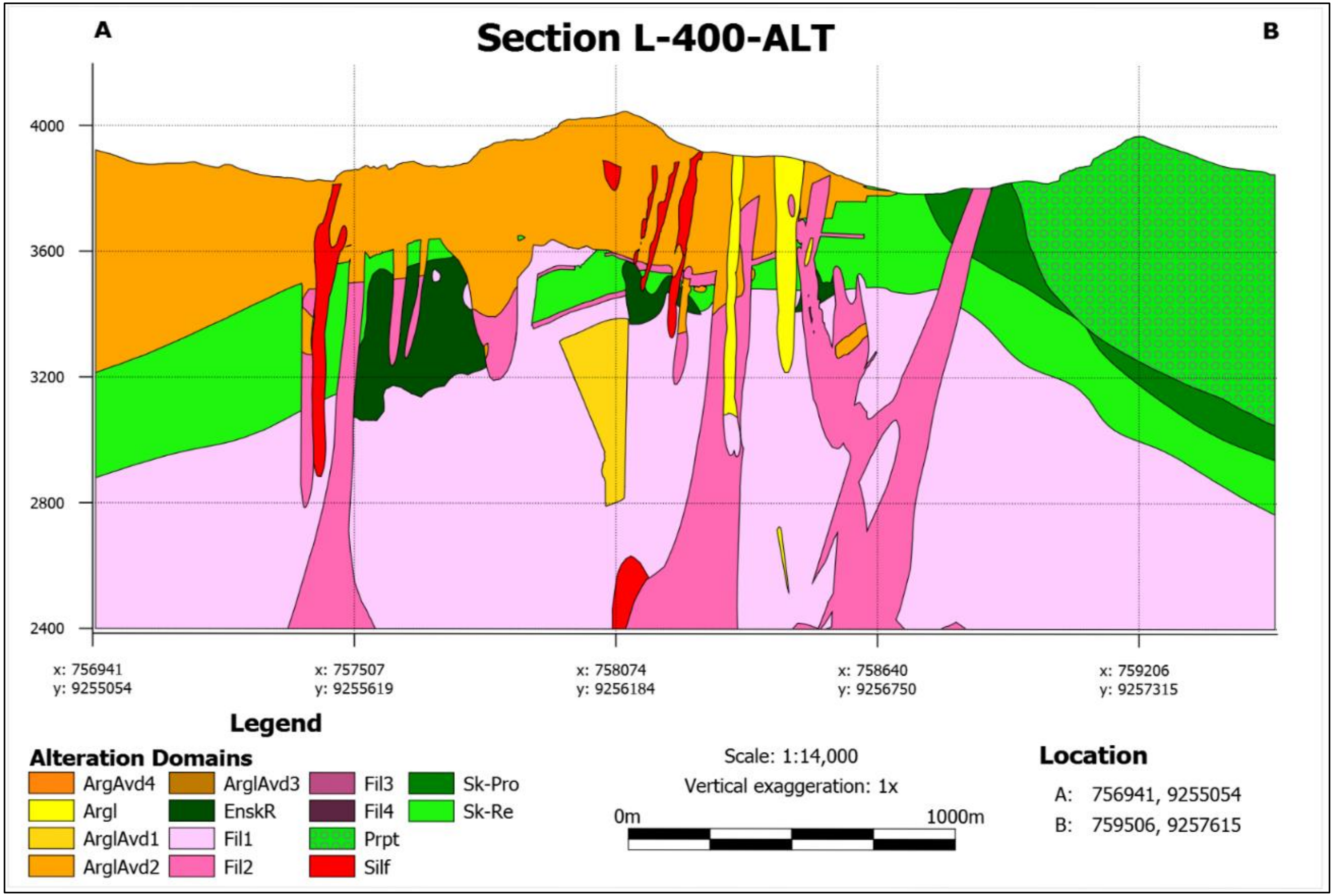


Figure 11-28: NE-SW section oriented at the location of the L-400-ALT section provided by Buenaventura.

Source: (SRK, 2023)

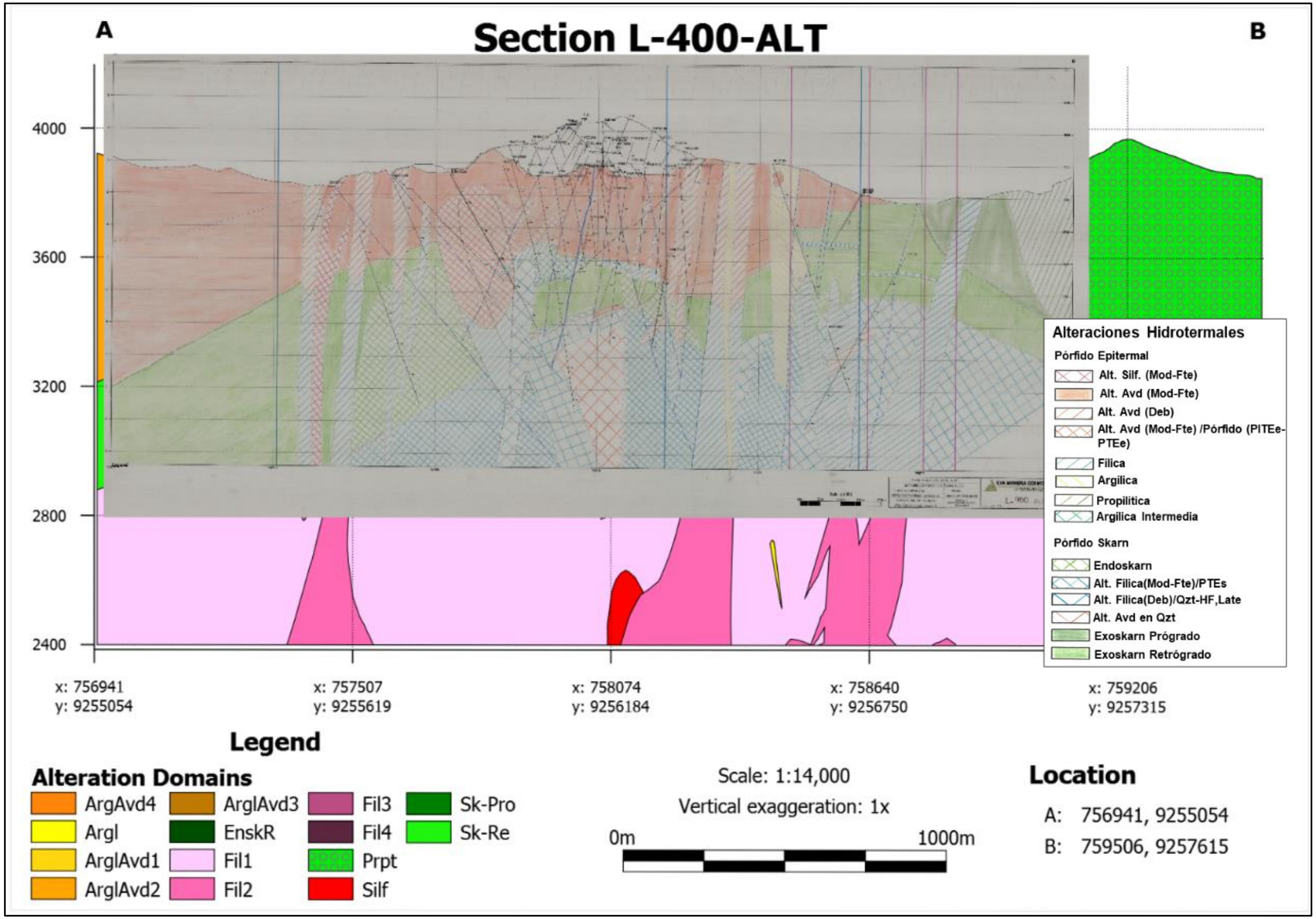
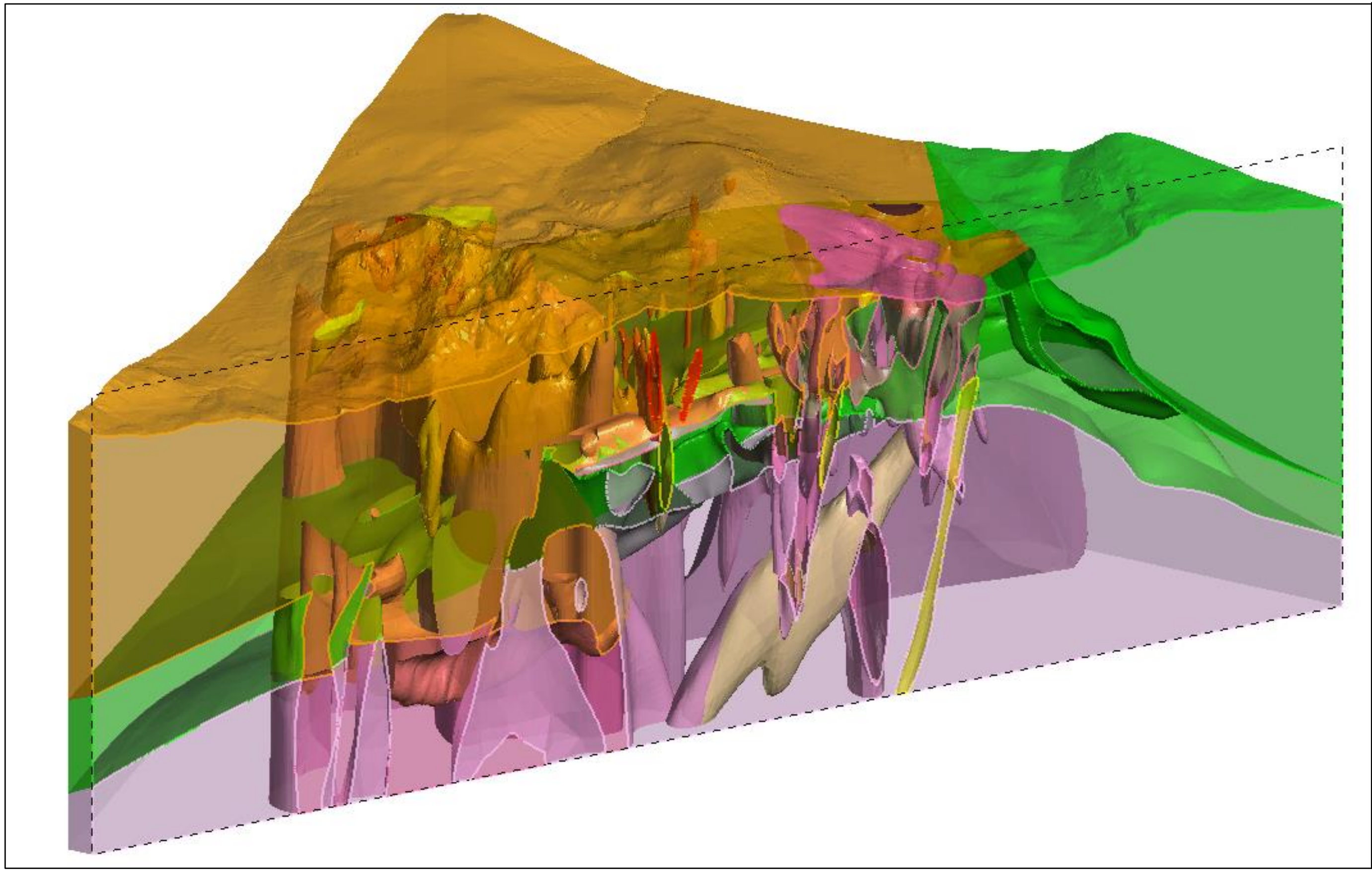


Figure 11-29: Section L-400-ALT provided by Buenaventura superimposed on the alteration model.

Source: (SRK, 2023)

Final Alteration Model

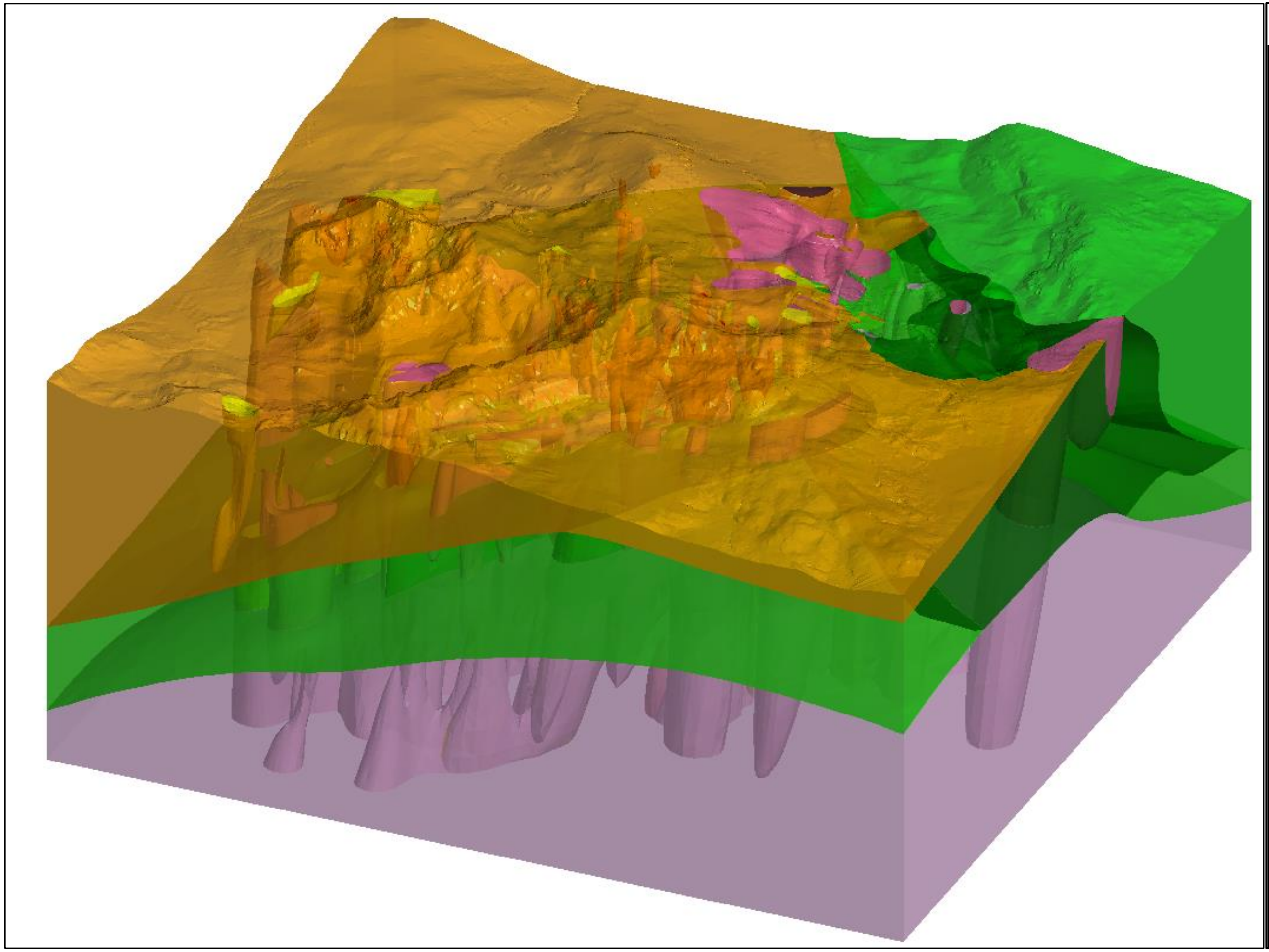
Figure 11-30 and Figure 11-31 present an isometric and section view of the final Mineralization model, respectively.



	Contact Surface Chronology
14	Argl
13	ArglAvd1
12	ArglAvd2
11	ArglAvd3
10	ArglAvd4
9	EnskR
8	Fil1
7	Fil2
6	Fil3
5	Fil4
4	Prpt
3	Silf
2	Sk-Pro
1	Sk-Re

Figure 11-30: NE-SW oriented section of the Alteration model

Source: (SRK, 2023)



	Contact Surface Chronology
14	Argl
13	ArglAvd1
12	ArglAvd2
11	ArglAvd3
10	ArglAvd4
9	EnskR
8	Fil1
7	Fil2
6	Fil3
5	Fil4
4	Prpt
3	Silf
2	Sk-Pro
1	Sk-Re

Figure 11-31: Isometric View of the Alteration Model

Source: (SRK, 2023)

Mineralization Model

Tantahuatay carried out a Minzone analysis to delimit the model into oxides and sulfides. This analysis was only carried out on the mineralization domains associated with oxides, mixed and Arsenical Sulfides; the domains associated with Non-Arsenical Sulfides were not taken into account. The methodology used includes 2 criteria:

- Evaluation of the AuCN/AuFA ratio (cyanidated gold/gold analyzed by Fire Assay), values of 0.4 and 0.6 were assigned as limits between sulfide-mixed and mixed-oxide domains respectively, as seen in Table 11-3.
- Evaluation of the percentage of sulfur (S), values of 1.5% and 5% were assigned as limits between mixed-oxide and mixed-sulfide domains respectively, as seen in Table 11-3.

Solids corresponding to oxides, mixed and sulfides were generated for both criteria, and subsequently intersected to generate a zone of oxides, mixed and sulfides that meets both conditions.

Later, Tantahuatay chose to treat the mixed and sulfide domains as a single block; as such, the Minzone model was made up of 2 domains, as shown in Figure 11-32.

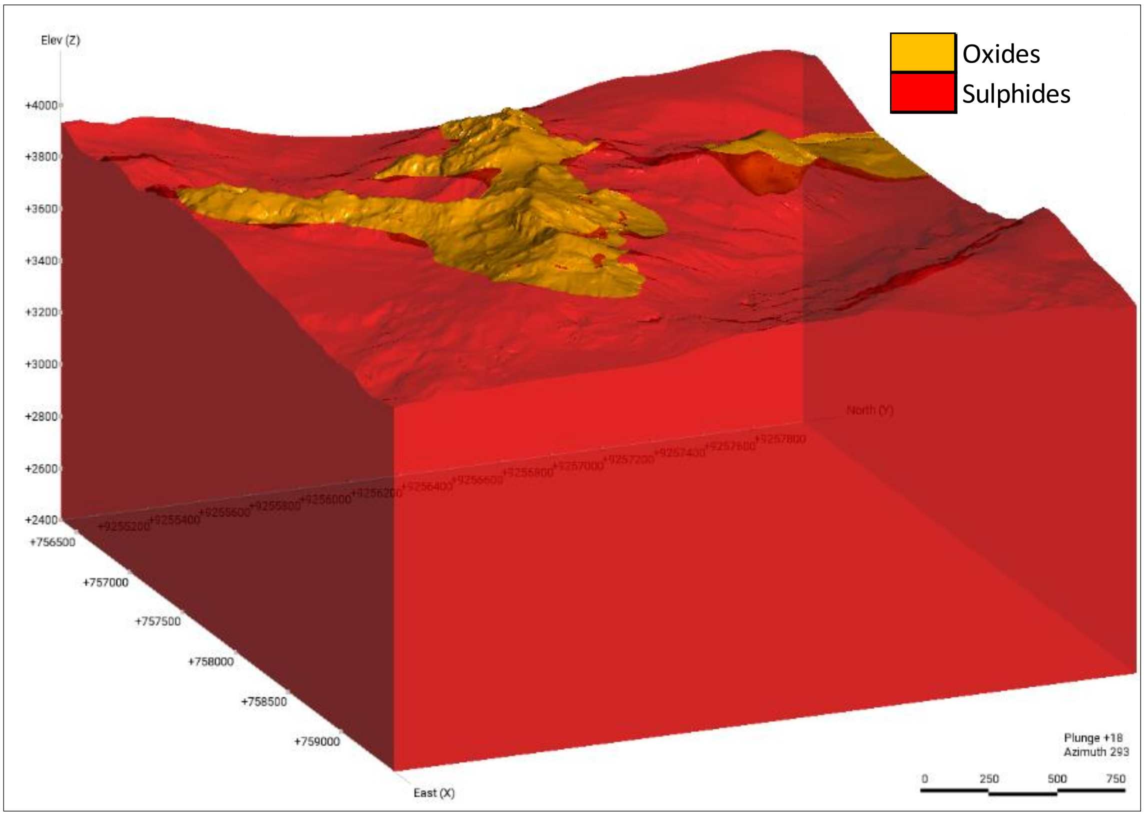


Figure 11-32: Isometric view of the oxide and sulfide domains.

Source: (SRK, 2023)

Table 11-3: Methodology used for the construction of Minzone solids (oxides, mixed and sulfides)

MineZone	GEO_INTERPRETACION (MINE ZONE)	Description Abbreviation	3D MODEL	Mineralization	Min Zone		Mineralization Event
					AuCN/AuFA	S (%)	
Oxides	Ox	Iron oxides	Ox	Goe-Jar-Hem	**>0.6**	**<1.5**	Event II
Non-arsenical sulfides	SulfN4	Non-arsenical sulfides Antanorte. Event III	SulfN4	Cp-Py	NA	NA	Event III Twinza (Cp-Mgt)
	SulfNLS4	Non-arsenical sulfides Low Sulphurization Antanorte. Event III	SulfNLS4	Gn-Esf-Td+Rdc (Ganga)			
Mixed-Transitional	Mix3	Mixed transitional Tiwinza sulfides. Event III	Mix3	En-Cp-Cc	NA	NA	
Non-arsenical sulfides	SulfN3	Tiwinza non-arsenical sulfides. Event III	SulfN3	Cp-Hem-Espc-Mgt	NA	NA	
	SulfNIS3	Non-arsenical sulfides Intermediate Tiwinza sulphurization. Event III		Cp-Esf-Td-Tn-Gn			
Mixed-Transitional	MixO2	Mixed transitional oxides. Event II		Py-En-Goe-Jar-Hem	0.4-0.6	1.5-5.0	Event II. System Epithermal Porphyry (En-Cc-Cv)
	MixE2	Mixed transitional sulfides. Event II	MixE2	Py-En-Cv-Cc			
Arsenical sulfides	SulfA2	Arsenical Sulfides. Event II	SulfA2	Py-En	<0.4	>5.0	
Non-arsenical sulfides	SulfN2(***)	Non-arsenical sulfides. Event II	SulfN2	Cp-Cc-Cv	NA	NA	
Arsenical sulfides	SulfIS2(***)	Arsenical sulfides Intermediate Sulphurization. Event II	SulfIS2	En-Cp-Esf-Cc-Td-Tn-Orp	<0.4	>5.0	
	SulfA1	Arsenical Sulfides Event II, superimposed on Event I	SulfA1	Py-En			
Discordance							
Non-arsenical sulfides	SulfNIS1	Non-arsenical sulfides Intermediate Sulphurization. Event I	SulfNIS1	Cp-Esf(*)-Gn-Td-Tn	NA	NA	Event I. System Skarn Porphyry (Cp-Sp)

NA. Not Applicable in non-arsenical sulfides. They are chalcopyrite, bornite, chalcocite and covellite minerals; In the next stage of the project, sequential copper ratios will be applied.

Esf(*). Sphalerite with Cadmium content in the IS system; Esf(**). Sphalerite from the porphyry skarn event.

(***). Assembly product of fluid neutralization, skarn level.

Source: (SRK, 2023)

To construct the Mineralization Model construction, a three-dimensional inspection of the samples, sections, and solids of the Lithological domains was conducted and a process to recognize relationships, temporality and continuity of Mineralization events was rolled out. In addition, the database for Mineralization model was reviewed through back flagging analysis.

SRK received the Leapfrog project that generated the geological model, which included the Database that contained Collar, Survey, Assay, Lithology and Mineralization information.

The Mineralization information provided by Buenaventura is based on logging and geochemistry.

The Mineralization table (THY_MINERAL_21072023) contains columns related to minerals, the style in which they are presented and the intensity. This information, together with the geological sections, was interpreted by the Coimolache exploration team. Subsequently, the "GEOINTERP" (Geointerpretation) column, which contains the mineralization domains, was developed.

For the purposes of creating the Mineralization model, a new Geointerpretation column was generated (which contains the initial information of the "GEOINTERP" column but which, unlike the previous columns, allows users to select intervals and reassign components to other domains if any inconsistency is identified in the review of the DB and the sections. This new column was denominated "GEOINTERP_IS".

As part of the coordination between the SRK team and the Coimolache team, the following points were agreed upon:

Take as reference the Lithological model solids delivered.

Model the following mineralization domains based on the Database:

- Oxides
- MixE2
- Mix3
- SulfA2
- SulfIS2
- SulfA1
- SulfN2
- SulfN1
- SulfNIS1
- SulfN3
- SulfN4
- SulfNLS4

Adjust the solids of the mineralization domains to the interpreted geological sections.

Mineralization model construction

To generate the Tantahuatay Sulfuros mineralization model, the following procedure was carried out:

Generate the Geological model "GM_MINERALIZACION" from the information in the "GEOINTERP_IS" column".

The resolution used in the model was 20 and the extension of the mineralization model was adjusted to the extension of the Lithological model.

As mentioned earlier, the teams agreed to respect the limits of the lithological model to construct the mineralization model. As such, the modeling strategy considered of generating lithological domains within the mineralization model and refining the domains of mineralization present within each lithological domain.

After generating the geological model "GM_MINERALIZACION", the domains associated with the lithological solids were created in the lithologies section.

In the Surface Chronology section, the Lithology solids from the lithological model "Refined Model_18LITOTHY expanded" were loaded and imported as an intrusion.

The chronological sequence was adjusted to reflect that seen in the Lithological model "Refined Model_18LITOTHY expanded."

The Refined Model "Refined GM_MINERALIZACION Final" was generated."

The analysis was carried out by Lithology, this analysis consists of loading the Database and interpreting sections and the Lithology solid to identify which domains of mineralization are present in each lithological domain. These mineralizations are modeled individually and cover the solid's full extension. For modeling purposes, tools are used to replicate the trend of the lithological solid and the interpolant parameters in the construction of the mineralization domain; polylines are used to adjust the mineralization solids to the interpreted sections.

The details of the analysis carried out for each mineralization domain are presented below.

Arsenical Sulfides

- SulfA2 / Epithermal Porphyry /HS

The high-sulfidation Arsenical Sulfide domain in the Epithermal Porphyry (SulfA2) was identified within the lithological domains:

Phreatic Breccia

  - Epithermal Hydrothermal Breccia
  - Diatrema
  - Endoskarn
  - PITAepitermal
  - PITAskarn

- PTEepitermal
- PTEskarn
- PTETiwinza
- Skarn
- Coherent Volcanic
- Fragmental Volcanic
- Volcaniclastic
- Vein1

For each domain, a refined SulfA2 wireframe was obtained; logged samples interpreted as SulfA2 were also identified; however, they were in the Ciénaga and Mirador areas, so they were not considered for the model. Figure 11-33 shows the wireframe generated for the SulfA2 domain, where all the solids refined by lithological domain are united. Figure 11-34 shows the support used to model the wireframe.

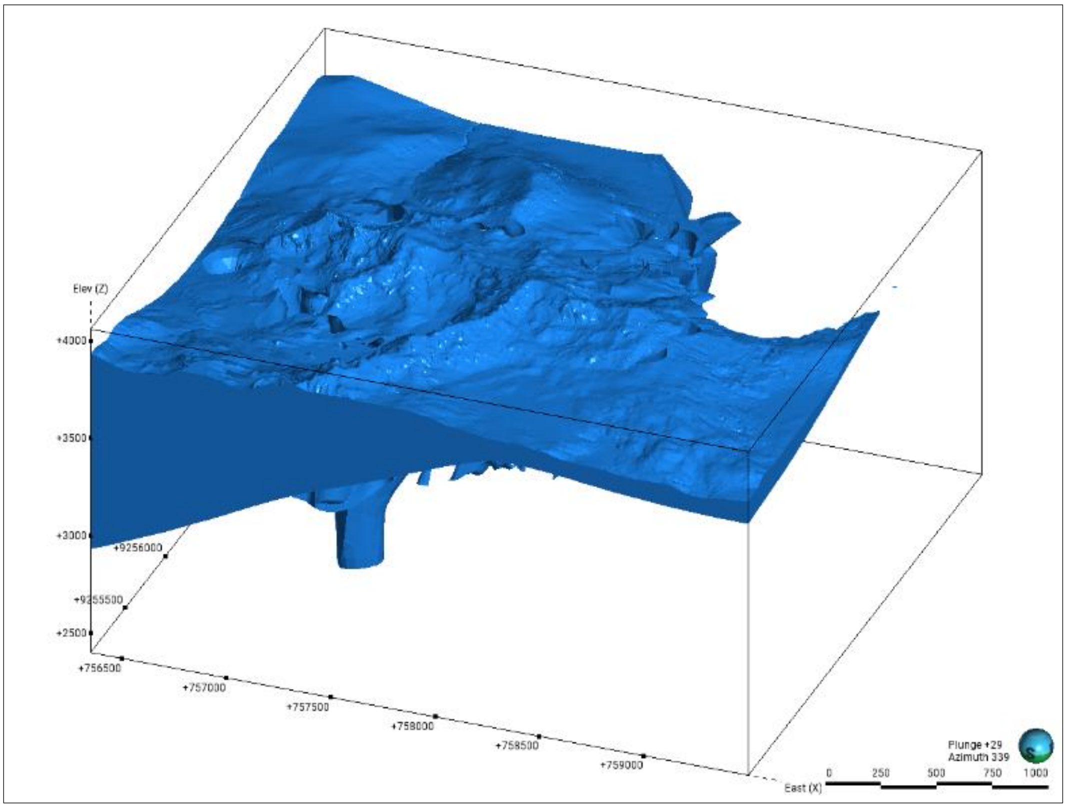


Figure 11-33: Wireframe of the high sulfidation Arsenical Sulfide domain in the Epithermal Porphyry of the mineralization model.

Source: (SRK, 2023)

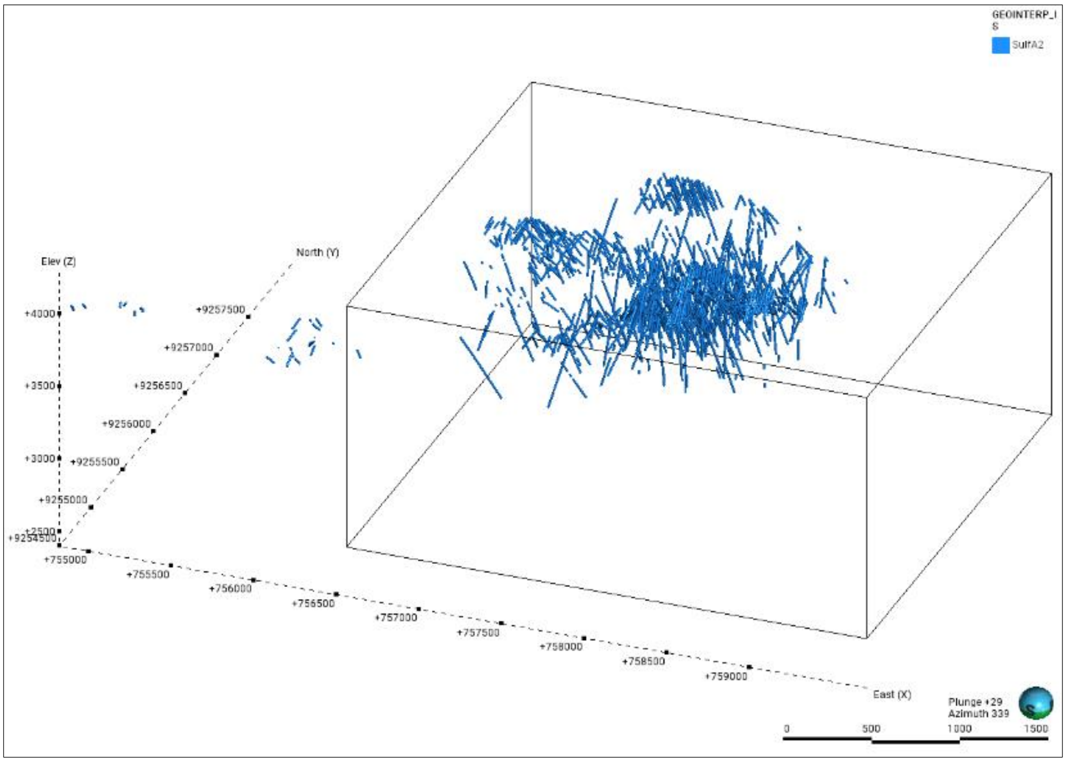


Figure 11-34: Sample support corresponding to the "SulfA2 / Epithermal Porphyry / HS" domain in the "GEOINTERP_IS" column.

Source: (SRK, 2023)

Non-arsenical sulfides

- SulfN2 / Epithermal Porphyry

The Non-Arsenical Sulfide domain in the Epithermal Porphyry (SulfN2) was identified within the lithological domains:

- Phreatic Breccia
- Epithermal Hydrothermal Breccia
- Endoskarn
- PITAepitermal
- PITAskarn
- PTEepitermal
- PTEskarn
- PTETiwinza
- Skarn
- Hornfels
- Quartzite

– Coherent Volcanic
– Fragmental Volcanic
– Volcaniclastic

For each domain, a refined SulfN2 wireframe was obtained. Figure 11-35 shows that the wireframe generated for the SulfN2 domain, where all the solids refined by lithological domain are united. Figure 11-36 shows the support used for wireframe modeling.

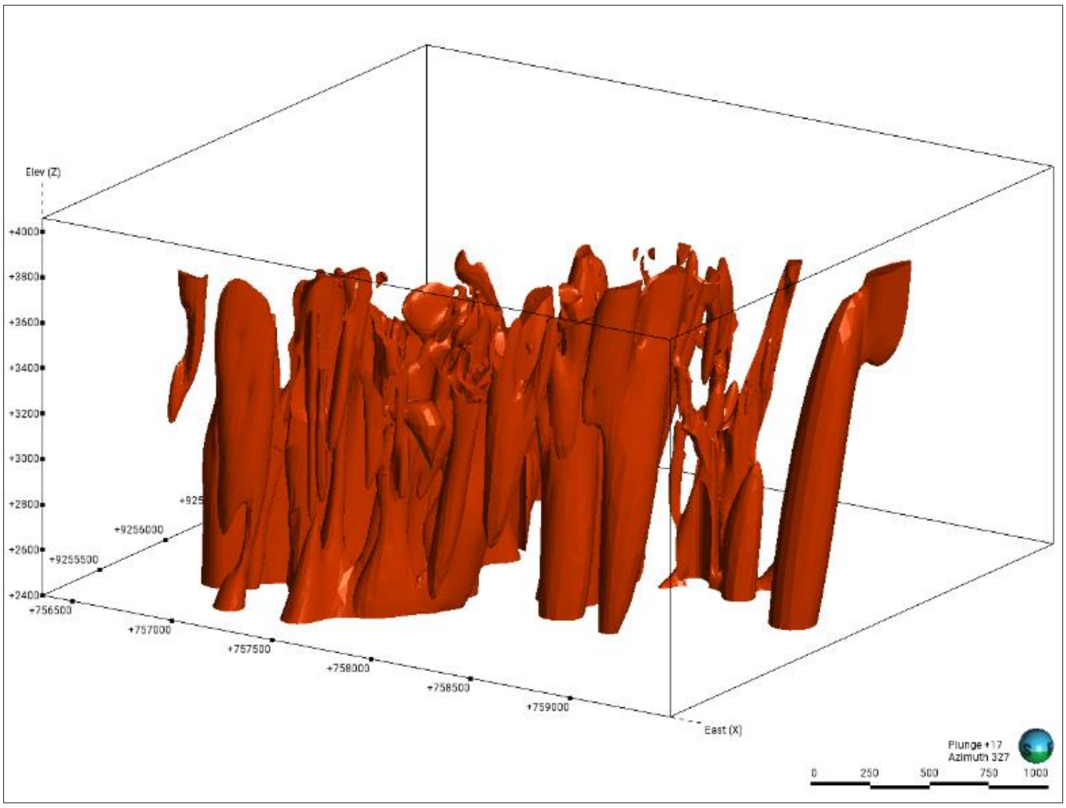


Figure 11-35: Wireframe of the non-Arsenical Sulfide domain in the Epithermal Porphyry of the alteration model.

Source: (SRK, 2023)

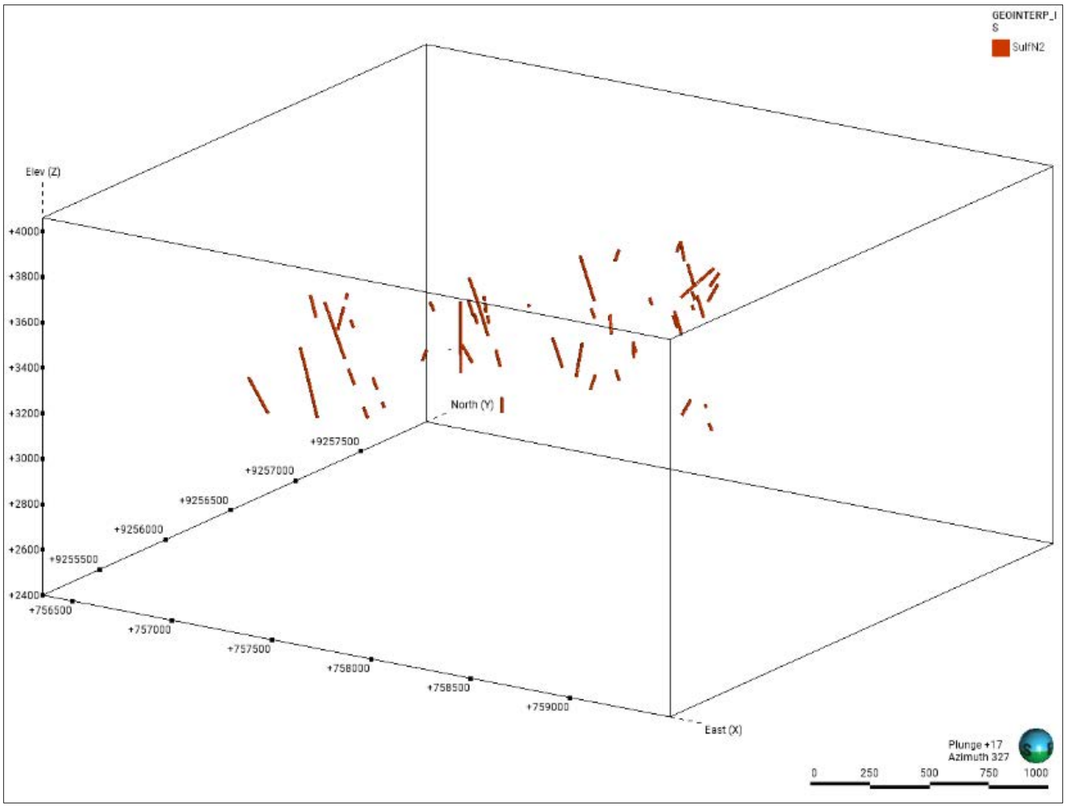


Figure 11-36: Sample support corresponding to the "SulfN2 / Epithermal Porphyry" domain in the "GEOINTERP_IS" column.

Source: (SRK, 2023)

- SulfN1 / Porfido Skarn

The non-Arsenical Sulfide domain in the Skarn Porphyry (SulfN1) was identified within the lithological domains:

- Phreatic Breccia
- Epithermal Hydrothermal Breccia
- Skarn Hydrothermal Breccia
- Endoskarn
- PITAskarn
- PTEepitermal
- PTEskarn
- PTETiwinza
- Pugpe
- Skarn
- Hornfels
- Quartzite

For each domain, a refined SulfN1 wireframe was obtained. Figure 11-37 shows the wireframe generated for the SulfN1 domain, where all the solids refined by lithological domain are united. Figure 11-38 shows the support used for wireframe modeling.

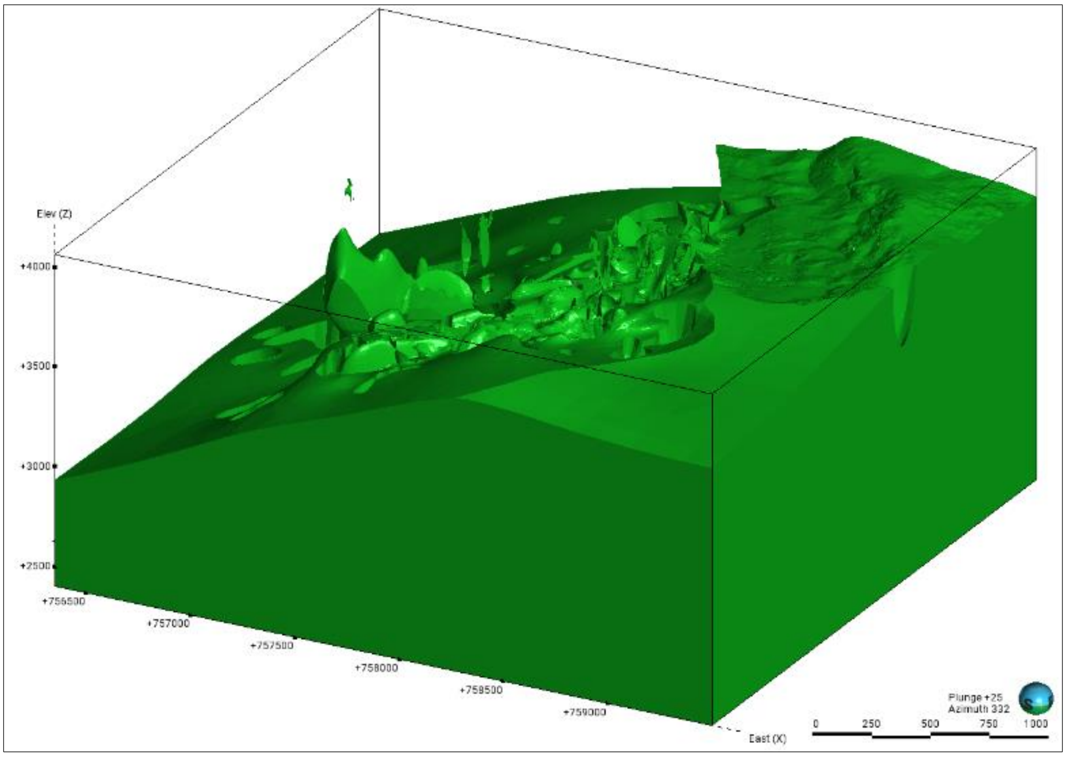


Figure 11-37: Wireframe of the non-Arsenical Sulfide domain in the Porphyry Skarn of the alteration model.

Source: (SRK, 2023)

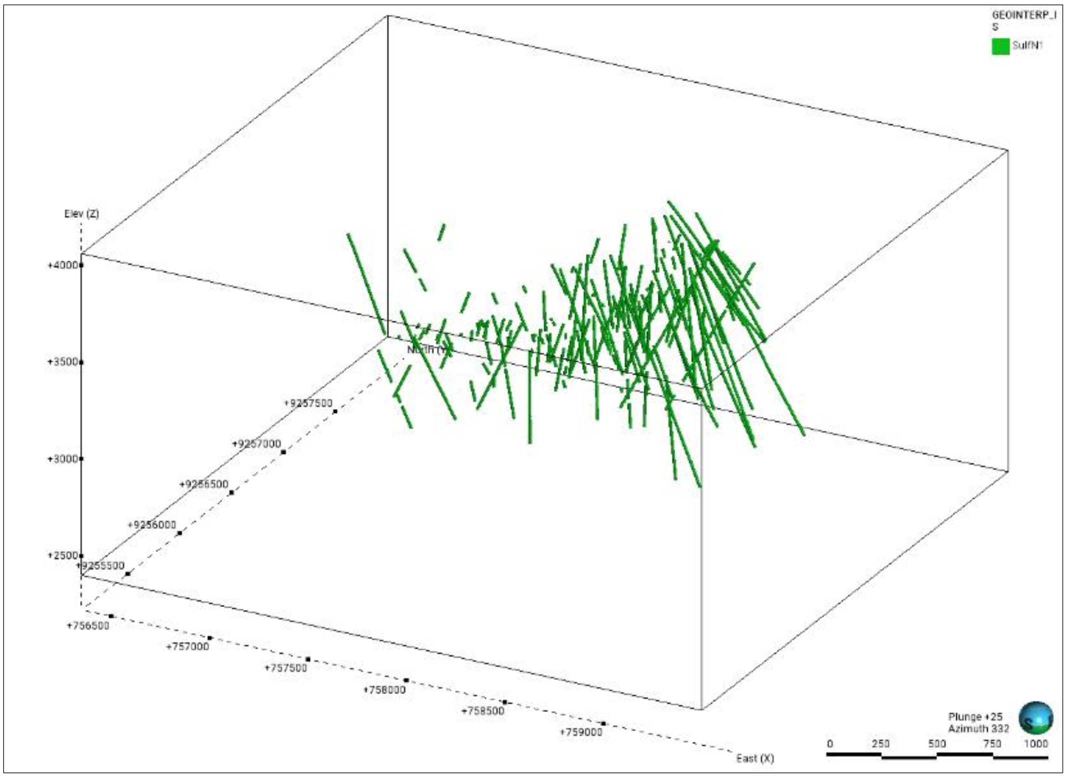


Figure 11-38: Sample support corresponding to the "SulN1 / Porfido Skarn" domain in the "GEOINTERP_IS" column.

Source: (SRK, 2023)

Mixed-Transitional

- MixE2 / Epithermal Porphyry / HS

The Mixed-Transitional domain of high sulfidation in the Epithermal Porphyry (MixE2) was identified within the lithological domains:

- Phreatic Breccia
- Epithermal Hydrothermal Breccia
- Diatrema
- Endoskarn
- PITAepitermal
- PTEepitermal
- PTETiwinza
- Skarn
- Coherent Volcanic
- Fragmental Volcanic
- Volcaniclastic

For each domain, a refined MixE2 wireframe was obtained. Figure 11-39 shows the wireframe generated for the MixE2 domain, where all the solids refined by lithological domain are joined. Figure 11-40 shows the support used for wireframe modeling.

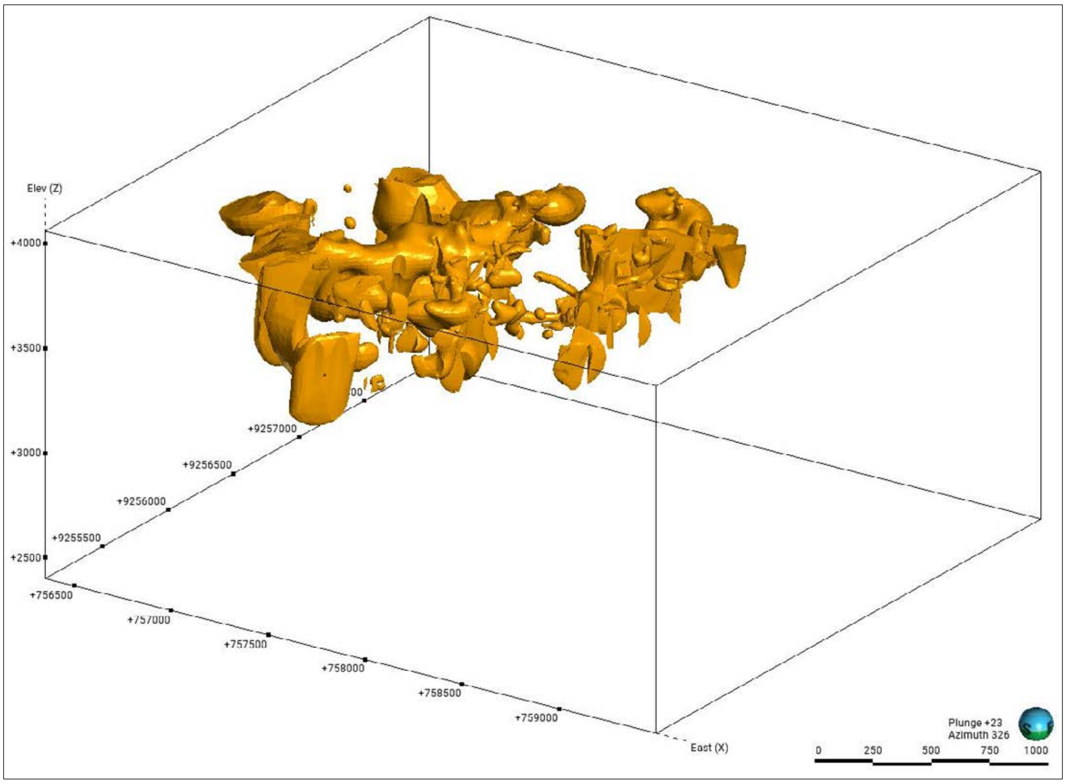


Figure 11-39: Wireframe of the Mixed-Transitional high sulfidation domain in the Epithermal Porphyry of the alteration model.

Source: SRK (2023)

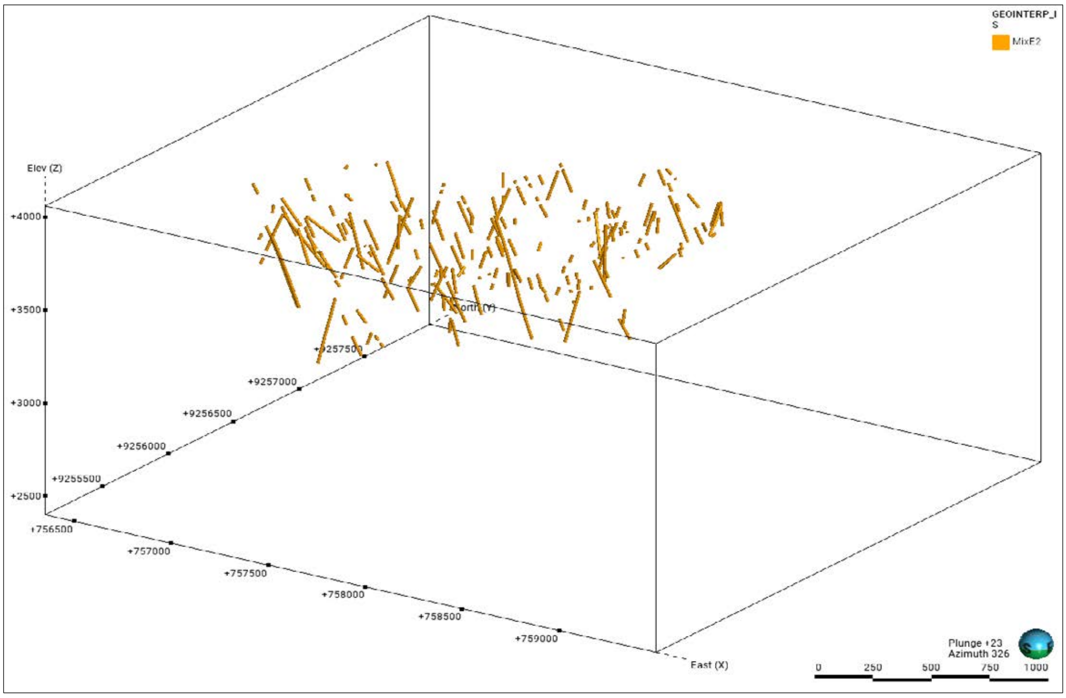


Figure 11-40: Sample support corresponding to the "MixE2 / Epithermal Porphyry / HS" domain in the "GEOINTERP_IS" column.

Source: SRK (2023)

Back Flagging

Table 11-4 presents the percentage of samples per domain that are within each modeled domain. For example, in the case of the ArglAvd1 domain, 92.81% of the sections used to build that wireframe were coded as ArglAvd1 in the Database.

Table 11-4: Backflagging of the modeled alteration domains

Domain	Length (m)	Match (%)
Mix3	1,180	100.00
MixE2	16,229	99.69
Ox	232	96.50
SulfA1	656	100.00
SulfA2	42,804	96.57
SulfIS2	622	100.00
SulfN1	22,813	95.08
SulfN2	3,511	80.83
SulfN3	1,343	99.95
SulfN4	239	100.00
SulfNIS1	1,182	100.00
SulfNLS4	845	84.79

Source: (SRK, 2023)

Comparative Model vs Sections

Figure 11-41 and Figure 11-42 present a comparative between the sections made by the project's geologists and the mineralization model.

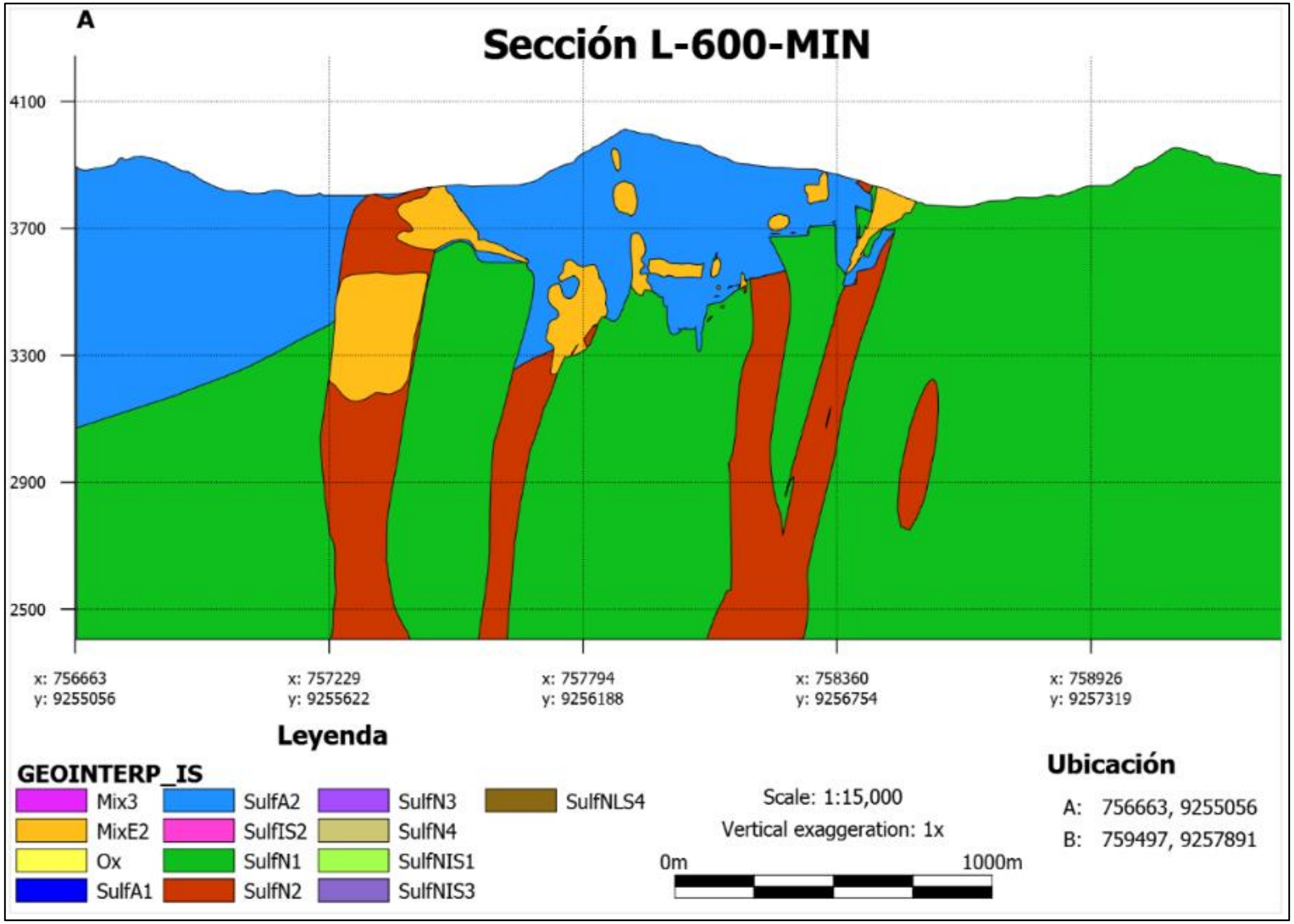


Figure 11-41: NE-SW section oriented at the location of the L-600-MIN section provided by Buenaventura.

Source: (SRK, 2023)

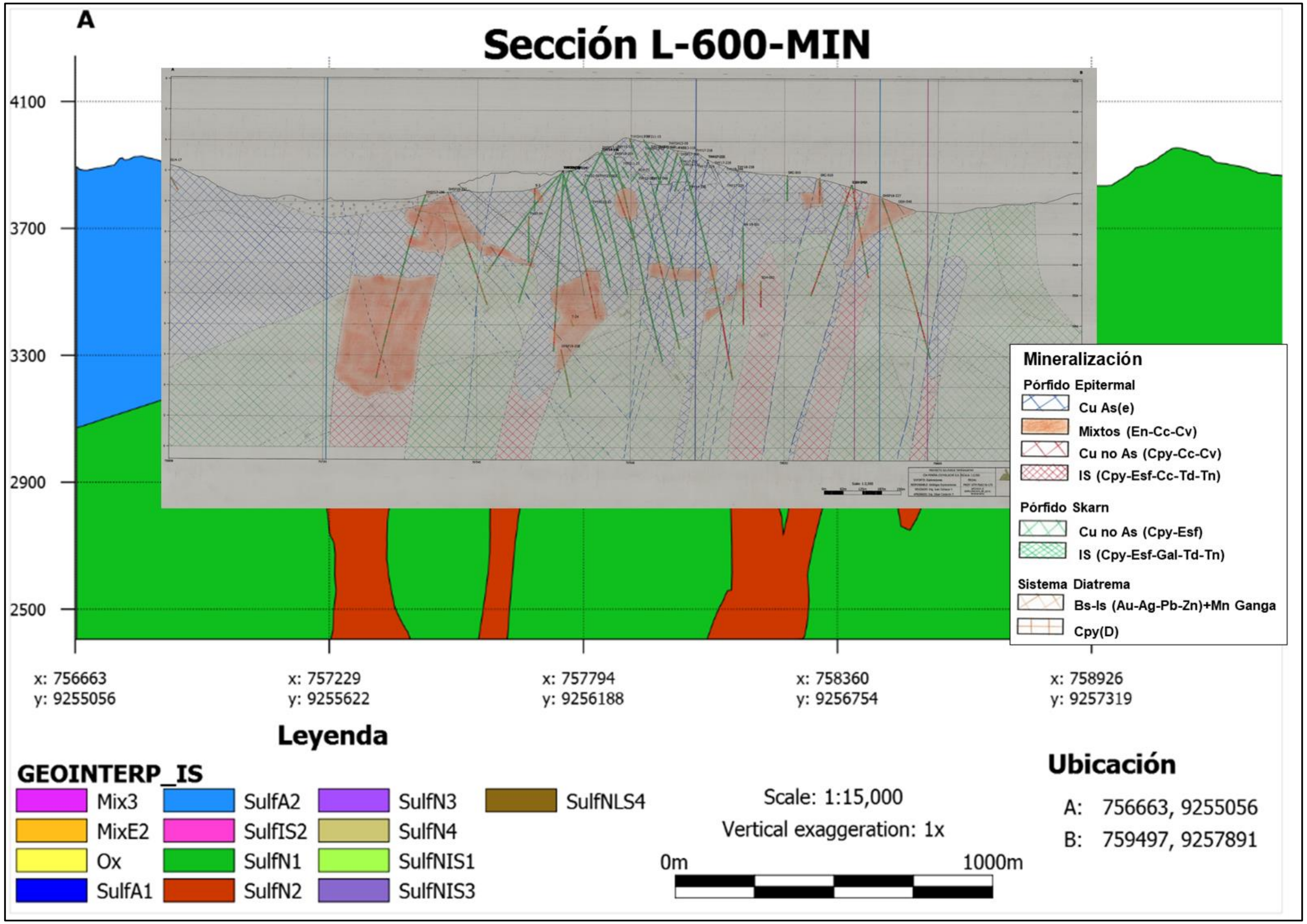


Figure 11-42: Section L-600-MIN provided by Buenaventura superimposed on the Mineralization model.

Source: (SRK, 2023)

Final Mineralization Model

Figure 11-43 and Figure 11-44 present an isometric and section view of the final Mineralization model, respectively.

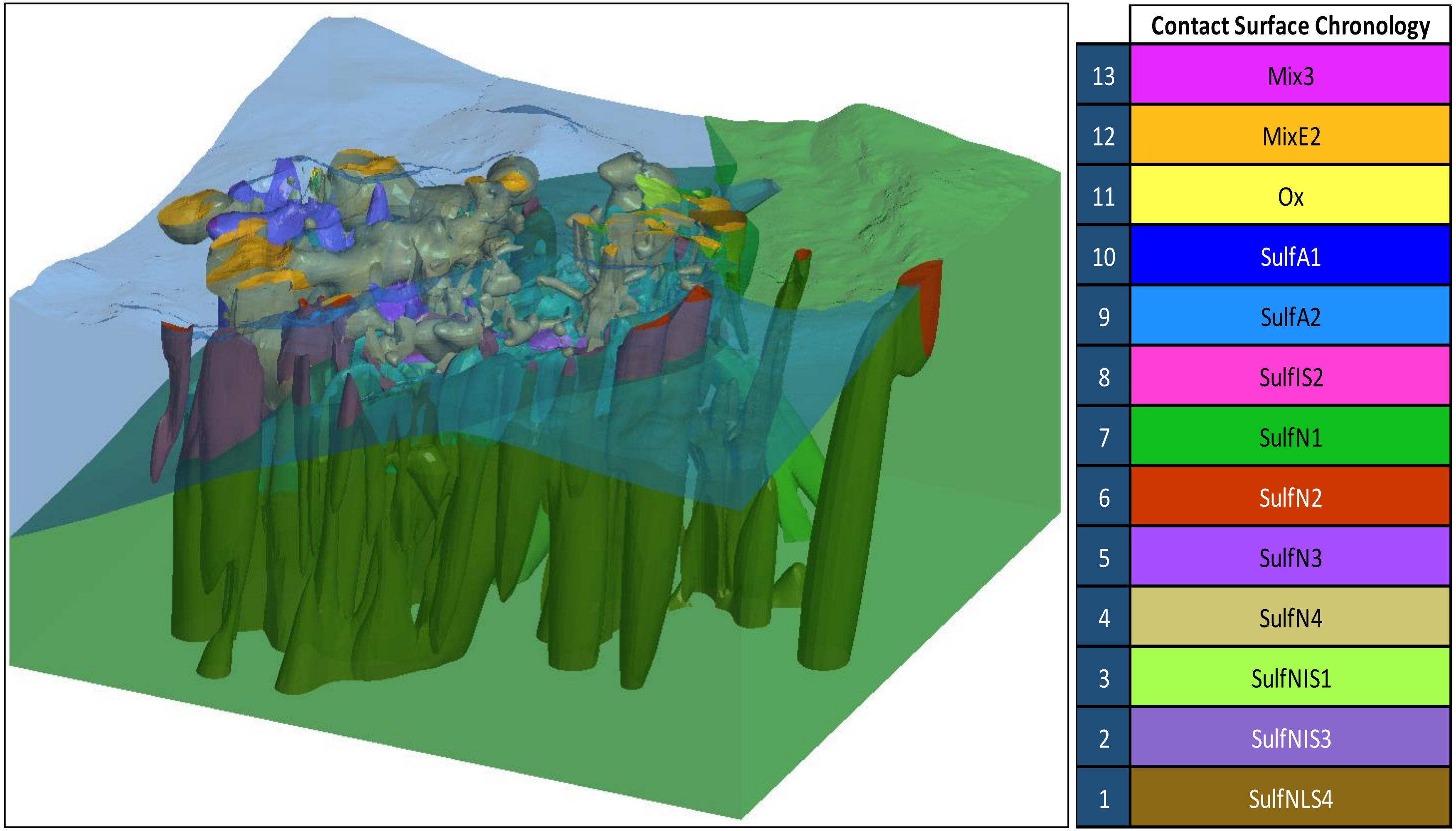


Figure 11-43 Isometric View of the Mineralization model

Source: (SRK, 2023)

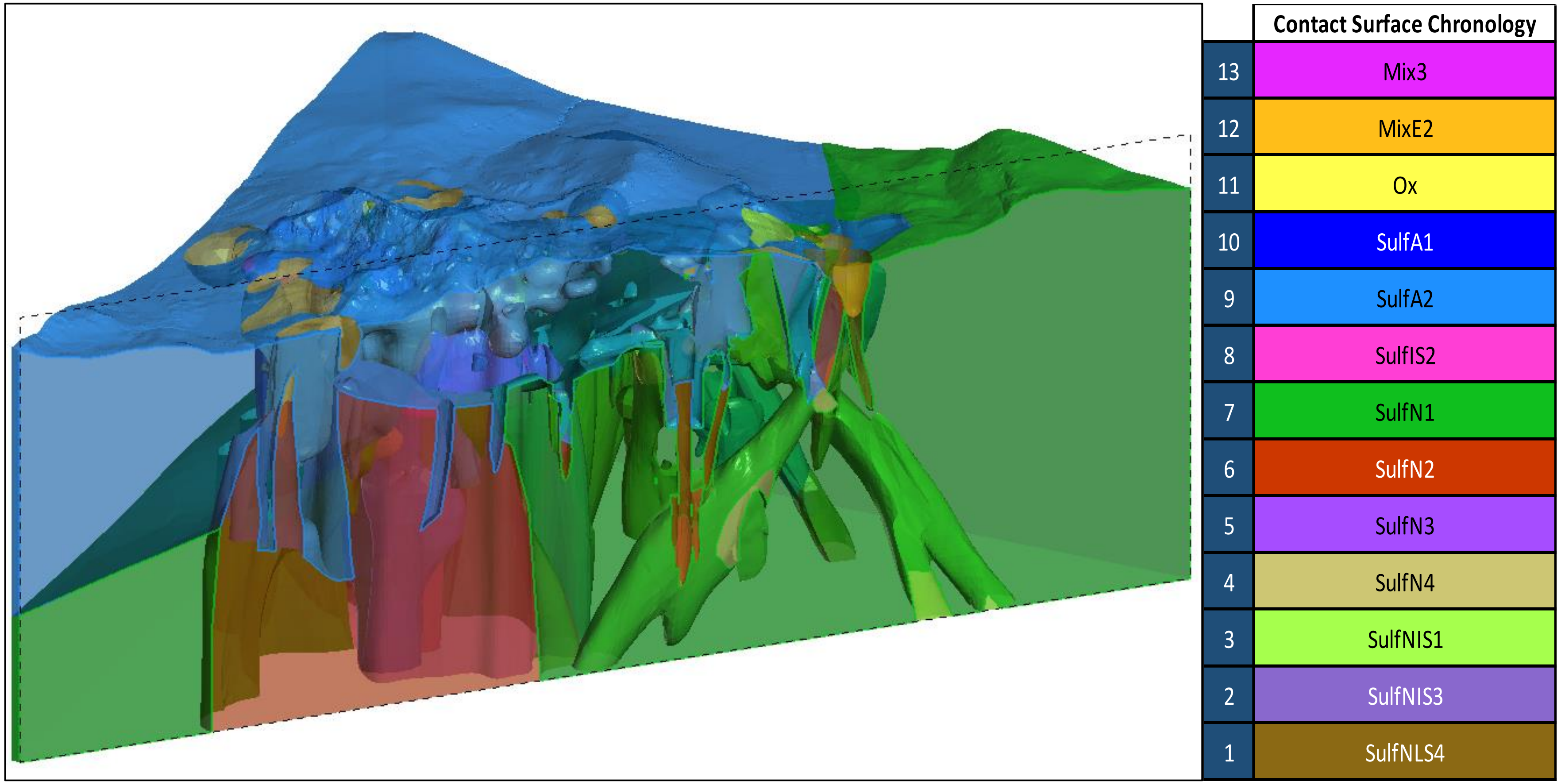


Figure 11-44: NE-SW oriented section of the Mineralization model

Source: (SRK, 2023)

11.1.2 Estimation Domains

The database used for mineral resource estimation was coded based on the 18 lithology solids (Figure 11-17) and the Minzone sulfide solid shared by Coimolache.

It should be noted that mineral resource estimation was only carried out in the sulfide zone, using the database encoded in that zone (Figure 11-45).

The estimation domains were defined based on box and whisker plots (Figure 11-46) and contact analysis (Figure 11-47) and to the extent permissible given the inherent genesis of the lithological domains (e.g. the endoskarn and skarn lithological domains were merged into a single estimation domain).

The union of the lithological domains and the coding of the estimation domains are presented in Table 11-5.

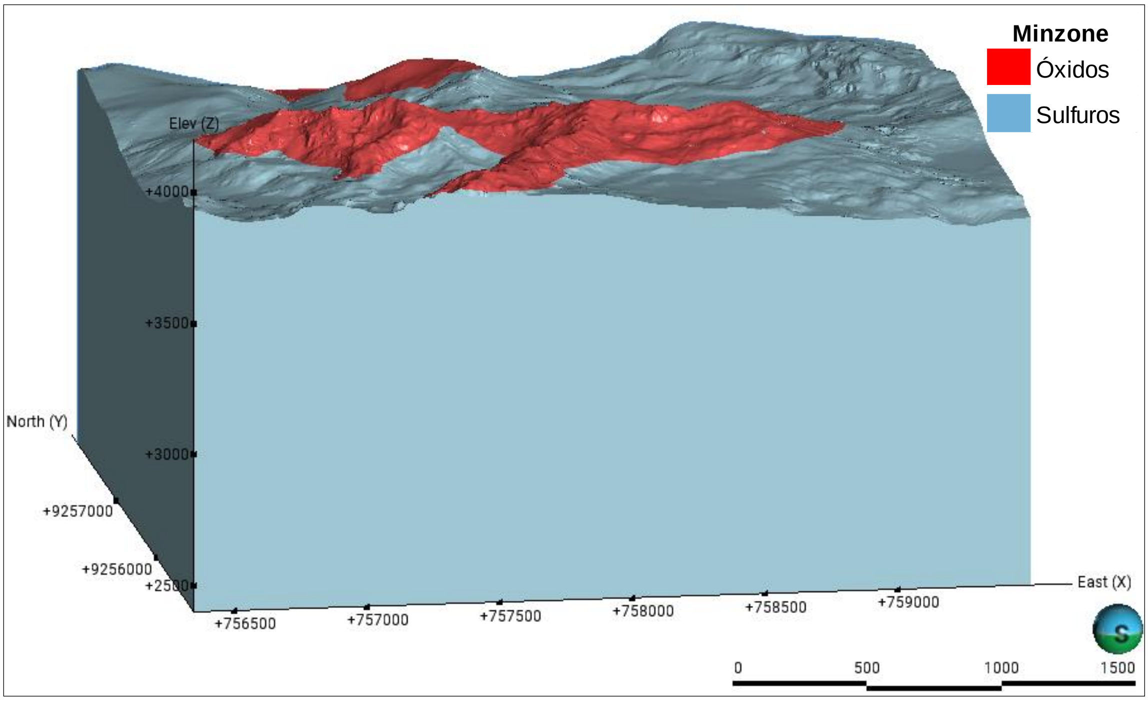


Figure 11-45: Tantahuatay Sulfuros Minzone that includes the oxide and sulfide zones.

Source: (SRK, 2023)

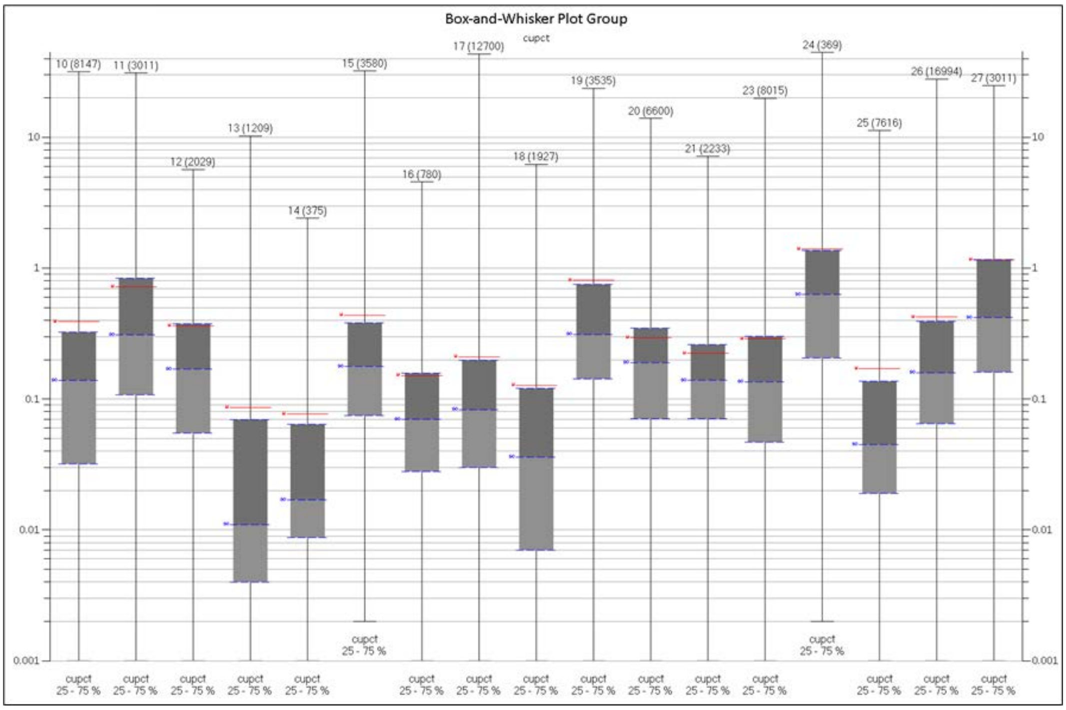


Figure 11-46: Box and Whisker according to lithological domains (including Regulus drillhole information)

Source: (SRK, 2023)

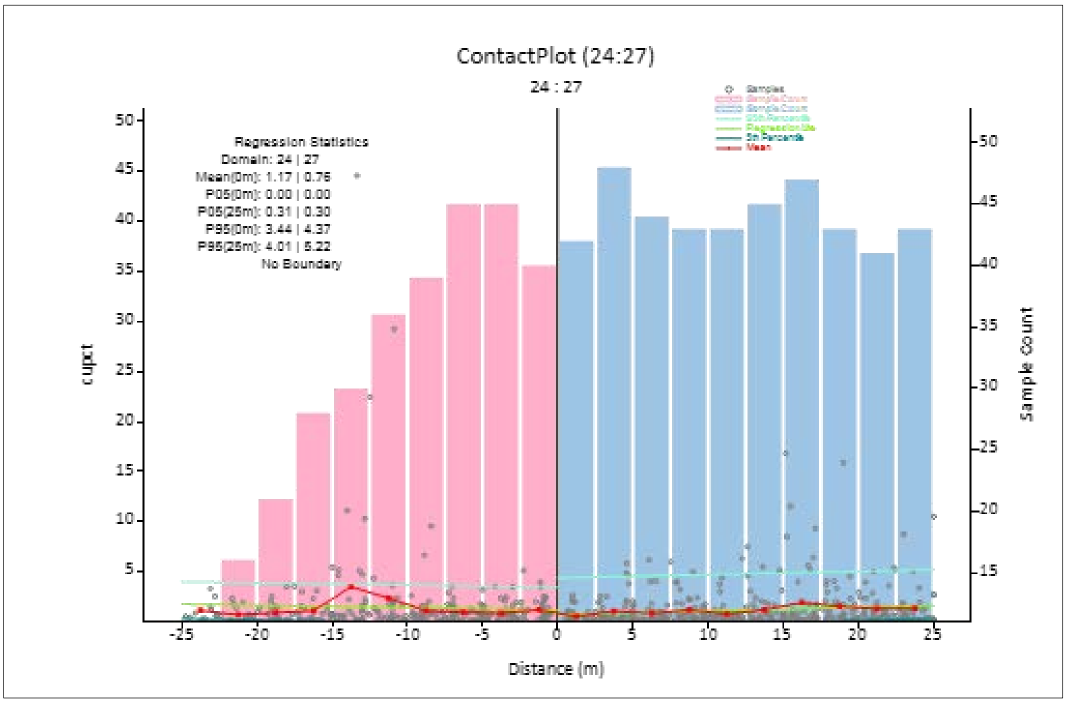


Figure 11-47: Contact analysis between the Vein domain (code 24) and the Volcaniclastic.

Source: (SRK, 2023)

Table 11-5: Summary of the estimation domain coding based on the lithological domains

Lithology Name	Lithology Code	Domain Code
Phreatic Breccia	10	10
Epithermal Hydrothermal Breccia	11	11
Skarn Hydrothermal Breccia	12	10
Quartzites	13	12
Diatrema	14	13
Endoskarn	15	14
Hornfels	16	15
PITA epitermal	17	16
PITA skarn	18	16
PTE Epitermal	19	17
PTE skarn	20	18
PTE Tiwinza	21	19
Pugpe	22	20
Skarn	23	14
Vein	24	21
Coherent Volcanic	25	22
Fragmental Volcanic	26	23
Volcaniclastic	27	21

Source: (SRK, 2023)

11.1.3 Available Data

The database used to generate the geological models (lithological, alteration and mineralization model) and the mineral resource estimation was made up of 615 diamond drillholes (179, 804.32 m), of which 534 drillings (128,732 m) correspond to Coimolache and 81 drillings (51,432 m) correspond to Regulus, and included the collar, survey, assay, lithology, density, mineralization, and alteration information tables.

Table 11-6 summarizes the general statistics of the Cu, Ag, Au, Pb, Zn, As, Sb, Cd, Bi and Hg samples from the Tantahuatay Sulfuros area.

Table 11-6: Statistical summary of the Tantahuatay Sulfuros database

Element	Samples	Median	Min.	Max.	CV	Std. Dev.
Cu (%)	101,281	0.31	0.00005	44.62	2.95	0.91
Ag (ppm)	101,424	8.23	0.1	9,950	4.85	39.88
Au (ppm)	101,421	0.22	0.001	339.83	6.42	1.41
Pb (ppm)	91,536	382.19	1	160,000	3.71	1,417.04
Zn (ppm)	91,540	665.75	0.5	200,000	4.70	3,126.28

Element	Samples	Median	Min.	Max.	CV	Std. Dev.
As (ppm)	90,619	991.18	0.5	149,000	2.99	2,968.21
Sb (ppm)	90,537	101.43	0.12	23,600	3.23	328.04
Cd (ppm)	84,304	4.30	0.5	1,515	4.11	17.65
Bi (ppm)	90,537	9.34	0.8	3,047	3.24	30.26
Hg (ppm)	54,898	1.04	0.01	329	3.33	3.46

Source: (SRK, 2023)

11.1.4 Exploratory Data Analysis

The estimate database provided by Buenaventura includes only the drillholes that enter the estimation; these holes have been differentiated according to lithological domain only in the sulfide zone (including Regulus and Buenaventura drillhole information). Table 11-7 summarizes the initial statistics of the data according to estimation domain.

Table 11-7: Summary of Assay data statistics according to estimation domain

Element	Domain	Total Samples	Min.	Max.	Median	Std. Dev.	CV	Variance
Ag (ppm)	103	10,176	0.1	1,872	7.74	27.09	3.50	734
	113	3,012	0.2	1,900	9.82	45.82	4.67	2,099
	123	1,215	0.2	1,195	5.92	45.66	7.71	2,084
	133	375	0.25	71.30	3.62	6.99	1.93	48.83
	143	11,598	0.1	9,950	10.05	99.63	9.91	9,927
	153	780	0.2	618	4.15	25.71	6.20	661
	163	14,627	0.1	532	4.56	13.83	3.03	191
	173	3,536	0.2	223	8.08	14.95	1.85	223
	183	6,591	0.2	605	3.58	15.75	4.40	248
	193	2,234	0.2	655	2.49	14.57	5.85	212
	213	3,376	0.1	1,000	18.98	55.32	2.91	3,059
	223	7,882	0.1	372	7.76	17.12	2.21	293
	233	16,993	0.1	613	6.27	18.40	2.93	338
As (ppm)	103	9,542	1	149,000	808.39	3,596.87	4.45	12,937,453
	113	2,796	5	124,000	2,657.56	4,845.73	1.82	23,481,048
	123	1,191	2	34,800	157.31	1,312.91	8.35	1,723,721
	133	375	2	5,620	222.20	608.17	2.74	369,873
	143	11,427	1	117,100	427.01	2,397.67	5.62	5,748,808
	153	741	2.5	14,500	165.60	830.20	5.01	689,231
	163	14,174	1	79,730	555.92	1,760.87	3.17	3,100,652
	173	3,505	0.5	72,850	2,349.43	4,969.82	2.12	24,699,145
	183	6,360	2	50,000	237.11	1,083.98	4.57	1,175,012
	193	2,028	3	12,600	307.96	680.43	2.21	462,981
	213	3,265	1	84,300	3,172.30	6,173.03	1.95	38,106,263

Element	Domain	Total Samples	Min.	Max.	Median	Std. Dev.	CV	Variance
	223	5,758	3	28,700	823.91	1,771.47	2.15	3,138,105
	233	16,277	2.5	108,000	1,249.24	3,330.94	2.67	11,095,168
Au (ppm)	103	10,176	0	339.83	0.34	3.60	10.63	12
	113	3,012	0.01	22.24	0.31	0.62	1.98	0.38
	123	1,215	0	3.45	0.07	0.20	2.70	0.04
	133	375	0	3.69	0.28	0.44	1.56	0.19
	143	11,598	0	151.5	0.27	1.95	7.35	3.78
	153	780	0.01	5.98	0.13	0.31	2.40	0.10
	163	14,624	0	19.65	0.12	0.38	3.11	0.14
	173	3,536	0.01	13.88	0.34	0.82	2.43	0.68
	183	6,591	0	29	0.14	0.52	3.69	0.27
	193	2,234	0.01	1.68	0.10	0.10	0.96	0.01
	213	3,376	0	27.25	0.64	1.40	2.17	1.95
	223	7,882	0.01	32.42	0.17	0.72	4.34	0.51
	233	16,993	0	52.87	0.18	0.58	3.24	0.34
Bi (ppm)	103	9,542	1	2,005	10.66	50.94	4.78	2,594
	113	2,780	1	493	10.68	15.15	1.42	229
	123	1,191	1	376	3.54	11.53	3.26	133
	133	375	1	65	4.23	7.88	1.87	62.14
	143	11,427	1	1,601	13.20	41.25	3.12	1,701
	153	741	1	65	5.33	6.33	1.19	40
	163	14,168	1	1,854	8.18	19.10	2.34	364
	173	3,497	5	486	10.06	18.43	1.83	339
	183	6,360	1	561	3.96	15.07	3.81	227
	193	2,028	5	185	7.97	6.96	0.87	48
	213	3,256	1	3,047	21.01	78.87	3.75	6,219
	223	5,754	1	399	7.48	8.96	1.20	80
	233	16,240	1	995	7.91	16.13	2.04	260
Cd (ppm)	103	9,498	0.5	1,016	6.04	23.85	3.95	568
	113	2,486	0.5	175.5	3.10	7.48	2.41	55
	123	1,191	0.5	269	2.22	10.67	4.80	113
	133	375	0.5	291	12.83	25.19	1.96	634
	143	10,937	0.5	1,486	12.35	34.14	2.77	1,165
	153	741	0.5	141	3.29	8.38	2.55	70
	163	12,834	0.5	1,515	2.69	16.72	6.21	279
	173	3,224	1	239	2.18	7.45	3.42	55
	183	6,355	0.5	359	2.16	9.60	4.44	92
	193	1,922	1	47	3.04	4.16	1.37	17

Element	Domain	Total Samples	Min.	Max.	Median	Std. Dev.	CV	Variance
	213	3,136	0.5	1,252	12.76	41.34	3.24	1,708
	223	5,245	0.5	717	1.91	11.13	5.84	123
	233	15,065	0.5	572	2.18	7.52	3.45	56
Cu (%)	103	10,160	0	31.8	0.39	1.09	2.81	1.19
	113	3,012	0	31.15	0.72	1.32	1.82	1.73
	123	1,216	0	10.25	0.09	0.40	4.60	0.16
	133	375	0	2.42	0.08	0.23	2.93	0.05
	143	11,598	0	32.3	0.34	0.87	2.59	0.76
	153	780	0	4.58	0.15	0.32	2.12	0.10
	163	14,627	0	43.4	0.20	0.62	3.10	0.38
	173	3,536	0	23.71	0.81	1.55	1.92	2.42
	183	6,591	0	14	0.30	0.49	1.67	0.24
	193	2,234	0	7.18	0.22	0.37	1.65	0.14
	213	3,376	0	44.62	1.19	2.27	1.91	5.15
	223	7,863	0	11.29	0.17	0.46	2.76	0.21
	233	16,988	0	27.9	0.43	0.99	2.33	0.98
Hg (ppm)	103	986	0.01	162.66	1.03	7.22	7.01	52
	113	2,382	0.01	77.08	1.13	2.44	2.17	5.96
	123	217	0.01	2.15	0.11	0.26	2.30	0.07
	133	-	-	-	-	-	-	-
	143	3,543	0.01	72.80	0.52	2.43	4.64	5.92
	153	212	0.01	3.69	0.12	0.34	2.87	0.11
	163	10,474	0.01	100	0.59	2.06	3.47	4.23
	173	2,989	0.01	81.92	1.00	2.55	2.55	6.48
	183	232	0.01	3.37	0.11	0.27	2.43	0.07
	193	2,028	0.01	23.75	0.33	0.86	2.64	0.74
	213	2,434	0.01	260.83	2.38	8.19	3.44	67
	223	4,978	0.01	205.38	1.05	3.20	3.05	10
	233	11,436	0.01	126.59	0.90	2.34	2.61	5.47
Pb (ppm)	103	10,075	1	53,200	450.03	1,543.62	3.43	2,382,762
	113	2,780	2	14,800	332.29	704.69	2.12	496,587
	123	1,216	1	83,100	250.90	3,279.37	13.07	10,754,291
	133	375	1	36,800	832.12	2,158.94	2.60	4,661,014
	143	11,589	1	258,000	653.68	3,897.28	5.96	15,188,774
	153	780	1	30,300	226.28	1,410.65	6.23	1,989,926
	163	14,239	1	41,700	282.20	682.62	2.42	465,967
	173	3,497	2	10,000	334.61	440.23	1.32	193,805
	183	6,507	1	35,600	111.17	809.33	7.28	655,009

Element	Domain	Total Samples	Min.	Max.	Median	Std. Dev.	CV	Variance
	193	2,028	12	3,465	425.75	410.34	0.96	168,380
	213	3,276	1	121,700	928.33	3,301.21	3.56	10,897,964
	223	5,754	2	15,600	264.26	420.66	1.59	176,953
	233	16,240	2	16,200	459.15	583.32	1.27	340,258
Sb (ppm)	103	9,542	2.5	12,100	117.84	365.05	3.10	133,261
	113	2,780	5	10,000	232.08	436.12	1.88	190,202
	123	1,191	2.5	9,780	73.25	457.48	6.25	209,291
	133	375	2.5	2,110	35.54	142.10	4.00	20,193
	143	11,427	2.5	12,300	58.19	269.79	4.64	72,788
	153	741	2.5	2,763	31.16	149.28	4.79	22,283
	163	14,168	2.5	7,470	62.54	213.38	3.41	45,530
	173	3,497	5	8,121	211.30	437.04	2.07	190,999
	183	6,360	2.5	23,600	66.17	599.83	9.07	359,799
	193	2,028	5	2,800	21.42	69.44	3.24	4,822
	213	3,256	2.5	7,608	280.96	563.95	2.01	318,042
	223	5,754	2	3,405	77.53	178.54	2.30	31,877
	233	16,240	2.5	10,000	111.46	295.37	2.65	87,245
Zn (ppm)	103	10,075	1	167,300	1,035.24	4,194.92	4.05	17,597,310
	113	2,780	1	23,690	184.77	851.59	4.61	725,198
	123	1,216	1	28,800	227.44	1,302.66	5.73	1,696,924
	133	375	1	43,100	1,852.39	3,684.42	1.99	13,574,968
	143	11,589	2	116,500	2,645.06	5,792.42	2.19	33,552,135
	153	780	1	18,900	528.06	1,266.55	2.40	1,604,156
	163	14,239	0.5	108,670	278.78	1,408.25	5.05	1,983,177
	173	3,497	0.5	61,420	184.79	1,923.31	10.41	3,699,105
	183	6,512	1	69,600	346.12	1,700.95	4.91	2,893,230
	193	2,028	5.6	9,552.1	375.69	728.19	1.94	530,265
	213	3,276	4.7	200,000	1,940.38	7,566.93	3.90	57,258,373
	223	5,754	0.5	68,400	149.39	1,143.30	7.65	1,307,130
	233	16,240	0.5	79,800	196.50	1,349.37	6.87	1,820,800

Source: (Buenaventura, 2023)

11.1.5 Capping and compositing

Assessment of outliers and their influence on mean grades within each estimation domain was carried out using cumulative probability plots. This analysis, which was carried out in all domains, was based on the visual interpretation of the probability curve, the distribution of grades, percentiles, and coefficients of variation; losses of metal content did not exceed 5%. This evaluation was carried out for all elements by estimation domain.

Figure 11-48 and Figure 11-49 show examples of the capping performed for Ag and Au in the 213 domain respectively. Table 11-8 summarizes the capping values used for Cu, Ag, Au and As per estimation domain and presents the parameters considered for capping (number of capped samples, loss of metal content, percentile, coefficient of variation) by element and estimation domain. Table 11-9 presents the statistics of capped samples by domain for each element.

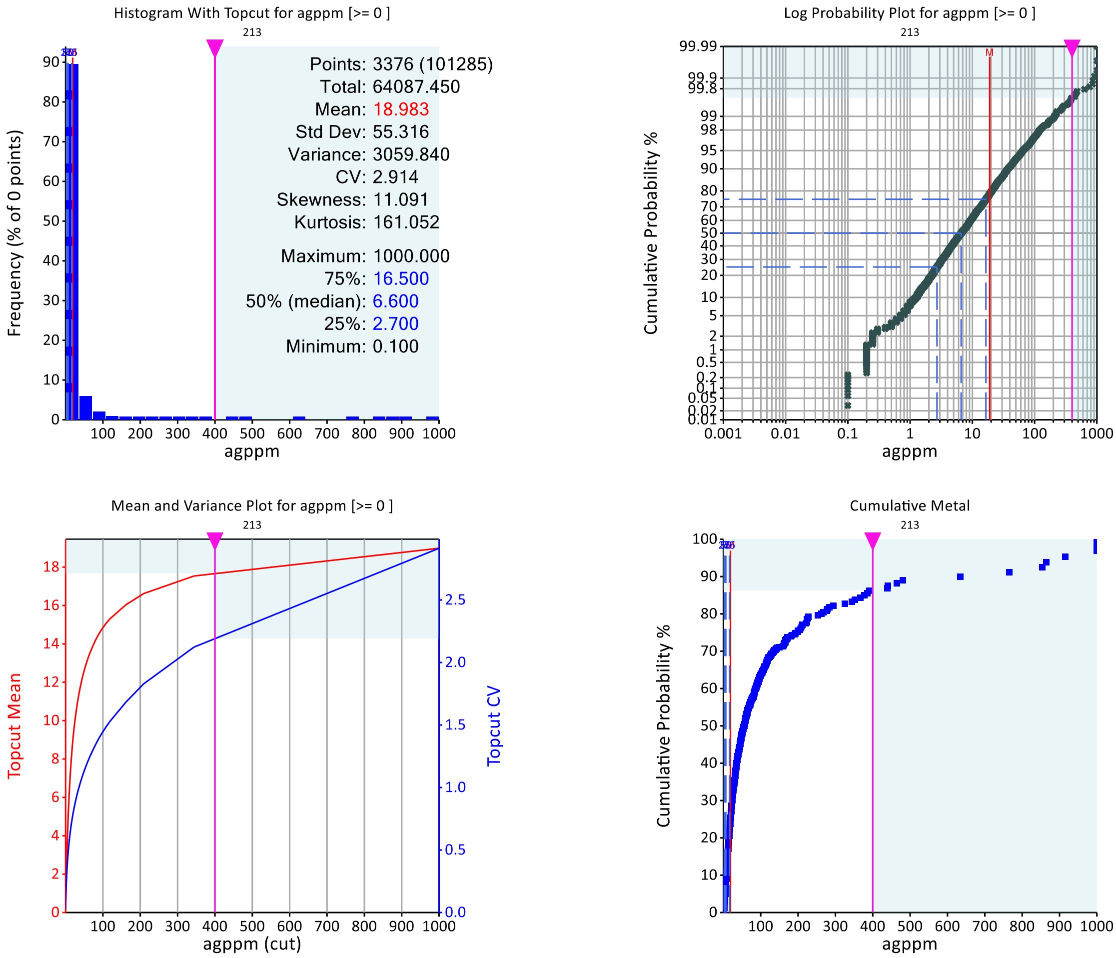


Figure 11-48: Cumulative probability curve for the evaluation of Ag capping in domain 213.

Source: (SRK, 2023)

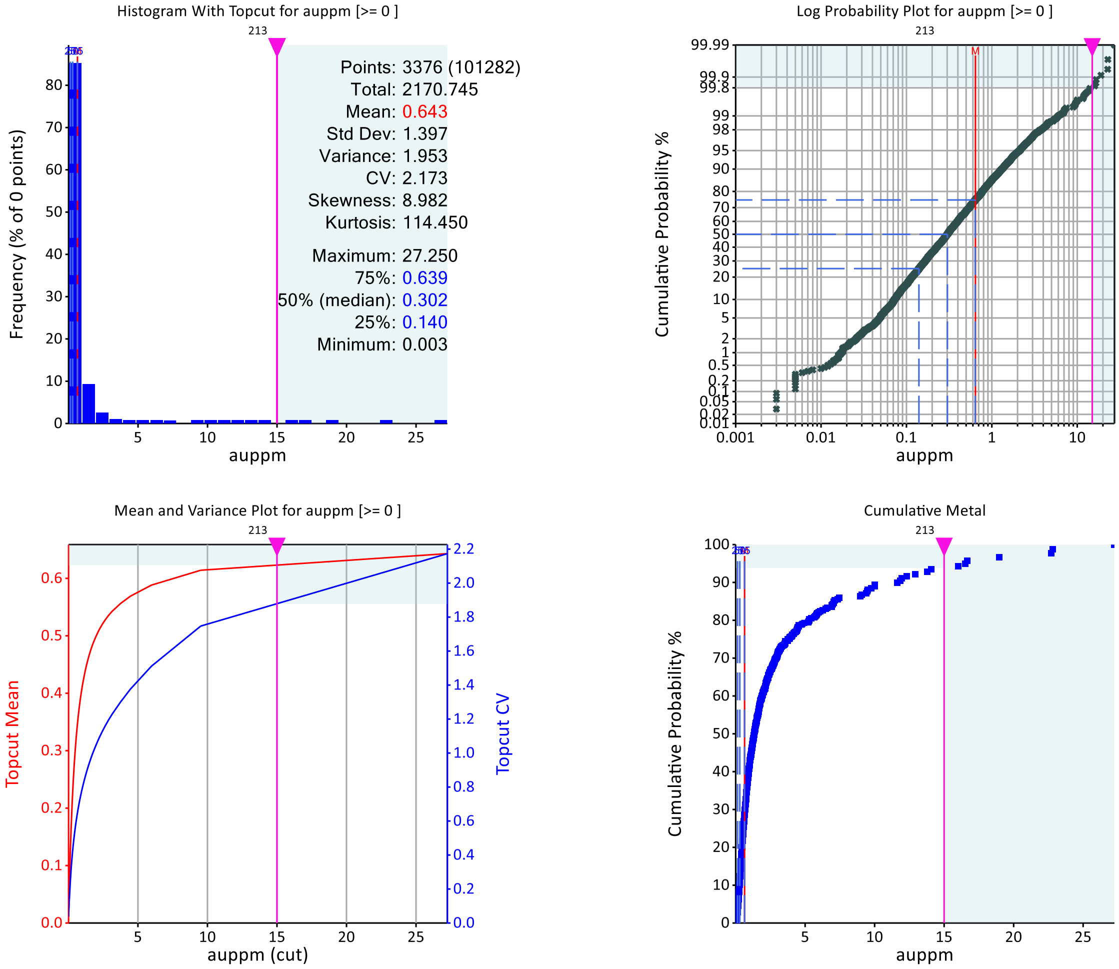


Figure 11-49: Cumulative probability curve for the evaluation of Au capping in domain 213.

Source: (SRK, 2023)

Table 11-8: Capping values for Cu, Ag, Au and As applied by estimation domain.

Domain	Cu (%)	Ag (ppm)	Au (ppm)	As (ppm)
103	10	280	13	70,000
113	11	200	4.5	40,000
123	1	200	1.1	8,000
133	0.8	30	2	3,300
143	10	550	15	50,000
153	1.4	100	1.5	8,000
163	5.5	170	4.8	25,000
173	10	120	8	50,000
183	5.5	100	4	15,000
193	2.5	40	0.6	5,000

Domain	Cu (%)	Ag (ppm)	Au (ppm)	As (ppm)
213	18	400	15	55,000
223	4	230	4	20,000
233	11	205	9.5	52,000

Source: (SRK, 2023)

Table 11-9: Statistics of capped samples

Element	Domain	Total samples	Median	Capping	N° Samples Capped	% CM red.	Topcut Percentile (%)	CV
Ag (ppm)	103	10,177	7.52	280	9	2.9	99.9	2.52
	113	3,012	8.57	200	9	12.7	99.7	1.9
	123	1,216	4.32	200	9	26.9	99.3	4.88
	133	375	3.39	30	6	6.5	98.4	1.61
	143	11,598	8.85	550	13	12	99.9	3.14
	153	780	3.18	100	3	23.3	99.6	2.85
	163	14,627	4.46	170	13	2.1	99.9	2.68
	173	3,536	7.98	120	8	1.3	99.8	1.75
	183	6,591	3.23	100	14	9.7	99.8	2.39
	193	2,234	2.12	40	6	14.8	99.7	1.53
	213	3,376	17.78	400	12	6.3	99.6	2.22
	223	7,882	7.7	230	7	0.8	99.9	2.1
	233	16,993	6.06	205	20	3.4	99.9	2.33
As (ppm)	103	9,542	790.21	70,000	5	2.2	99.9	3.89
	113	2,796	2,618.18	40,000	5	1.5	99.8	1.62
	123	1,191	119.27	8,000	3	24.2	99.7	4.82
	133	375	203.96	3,300	4	8.2	98.9	2.31
	143	11,427	413.62	50,000	5	3.1	100	4.71
	153	741	152.11	8,000	2	8.1	99.7	4.18
	163	14,174	545.83	25,000	9	1.8	99.9	2.76
	173	3,505	2,334.40	50,000	5	0.6	99.9	2.06
	183	6,360	226.65	15,000	7	4.4	99.9	3.53
	193	2,028	296.28	5,000	8	3.8	99.6	1.83
	213	3,265	3,150.11	55,000	6	0.7	99.8	1.89
	223	5,758	819.81	20,000	6	0.5	99.9	2.1
	233	16,277	1,238.95	52,000	7	0.8	100	2.52
Au (ppm)	103	10,177	0.29	13	11	15.1	99.9	2.76
	113	3,012	0.3	4.5	6	3.5	99.8	1.36

Element	Domain	Total samples	Median	Capping	N° Samples Capped	% CM red.	Topcut Percentile (%)	CV
	123	1,216	0.07	1.1	9	6.6	99.3	2.15
	133	375	0.27	2	3	4.1	99.2	1.36
	143	11,598	0.24	15	1	0	100	3.28
	153	780	0.12	1.5	6	7.2	99.2	1.68
	163	14,627	0.12	4.8	13	3.5	99.9	2.12
	173	3,536	0.33	8	9	2.4	99.7	2.18
	183	6,591	0.13	4	9	6	99.9	1.98
	193	2,234	0.1	0.6	9	1.4	99.6	0.85
	213	3,376	0.63	15	7	1.7	99.8	1.98
	223	7,882	0.15	4	9	10.3	99.9	1.56
	233	16,993	0.18	9.5	6	2.1	100	2.18
Bi (ppm)	103	9,542	9.24	300	28	13.3	99.7	2.54
	113	2,780	10.37	80	11	2.9	99.6	0.97
	123	1,191	3.25	40	3	8.2	99.7	1.27
	133	375	3.98	35	6	5.7	98.4	1.61
	143	11,427	12.75	550	13	3.5	99.9	2.39
	153	741	5.24	35	8	1.8	98.9	1.09
	163	14,168	7.95	120	14	2.7	99.9	1.15
	173	3,497	9.57	110	13	4.9	99.6	1.19
	183	6,360	3.59	70	19	9.2	99.7	1.88
	193	2,028	7.84	25	121	1.7	94	0.7
	213	3,256	19.4	550	8	7.7	99.8	2.32
	223	5,754	7.36	60	12	1.6	99.8	0.9
	233	16,240	7.6	100	36	3.8	99.8	1.14
Cd (ppm)	103	9,498	5.77	230	16	4.6	99.8	3.15
	113	2,486	2.92	45	10	5.8	99.6	1.76
	123	1,191	1.9	55	8	14.5	99.3	3.1
	133	375	11.85	100	6	7.6	98.4	1.5
	143	10,937	11.94	300	14	3.3	99.9	2.1
	153	741	3.03	40	4	7.9	99.5	1.86
	163	12,834	2.48	130	8	7.8	99.9	2.48
	173	3,224	1.86	20	15	14.8	99.5	1.11
	183	6,355	2.03	100	11	6.1	99.8	3.32
	193	1,922	3.02	30	6	0.7	99.7	1.31

Element	Domain	Total samples	Median	Capping	N° Samples Capped	% CM red.	Topcut Percentile (%)	CV
	213	3,136	12.26	350	7	3.9	99.8	2.65
	223	5,245	1.7	45	6	10.8	99.9	1.57
	233	15,065	2.09	70	12	4.2	99.9	2.04
Cu (%)	103	10,177	0.36	6.9	46	6.5	99.5	2.13
	113	3,012	0.7	8	14	2.9	99.5	1.55
	123	1,216	0.08	3	3	10.6	99.8	2.94
	133	375	0.08	2.42	1	0	99.7	2.93
	143	11,598	0.32	7.5	32	3.6	99.7	2.07
	153	780	0.14	1.5	7	7.7	99.1	1.53
	163	14,627	0.19	5	26	3.7	99.8	2.15
	173	3,536	0.79	10	14	2.5	99.6	1.73
	183	6,591	0.29	3.7	20	2.3	99.7	1.4
	193	2,234	0.21	1.8	14	5.2	99.4	1.16
	213	3,376	1.16	13.5	22	2.8	99.3	1.7
	223	7,882	0.16	3	37	5.5	99.5	2.25
	233	16,993	0.42	9.8	28	1.8	99.8	2.1
Hg (ppm)	103	986	0.63	9	8	39.2	99.2	1.87
	113	2,382	1.07	16	5	4.9	99.8	1.38
	123	217	0.09	0.7	6	18	97.2	1.49
	133	0	0	-				0
	143	3,543	0.47	17	9	10.4	99.7	3.18
	153	212	0.09	0.6	6	26.1	97.2	1.57
	163	10,474	0.57	25	9	4.2	99.9	2.2
	173	2,989	0.95	20	6	4.6	99.8	1.75
	183	232	0.09	0.6	4	17	98.3	1.35
	193	2,028	0.31	5	8	6.2	99.6	1.82
	213	2,434	2.18	50	8	8.3	99.7	2.14
	223	4,978	1	15	2	4.4	100	1.13
	233	11,436	0.87	23	14	3	99.9	1.79
Pb (ppm)	103	10,075	436.83	19,000	12	2.9	99.9	2.93
	113	2,780	318.02	5,000	9	4.3	99.7	1.6
	123	1,216	105.66	5,000	9	57.9	99.3	4.66
	133	375	755.32	8,000	1	9.2	99.7	1.53
	143	11,589	591.22	30,000	10	9.6	99.9	2.87

Element	Domain	Total samples	Median	Capping	N° Samples Capped	% CM red.	Topcut Percentile (%)	CV
	153	780	160.04	4,000	4	29.3	99.5	2.72
	163	14,239	275.07	7,500	9	2.5	99.9	1.64
	173	3,497	326.05	2,800	11	2.6	99.7	0.98
	183	6,507	106.28	15,000	7	4.4	99.9	6.24
	193	2,028	423.95	2,400	6	0.4	99.7	0.94
	213	3,276	848.35	20,000	9	8.6	99.7	2.16
	223	5,754	256.88	2,500	14	2.8	99.8	1.18
	233	16,240	456.13	8,000	13	0.7	99.9	1.16
Sb (ppm)	103	9,542	116.28	5,400	6	1.3	99.9	2.86
	113	2,780	225.55	2,950	7	2.8	99.7	1.54
	123	1,191	63.3	3,350	5	13.6	99.6	5.06
	133	375	22.66	200	11	36.2	97.1	1.84
	143	11,427	54.65	3,000	13	6.1	99.9	3.21
	153	741	25.02	700	4	19.7	99.5	2.89
	163	14,168	61.71	4,000	9	1.3	99.9	3.13
	173	3,497	208.19	3,200	7	1.5	99.8	1.94
	183	6,360	49.95	2,500	18	24.5	99.7	3.74
	193	2,028	19.62	230	6	8.4	99.7	1.32
	213	3,256	278.04	5,000	10	1	99.7	1.92
	223	5,754	76.9	2,500	6	0.8	99.9	2.19
	233	16,240	110.37	4,800	11	1	99.9	2.47
Zn (ppm)	103	10,075	981.63	40,000	22	5.2	99.8	3.27
	113	2,780	160.98	5,000	13	12.9	99.5	3.26
	123	1,216	180.5	6,000	9	20.6	99.3	3.71
	133	375	1,769.99	20,000	3	4.4	99.2	1.7
	143	11,589	2,591.87	50,000	34	2	99.7	1.99
	153	780	506.31	8,000	3	4.1	99.6	2.06
	163	14,239	255.77	10,000	24	8.3	99.8	2.89
	173	3,497	124.76	9,000	8	32.5	99.8	4.61
	183	6,512	319.44	16,000	11	7.7	99.8	3.56
	193	2,028	370.76	5,000	5	1.3	99.8	1.85
	213	3,276	1,691.72	40,000	21	12.8	99.4	2.8
	223	5,754	126.06	5,000	10	15.6	99.8	3.17
	233	16,240	172.68	10,000	20	12.1	99.9	3.83

Source: (SRK, 2023)

After capping, composition of the diamond drill samples was performed within each estimation domain. SRK performed an analysis of the copper information to identify the composite size that best suits the deposit and evaluate values proportional to the height of the bank (2, 4, 5, 6 and 8 m; Table 11-10). It was found that at 5 m, there is less variability and the value of the mean increases (Figure 11-50); however, 4 m was chosen as this size best suits the size of the cell (10 m x 10 m x 8 m) requested by Buenaventura (Section 1450).

Table 11-10: Summary of composited Cu data statistics at different lengths to define the best option.

Statistics	Uncomposited	Composite 2m	Composite 4m	Composite 5m	Composite 6m	Composite 8m
Data	101,281	74,120	37,148	29,720	24,782	18,638
Median (%)	0.31	0.35	0.35	0.35	0.35	0.35
Std. Dev (%)	0.91	0.79	0.72	0.69	0.67	0.65
CV	2.95	2.28	2.07	1.99	1.93	1.85
Variance (%)	0.83	0.63	0.52	0.48	0.45	0.42
Min. (%)	0.00005	0.00	0.00	0.00	0.00	0.00
Max (%)	44.62	27.82	18.73	15.47	12.64	12.66

Source: (SRK, 2023)

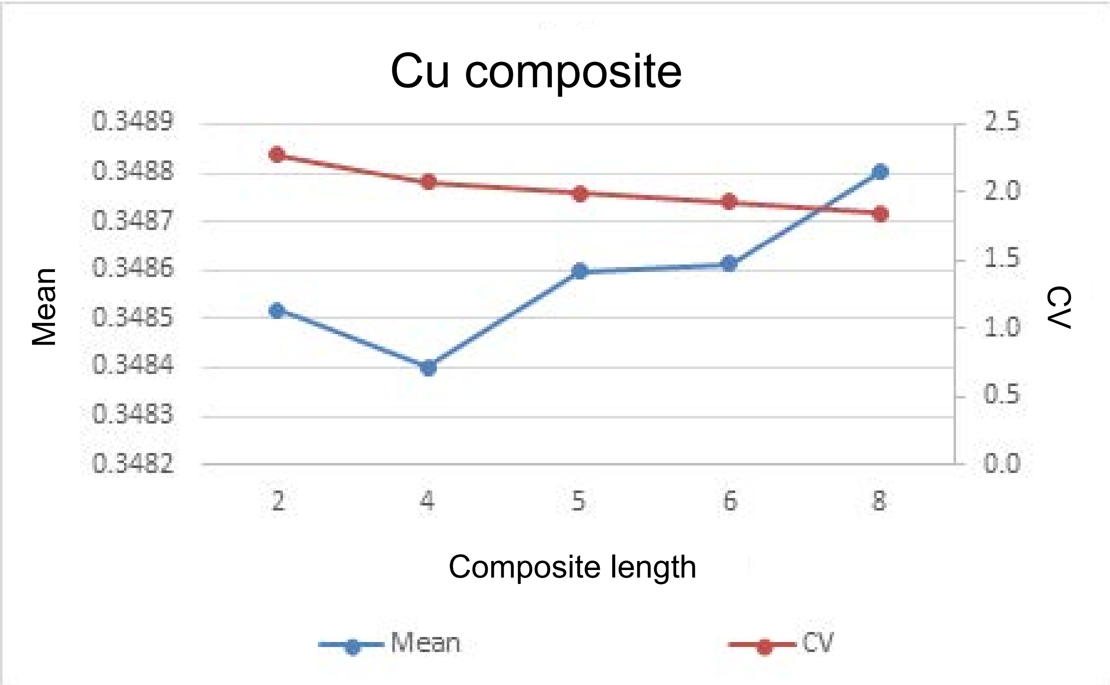


Figure 11-50: Analysis of the support at 2, 4, 5, 6 and 8 m to define the optimal composition size.

Source: (SRK, 2023)

SRK evaluated the composition by comparing the original sample (unweighed) interval Cu statistics and the compositional length-weighted Cu statistics generated by Buenaventura. SRK verified that there was no significant bias in the mean value after compositing. Table 11-11 summarizes the statistics of the composite data for Tantahuatay Sulfuros.

For the rest of the elements (Au, Ag, As, Pb, Zn, Sb, Bi, Hg and Cd) SRK carried out the entire procedure.

Table 11-11: Summary of the estimation domain composite data statistics.

Domain	Element	Samples	Min.	Max.	Median	Std. Dev.	CV
103	Cu (%)	4,212	0.001	6.6	0.33	0.59	1.78
	Ag (ppm)	4,212	0.1	225.06	7.01	13.56	1.94
	Au (ppm)	4,212	0.003	9.54	0.26	0.58	2.22
	Pb (ppm)	4,159	1	16,329.71	429.88	1,006.93	2.34
	Zn (ppm)	4,159	1.6	37,585.81	951.73	2,567.25	2.70
	As (ppm)	3,899	2.15	47,850	708.80	2,246.29	3.17
	Sb (ppm)	3,899	2.5	3,722.77	108.58	238.08	2.19
	Cd (ppm)	3,877	0.5	198.71	5.61	14.42	2.57
	Bi (ppm)	3,899	1	294.68	8.90	18.05	2.03
	Hg (ppm)	471	0.01	9	0.63	1.01	1.62
113	Cu (%)	1,339	0.002	7.09	0.66	0.85	1.29
	Ag (ppm)	1,339	0.2	200	8.35	13.84	1.66
	Au (ppm)	1,339	0.02	4.34	0.29	0.32	1.10
	Pb (ppm)	1,219	8.88	4,936.25	319.41	464.69	1.46
	Zn (ppm)	1,219	2.2	4,925.63	163.10	478.77	2.94
	As (ppm)	1,235	5	28,872.79	2,448.30	3,221.66	1.32
	Sb (ppm)	1,219	5	2,417.61	212.72	271.74	1.28
	Cd (ppm)	1,084	0.64	44.25	2.99	4.6	1.54
	Bi (ppm)	1,219	1	64.6	10.31	8.39	0.81
	Hg (ppm)	1,033	0.03	16	1.03	1.17	1.14
123	Cu (%)	473	0.001	2.89	0.07	0.17	2.53
	Ag (ppm)	473	0.2	168.29	4.04	15.13	3.75
	Au (ppm)	473	0.003	0.84	0.06	0.11	1.72
	Pb (ppm)	473	1	4,624	104.91	413.52	3.95
	Zn (ppm)	473	1	6,000	180.47	602.73	3.34
	As (ppm)	461	2	7,991.5	113.58	465.99	4.10
	Sb (ppm)	461	2.5	2,726.91	56.89	220.72	3.88
	Cd (ppm)	461	0.5	55	1.98	5.19	2.61
	Bi (ppm)	461	1	23	3.30	3.11	0.94
	Hg (ppm)	105	0.01	0.56	0.09	0.1	1.08
133	Cu (%)	141	0.001	0.81	0.06	0.12	1.96

Domain	Element	Samples	Min.	Max.	Median	Std. Dev.	CV
	Ag (ppm)	141	0.25	22.24	2.92	3.51	1.20
	Au (ppm)	141	0.003	1.64	0.27	0.29	1.10
	Pb (ppm)	141	1	7,452.5	776.44	969	1.25
	Zn (ppm)	141	1.24	14,227.5	1,687.34	2,242.37	1.33
	As (ppm)	141	2.5	1,856.75	164.95	278.86	1.69
	Sb (ppm)	141	2.5	200	20.03	33.36	1.67
	Cd (ppm)	141	0.5	87.33	11.43	13.45	1.18
	Bi (ppm)	141	1	22.63	3.47	4.12	1.19
	Hg (ppm)	-	-	-	-	-	-
143	Cu (%)	4,822	0	6.57	0.31	0.51	1.64
	Ag (ppm)	4,822	0.1	550	8.27	20.51	2.48
	Au (ppm)	4,822	0.002	14.24	0.23	0.59	2.59
	Pb (ppm)	4,817	3.15	30,000	576.72	1,201.61	2.08
	Zn (ppm)	4,817	3.75	50,000	2,544.05	4,121.75	1.62
	As (ppm)	4,740	1	34,410.7	396.57	1,389.05	3.50
	Sb (ppm)	4,740	2.5	1,929.34	51.79	119.84	2.31
	Cd (ppm)	4,495	0.5	300	11.72	19.04	1.62
	Bi (ppm)	4,740	1	466.71	12.34	21.86	1.77
	Hg (ppm)	1,623	0.01	16	0.46	1.28	2.77
153	Cu (%)	293	0.002	1.45	0.15	0.19	1.25
	Ag (ppm)	293	0.2	62.65	3.34	6.67	2.00
	Au (ppm)	293	0.009	1.03	0.13	0.17	1.31
	Pb (ppm)	293	2.25	2,490	158.06	299.87	1.90
	Zn (ppm)	293	5.11	4,997.57	530.82	815.95	1.54
	As (ppm)	275	2.56	6,363.5	175.15	595.53	3.40
	Sb (ppm)	275	2.5	523.31	28.11	59.32	2.11
	Cd (ppm)	275	0.5	25	3.33	4.37	1.31
	Bi (ppm)	275	1	31.08	5.61	5	0.89
	Hg (ppm)	88	0.01	0.58	0.09	0.1	1.18
163	Cu (%)	6,651	0	4.01	0.18	0.29	1.64
	Ag (ppm)	6,651	0.10	122.38	4.21	9.34	2.22
	Au (ppm)	6,651	0.001	4.03	0.11	0.18	1.63
	Pb (ppm)	6,469	1.63	5,973.99	270.16	366	1.35
	Zn (ppm)	6,469	1.31	9,602.19	249.59	582.36	2.33
	As (ppm)	6,439	2.04	17,113.06	506.01	1,065.45	2.11
	Sb (ppm)	6,433	2.50	2,552.93	56.64	123.38	2.18
	Cd (ppm)	5,784	0.50	97.75	2.44	4.51	1.85
	Bi (ppm)	6,433	1	87.54	8.08	7.74	0.96
	Hg (ppm)	4,824	0.01	18.88	0.55	0.93	1.70

Domain	Element	Samples	Min.	Max.	Median	Std. Dev.	CV
173	Cu (%)	1,582	0.008	9.82	0.76	1.17	1.53
	Ag (ppm)	1,582	0.2	94	7.75	11.7	1.51
	Au (ppm)	1,582	0.013	7.29	0.33	0.62	1.89
	Pb (ppm)	1,562	9	2,539.71	326.34	285.06	0.87
	Zn (ppm)	1,562	6.86	9,000	125.39	501.03	4.00
	As (ppm)	1,570	11.75	47,867.1	2,248.94	4,092.2	1.82
	Sb (ppm)	1,562	5	2,921.13	201.40	347.06	1.72
	Cd (ppm)	1,425	1	20	1.90	1.78	0.94
	Bi (ppm)	1,562	5	109.55	9.71	9.41	0.97
	Hg (ppm)	1,318	0.01	11.8	0.93	1.27	1.36
183	Cu (%)	2,618	0	2.63	0.27	0.29	1.06
	Ag (ppm)	2,618	0.2	67.06	2.98	4.66	1.56
	Au (ppm)	2,618	0.002	3.3	0.12	0.17	1.40
	Pb (ppm)	2,576	1	6,766.02	93.59	348.97	3.73
	Zn (ppm)	2,579	1	12,056.50	287.51	743.89	2.59
	As (ppm)	2,502	2	13,718.79	205.63	481.19	2.34
	Sb (ppm)	2,502	2.5	2,289.77	45.35	114.8	2.53
	Cd (ppm)	2,499	0.5	56	1.85	3.8	2.06
	Bi (ppm)	2,502	1	48.5	3.49	4.71	1.35
	Hg (ppm)	114	0.01	0.44	0.09	0.09	1.00
193	Cu (%)	1,082	0.003	1.8	0.21	0.21	0.97
	Ag (ppm)	1,082	0.2	32.71	2.10	2.54	1.21
	Au (ppm)	1,082	0.005	0.51	0.10	0.07	0.68
	Pb (ppm)	979	16.75	2,356.36	418.10	368.22	0.88
	Zn (ppm)	979	6.88	4,723.55	378.96	625.92	1.65
	As (ppm)	979	3	4,367.99	296.79	467.08	1.57
	Sb (ppm)	979	5	198.37	19.45	21.05	1.08
	Cd (ppm)	926	1	25	3.05	3.43	1.12
	Bi (ppm)	979	5	25	7.87	4.94	0.63
	Hg (ppm)	979	0.01	4.57	0.30	0.46	1.54
213	Cu (%)	1,404	0.002	11.44	1.10	1.55	1.41
	Ag (ppm)	1,404	0.1	400	17.36	33.09	1.91
	Au (ppm)	1,404	0.003	15	0.63	1.08	1.71
	Pb (ppm)	1,354	2.35	15,425.22	834.32	1,488.55	1.78
	Zn (ppm)	1,354	12	40 000	1,643.18	4,108.15	2.50
	As (ppm)	1,353	3.28	43,566.38	3,062.58	4,644.5	1.52
	Sb (ppm)	1,344	2.5	3,922.14	271.59	406.11	1.50
	Cd (ppm)	1,284	0.5	320.98	12.07	27.01	2.24
	Bi (ppm)	1,344	1	446.1	19.31	34.9	1.81

Domain	Element	Samples	Min.	Max.	Median	Std. Dev.	CV
	Hg (ppm)	1,006	0.01	33.09	2.10	3.57	1.70
223	Cu (%)	3,712	0	5.39	0.15	0.3	1.95
	Ag (ppm)	3,712	0.14	200.33	7.41	13.52	1.82
	Au (ppm)	3,712	0.005	4	0.14	0.2	1.37
	Pb (ppm)	2,676	2	2,500	254.04	276.32	1.09
	Zn (ppm)	2,676	0.63	5,000	130.23	371.7	2.85
	As (ppm)	2,680	3	15,008.84	768.10	1,334.18	1.74
	Sb (ppm)	2,676	2.5	2,321.69	72.88	133.03	1.83
	Cd (ppm)	2,441	0.5	45	1.73	2.45	1.41
	Bi (ppm)	2,676	1	56.5	7.34	6.01	0.82
	Hg (ppm)	2,335	0.01	10.42	1.00	0.95	0.95
233	Cu (%)	7,583	0.001	8.52	0.39	0.65	1.66
	Ag (ppm)	7,583	0.1	205	5.78	11.67	2.02
	Au (ppm)	7,583	0.002	6.71	0.16	0.28	1.68
	Pb (ppm)	7,198	3	7,700	457.40	460.29	1.01
	Zn (ppm)	7,198	1.24	10,000	169.88	560.47	3.30
	As (ppm)	7,235	3	37,040.33	1,134.33	2,219.54	1.96
	Sb (ppm)	7,198	2.5	3,887.36	100.40	185.24	1.85
	Cd (ppm)	6,616	0.5	70	2.10	3.55	1.69
	Bi (ppm)	7,198	1	100	7.71	7.13	0.92
	Hg (ppm)	5,183	0.01	23	0.83	1.21	1.46

Source: SRK, 2023

11.1.6 Spatial Continuity

Buenaventura performed a variography analysis using Snowden Supervisor software for each element according to estimation domain. The analysis utilized a conventional semivariogram and entailed visual interpretation of the mineralization trends and interpretation of variographic maps that show orientations of best continuity, the entire procedure was validated by SRK.

To carry out the variographic analysis, information from Regulus and Buenaventura drillings was included.

The variograms were constructed using two or three spherical type structures (the latter only in special cases). Sufficient data exist to model directional variograms in domains 103, 113, 143, 163, 173, 183, 193, 213, 223, and 233; however, there was not enough data for domains 123, 133, and 153, so the variogram was modeled as omnidirectional. The variograms were made using “Normal Score” and were re-transformed so that they could be used in the estimation.

Figure 11-51 and Figure 11-52 show the variograms resulting from the continuity analysis for Au and Ag in the 213 domain, respectively.

In

Table 11-12 the variographic parameters for Cu, Ag, Au and As are summarized by estimation domain. Review Appendix A for information on secondary elements.

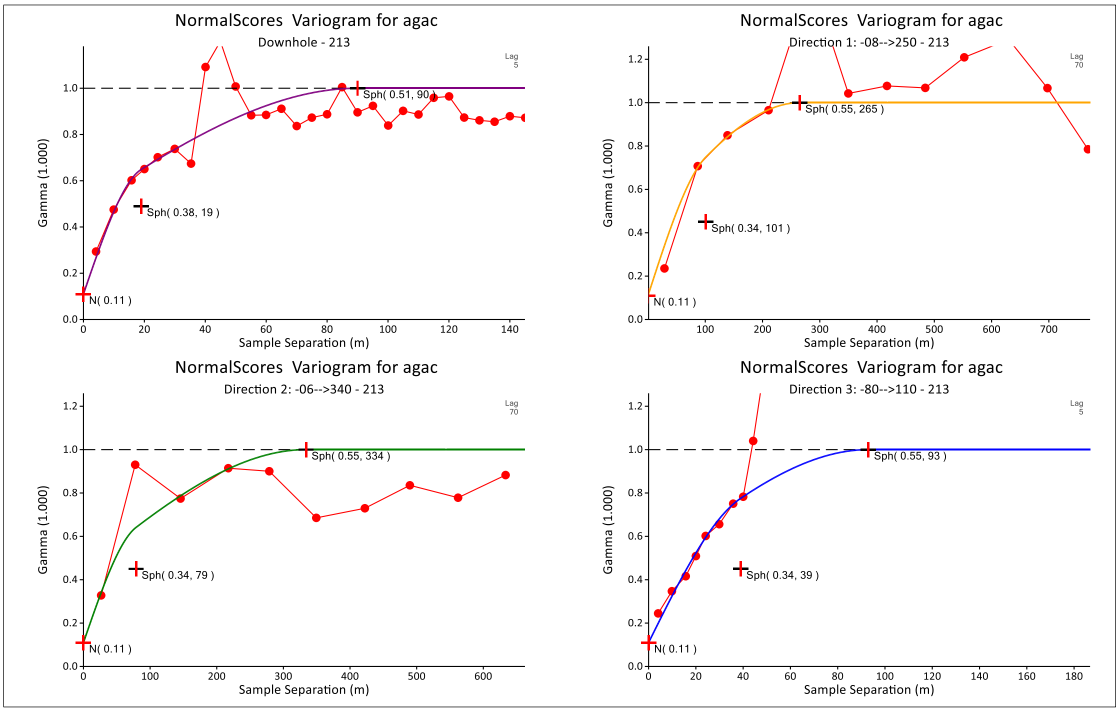


Figure 11-51: Modeled variogram for Ag in the domain 213.

Source: SRK, 2023

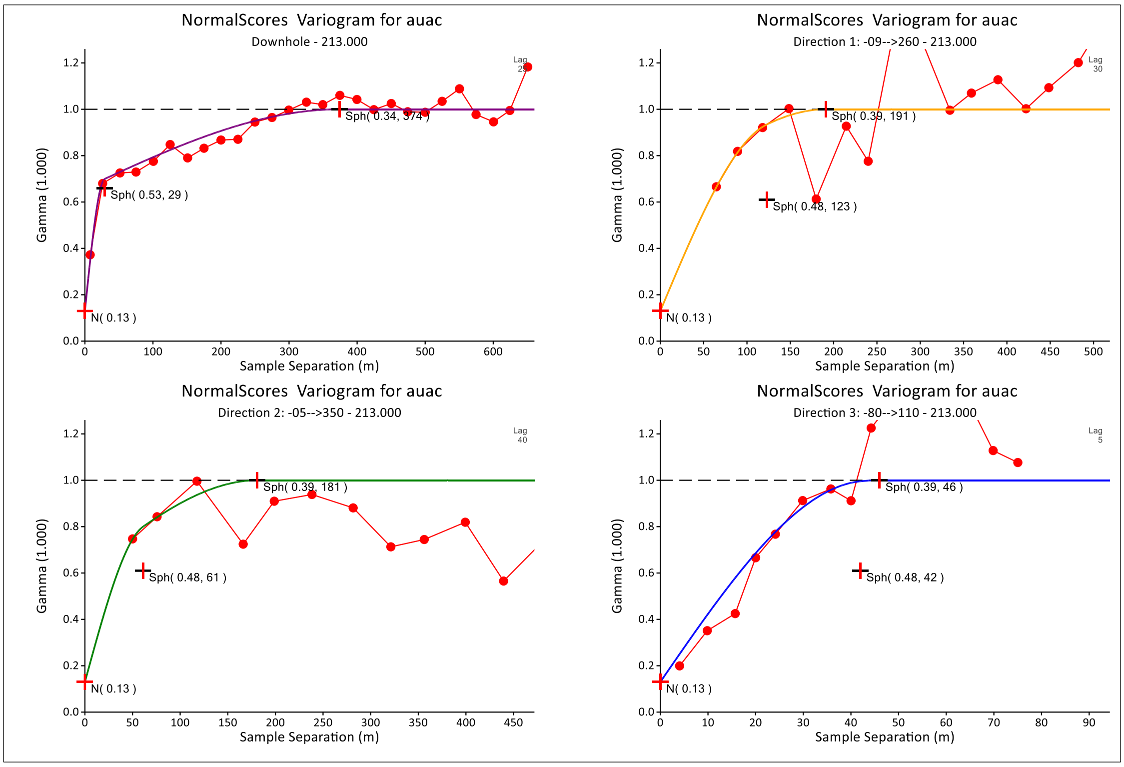


Figure 11-52: Modeled variogram for Au in the domain 213.

Source: SRK, 2023

Table 11-12: Summary of estimation domain variographic parameters of Cu, Ag, Au and As.

Domain	Element	Bearing	Plunge	Dip	C0§	C1§	Ranges 1	C2§	Ranges 2	C3§	Ranges 3
103	Cu	120	80	-90	0.16	0.53	63 ;51 ;82	0.31	265 ;235 ;212		
	Ag	57.27	67.73	154.49	0.36	0.29	26 ;16 ;81	0.35	481 ;153 ;143		
	Au	57.27	67.73	154.49	0.27	0.38	28 ;8 ;81	0.21	343 ;36 ; 109	0.14	536 ;258 ;488
	As	105	0	-85	0.36	0.26	93 ;57 ;103	0.25	282 ;278 ;332	0.13	684 ;536 ;582
113	Cu	0	90	-40	0.13	0.30	14 ;16 ;25	0.57	233 ;186 ;156		
	Ag	128.25	9.85	100.15	0.27	0.23	60 ;20 ;159	0.50	472 ;519 ;254		
	Au	129.13	-4.92	79.96	0.28	0.27	96 ;25 ;298	0.44	496 ;293 ; 333		
	As	20	-70.00	-90.00	0.33	0.24	291 ;132 ;115	0.43	532 ;251 ;431		
123	Cu	0	90	-90	0.56	0.29	190 ;190 ;190	0.15	284 ;284 ;284		
	Ag	0	0	0	0.39	0.37	11 ;11 ;11	0.24	180 ;180 ;180		
	Au	0	0	0	0.35	0.25	14 ;14 ;14	0.41	180 ;180 ; 180		
	As	0	0	0	0.43	0.38	17 ;18 ;15	0.19	88 ;88 ;97		
133	Cu	0	90	-90	0.56	0.29	190 ;190 ;190	0.15	284 ;284 ;284		
	Ag	0	0	0	0.30	0.24	50 ;50 ;50	0.46	54 ;54 ;54		
	Au	0	0	0	0.51	0.27	31 ;31 ;31	0.22	60 ;60 ; 60		
	As	0	0	0	0.15	0.71	45 ;45 ;45	0.14	79 ;79 ;79		
143	Cu	220	60	0	0.18	0.43	33 ;26 ;17	0.39	566 ;228 ;94		
	Ag	139.93	-1.71	-4.70	0.40	0.51	110 ;176 ;36	0.09	303 ;536 ;401		
	Au	120	0	10	0.29	0.44	51 ;126 ;23	0.28	306 ;397 ; 213		
	As	90	0	5	0.40	0.49	121 ;113 ;41	0.11	363 ;378 ;131		
153	Cu	0	90	-90	0.49	0.21	123 ;123 ;123	0.30	125 ;125 ;125		
	Ag	0	0	0	0.48	0.21	17 ;17 ;17	0.31	200 ;200 ;200		
	Au	0	0	0	0.41	0.26	17 ;17 ;17	0.32	105 ;105 ; 105		
	As	0	0	0	0.48	0.32	12 ;12 ;12	0.20	137 ;137 ;137		
163	Cu	245	37	16	0.16	0.37	9 ;63 ;33	0.47	293 ;368 ;367		
	Ag	30	80	0	0.38	0.31	57 ;125 ;77	0.31	286 ;126 ;288		
	Au	20	-30	0	0.23	0.24	71 ;29 ;64	0.29	113 ;110 ; 392	0.24	344 ;409 ;665
	As	125	0	-60	0.32	0.25	38 ;221 ;56	0.25	187 ;581 ;288	0.19	736 ;639 ;1408
173	Cu	20	0	-40	0.09	0.49	63 ;18 ;21	0.42	198 ;181 ;172		

Domain	Element	Bearing	Plunge	Dip	C0§	C1§	Ranges 1	C2§	Ranges 2	C3§	Ranges 3
	Ag	10	-10	-90	0.24	0.38	108 ;27 ;41	0.38	169 ;432 ;159		
	Au	190	-10	-90	0.20	0.50	157 ;35 ;188	0.30	176 ;323 ; 189		
	As	230	75	0	0.29	0.24	34 ;31 ;24	0.47	619 ;351 ;149		
183	Cu	52.20	-46	-60	0.09	0.36	12 ;11 ;1	0.55	119 ;64 ;26		
	Ag	67.88	4.53	-64.92	0.40	0.25	112 ;10 ;142	0.35	472 ;170 ;367		
	Au	0	90	-80	0.30	0.28	20 ;75 ;79	0.22	83 ;85 ; 411	0.21	696 ;151 ;536
	As	230	75	0	0.36	0.42	24 ;180 ;129	0.22	601 ;360 ;149		
193	Cu	54	32	-46	0.14	0.27	328 ;3 ;15	0.59	328 ;182 ;84		
	Ag	66.78	-62.01	43.22	0.29	0.25	20 ;126 ;46	0.45	189 ;592 ;353		
	Au	220	80	0	0.19	0.29	108 ;84 ;45	0.52	439 ;412 ;216		
	As	230	75	0	0.26	0.27	112 ;31 ;24	0.47	436 ;351 ;149		
213	Cu	0	0	-90	0.10	0.59	63 ;19 ;32	0.31	330 ;128 ;343		
	Ag	249.57	-7.64	173.53	0.19	0.51	101 ;79 ;39	0.30	265 ;334 ;93		
	Au	259.62	-8.65	174.96	0.22	0.59	123 ;61 ;42	0.19	191 ;181 ; 46		
	As	125	0	-60	0.26	0.33	35 ;23 ;90	0.41	629 ;206 ;413		
223	Cu	-40	0	-90	0.13	0.54	63 ;48 ;50	0.34	1011 ;833 ;377		
	Ag	4.59	8.18	5.78	0.27	0.33	59 ;58 ;17	0.41	738 ;447 ;262		
	Au	4.59	8.18	5.78	0.27	0.33	59 ;58 ;17	0.41	738 ;447 ;262		
	As	90	0	5	0.10	0.57	59 ;54 ;101	0.34	303 ;329 ;222		
233	Cu	90	0	-90	0.11	0.46	17 ;15 ;25	0.43	267 ;328 ;334		
	Ag	20	0	170	0.20	0.34	79 ;30 ;18	0.26	191 ;136 ;90		
	Au	20	0	170	0.20	0.34	79 ;30 ;18	0.26	191 ;136 ; 90	0.20	728 ;531 ;281
	As	90	0	5	0.30	0.44	91 ;89 ;40	0.26	188 ;154 ;232		

Source: (SRK, 2023)

11.1.7 Block Model Methodology

Buenaventura generated the block model for grade interpolation in Vulcan© software. The block model was based on the lithological model and covered all the current pit. The block model has a cell size of 10 m x 10 m x 8 m. The location of the generated block model covers the Coimolache and Regulus concessions. Table 11-13 summarizes the parameters used to build the block model.

Table 11-13: Characteristics of the Tantahuatay Sulfuros block model

Coordinates	Minimum (m)	Maximum (m)	Block size (m)	No. of blocks
East	756,350	759,500	10	315
North	9,255,060	9,258,000	10	294
Elevation	2,400	4,200	8	225

Source: Buenaventura (2023)

11.1.8 Estimation Plan

Estimation parameters were defined with Quantitative Kriging Neighborhood Analysis (QKNA) using Supervisor© software. The estimation of Cu, As, Au, Ag, Pb, Zn, Sb, Cd, Bi and Hg grades for each domain was executed in the Vulcan© software. The estimation methods used were Ordinary Kriging (OK), Inverse Distance (ID), and Nearest Neighbor (NN) interpolation for validation purposes.

QKNA analysis was used to determine the maximum number of samples to prevent excessive smoothing of the estimate and minimize the screen effect that increases the number of negative weights assigned to the data. Additionally, this analysis was used to determine the minimum number of samples as well as scopes and the discretization, which were subsequently refined with local, global and visual validations. Generally, a minimum of 2 samples and a maximum of 24 samples were used as a starting point, with a maximum of 2 samples per drillhole. From this configuration, the appropriate parameters for each domain were determined. In some cases, the use of octants was also necessary.

Additionally, an outlier restriction was applied based on a range of 20m. Within 20 m, high grade values are used in the estimation; however, beyond 20 m, capping is applied to these samples. The 20 m range for outlier restriction was based on bench size and visual confirmation that the influence of high grades is adequately controlled at that distance.

The estimation parameters used for Cu, Ag, Au and As are shown in Table 11-14, Table 11-15, Table 11-16 and Table 11-17, respectively. Table 11-18 shows the restrictions applied to Au and Ag per estimation domain. Review Appendix B for information on secondary elements.

Table 11-14: Estimation parameters for Cu according to domain

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max comps /oct	Max comps /DDH
103	1	200	75	50	4	12	3	3	1

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max comps /oct	Max comps /DDH
	2	250	125	100	4	12	3	2	1
	3	300	150	125	3	7	3	1	1
	4	900	600	500	1	5	0	1	1
113	1	100	80	40	4	12	3	3	1
	2	150	120	60	4	12	3	2	1
	3	200	160	80	3	12	3	1	1
	4	600	180	240	1	7	3	1	1
123	1	75	75	75	4	12	3	3	1
	2	100	100	100	4	12	3	2	1
	3	250	250	250	3	7	3	1	1
	4	500	500	500	1	5	3	1	1
133	1	50	50	50	4	14	3	3	1
	2	60	60	60	4	14	3	2	1
	3	100	100	100	3	12	0	1	1
	4	200	200	200	3	12	0	1	1
143	1	150	50	30	4	22	3	3	1
	2	250	90	80	4	22	3	2	1
	3	300	180	160	3	22	0	1	1
	4	600	360	320	1	7	0	1	1
153	1	40	40	40	4	12	3	3	1
	2	80	80	80	4	12	3	2	1
	3	240	240	240	3	5	0	1	1
	4	480	480	480	1	5	0	1	1
163	1	100	90	60	4	12	3	3	1
	2	120	100	80	4	12	3	2	1
	3	240	200	160	3	9	0	1	1
	4	480	400	320	1	7	0	1	1
173	1	50	80	120	4	12	3	3	1
	2	70	100	180	4	12	3	2	1
	3	140	200	250	3	7	0	1	1
	4	280	400	500	1	5	0	1	1
183	1	160	100	60	4	18	3	3	1
	2	240	150	80	4	22	3	2	1
	3	320	200	120	3	12	0	1	1
	4	480	300	160	3	12	0	1	1
193	1	80	35	35	4	12	3	3	1
	2	100	50	50	4	12	3	2	1

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max comps /oct	Max comps /DDH
	3	140	75	60	2	5	0	1	1
	4	280	150	120	2	5	0	1	1
213	1	100	30	60	3	12	0	1	1
	2	125	40	80	3	9	0	1	1
	3	200	75	100	3	7	0	1	1
	4	450	200	300	1	7	0	1	1
223	1	100	50	45	3	12	0	1	1
	2	125	70	90	3	9	0	1	1
	3	150	140	180	3	9	0	1	1
	4	500	480	560	1	7	0	1	1
233	1	80	100	100	4	12	3	3	1
	2	130	115	115	4	12	3	2	1
	3	260	230	230	3	7	0	1	1
	4	520	460	460	1	5	0	1	1

Table 11-15: Estimation parameters for Ag according to domain

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max comps /oct	Max comps /DDH
103	1	100	100	100	4	12	2	4	4
	2	200	200	200	3	12	2	4	4
	3	300	300	300	2	12	2	5	2
	4	500	500	500	2	12	2	5	2
113	1	100	80	40	4	12	2	4	4
	2	200	160	80	3	12	2	4	4
	3	350	300	160	2	12	2	5	2
	4	600	400	400	2	12	2	5	2
123	1	100	100	100	5	16	3	4	2
	2	200	200	200	7	12	3	3	2
	3	300	300	300	4	10	2	3	2
	4	800	800	800	4	10	2	5	2
133	1	50	50	70	4	12	2	4	4
	2	160	160	240	3	12	2	4	4
	3	300	300	500	2	12	2	5	2
	4	600	600	1000	2	12	2	5	2
143	1	75	75	75	8	16	3	5	4
	2	150	150	150	12	24	3	6	4

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max comps /oct	Max comps /DDH
	3	300	300	300	4	16	2	6	2
	4	600	600	600	4	16	2	6	2
153	1	50	50	50	6	16	3	5	4
	2	100	100	100	12	24	3	8	4
	3	200	200	200	4	16	2	6	2
	4	500	500	500	4	16	2	6	2
163	1	75	75	75	4	16	3	4	4
	2	150	150	150	6	12	3	4	4
	3	200	200	200	2	16	2	4	2
	4	500	500	500	2	16	2	4	2
173	1	50	40	25	3	12	2	6	4
	2	100	80	50	3	9	2	4	4
	3	200	150	150	2	5	2	2	2
	4	500	500	500	2	5	2	2	2
183	1	100	100	100	8	16	3	5	4
	2	200	200	200	12	24	3	6	4
	3	300	300	300	4	16	2	6	2
	4	500	500	500	4	16	2	6	2
193	1	60	75	60	4	16	3	3	4
	2	120	225	120	4	20	3	6	4
	3	235	450	240	8	32	2	10	2
	4	470	900	480	8	32	2	10	2
213	1	50	50	50	4	16	3	4	4
	2	100	100	100	6	12	3	4	4
	3	200	200	200	2	16	2	4	2
	4	500	500	500	2	16	2	4	2
223	1	60	50	40	3	8	3	2	4
	2	120	100	80	4	12	3	4	4
	3	250	220	200	2	12	2	4	2
	4	500	500	500	2	12	2	4	2
233	1	75	50	75	4	16	3	3	4
	2	150	100	150	4	20	3	6	4
	3	500	200	500	8	32	2	10	2
	4	1000	500	1000	8	32	2	10	2

Source: SRK (2023)

Table 11-16: Estimation parameters for Au according to domain

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max. comps/oct	Max. comps /probing
103	1	100	100	100	3	16	3	4	4
	2	250	250	250	6	12	3	4	4
	3	400	400	400	2	16	2	4	2
	4	900	600	500	2	16	2	4	2
113	1	50	40	30	4	12	2	4	4
	2	200	160	80	3	12	2	4	4
	3	300	180	160	2	12	2	5	2
	4	600	300	240	2	12	2	5	2
123	1	25	25	25	2	9	2	4	4
	2	150	150	150	3	7	2	4	4
	3	250	250	250	3	5	2	5	2
	4	500	500	500	3	5	2	5	2
133	1	60	35	40	4	16	3	4	4
	2	335	320	215	4	20	3	5	4
	3	500	500	425	8	32	2	5	2
	4	1000	1000	850	8	32	2	5	2
143	1	50	50	50	8	16	3	5	4
	2	100	100	100	12	24	3	6	4
	3	300	180	160	4	16	2	6	2
	4	600	360	320	4	16	2	6	2
153	1	50	50	50	6	16	3	5	4
	2	100	100	100	12	24	3	8	4
	3	240	240	240	4	16	2	6	2
	4	480	480	480	4	16	2	6	2
163	1	50	50	50	4	16	3	4	4
	2	100	100	100	6	12	3	4	4
	3	240	200	160	2	16	2	4	2
	4	480	400	320	2	16	2	4	2
173	1	60	50	40	3	12	2	6	4
	2	120	100	70	3	9	2	4	4
	3	250	200	250	2	5	2	2	2
	4	500	400	500	2	5	2	2	2
183	1	100	100	100	8	16	3	5	4
	2	200	200	200	12	24	3	6	4
	3	320	320	320	4	16	2	6	2
	4	480	480	480	4	16	2	6	2

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Min. oct	Max. comps/oct	Max. comps /probing
193	1	60	100	60	4	16	3	3	4
	2	120	225	120	4	20	3	6	4
	3	235	450	240	8	32	2	10	2
	4	470	900	480	8	32	2	10	2
213	1	50	50	50	4	16	3	4	4
	2	100	100	100	6	12	3	4	4
	3	200	200	200	2	16	2	4	2
	4	500	500	500	2	16	2	4	2
223	1	75	50	40	3	8	3	2	4
	2	150	70	60	4	12	3	4	4
	3	200	140	120	2	12	2	4	2
	4	500	500	500	2	12	2	4	2
233	1	75	50	75	4	16	3	3	4
	2	150	115	150	4	20	3	6	4
	3	500	155	500	8	32	2	10	2
	4	1000	500	1000	8	32	2	10	2

Source: (SRK, 2023)

Table 11-17: Estimation parameters for As according to domain

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Max comps/probing
103	1	75	70	25	5	12	4
	2	125	110	50	5	12	4
	3	250	220	100	5	12	4
	4	500	440	200	5	12	4
	5	1000	880	500	1	5	3
113	1	50	25	25	5	12	4
	2	85	50	40	5	12	4
	3	170	100	80	5	12	4
	4	340	200	160	5	12	4
	5	800	500	500	1	6	3
123	1	35	35	35	5	12	4
	2	70	70	70	5	12	4
	3	140	140	140	3	8	2
	4	280	280	280	3	8	2
	5	800	800	800	1	20	10
133	1	50	50	50	5	12	4
	2	70	70	70	5	12	4

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Max comps/probing
	3	140	140	140	5	12	4
	4	280	280	280	5	12	4
	5	800	800	800	1	6	3
143	1	50	50	30	5	12	4
	2	100	75	50	5	12	4
	3	200	150	100	5	12	4
	4	400	300	200	3	8	2
	5	1000	800	800	1	20	3
153	1	30	30	30	6	20	5
	2	60	60	60	6	20	5
	3	120	120	120	3	15	2
	4	240	240	240	6	20	5
	5	800	800	800	1	30	10
163	1	40	40	25	5	12	4
	2	80	75	50	5	12	4
	3	160	150	100	5	12	4
	4	320	300	200	5	15	4
	5	800	800	800	4	8	4
173	1	35	35	20	5	12	4
	2	70	60	35	5	12	4
	3	140	120	70	5	12	4
	4	280	240	140	5	12	4
	5	800	800	600	1	6	3
183	1	25	25	40	6	15	5
	2	50	35	65	6	20	5
	3	100	70	130	6	20	5
	4	200	140	260	5	12	4
	5	800	600	800	1	6	3
193	1	40	25	30	5	12	4
	2	75	30	50	5	12	4
	3	150	60	100	5	12	4
	4	300	120	200	5	12	4
	5	800	600	600	1	15	10
213	1	30	50	40	5	12	4
	2	65	100	60	5	12	4
	3	130	200	120	5	12	4
	4	260	400	240	5	12	4
	5	800	1000	700	1	6	3

Domain	Pass	1st Range (m)	2nd Range (m)	3rd Range (m)	Min. comps	Max. comps	Max comps/probing
223	1	50	30	15	5	12	4
	2	70	45	30	5	12	4
	3	140	90	60	5	12	4
	4	280	180	120	5	12	4
	5	800	600	600	1	30	3
233	1	30	40	55	5	12	4
	2	65	65	110	5	12	4
	3	130	130	220	5	12	4
	4	260	260	440	3	6	2
	5	800	800	1000	1	6	3

Source: (SRK, 2023)

Table 11-18: Restrictions for Au and Ag

Domain	Element	HY Limit	HY Major	HY Semi	HY Minor
103	Au	6.5	20	20	20
	Ag	140	20	20	20
113	Au	2.18	20	20	20
	Ag	100	20	20	20
123	Au	0.65	20	20	20
	Ag	140	20	20	20
133	Au	1.6	20	20	20
	Ag	20	20	20	20
143	Au	8	20	20	20
	Ag	170	20	20	20
153	Au	0.9	20	20	20
	Ag	55	20	20	20
163	Au	1.85	20	20	20
	Ag	100	20	20	20
173	Au	5	20	20	20
	Ag	80	20	20	20
183	Au	1.5	20	20	20
	Ag	40	20	20	20
193	Au	0.35	20	20	20
	Ag	15	20	20	20
213	Au	9	20	20	20
	Ag	300	20	20	20
223	Au	2	20	20	20
	Ag	140	20	20	20

Domain	Element	HY Limit	HY Major	HY Semi	HY Minor
233	Au	4.3	20	20	20
	Ag	110	20	20	20

11.1.9 Model Validation

SRK applied the following validation methods to Tantahuatay Sulfuros: strip plots to assess local bias, conduct global bias verification and engage in visual inspection by comparing estimated values in the block model with composite data.

Below are the validations performed by SRK as part of the audit of the BNV Cu estimation, and validations of the SRK estimation for Au, Ag, As, Pb, Zn, Sb, Bi, Cd and Hg.

Cu Audit

Global Bias

The global bias review includes analysis of the estimated Cu value (OK) versus the nearest neighbor (NN) value per estimation pass, examination of the tonnage (Ton) associated with the estimation pass, and comparison of the relative error of the estimated Cu value and the nearest neighbor value (Δ error).

SRK found that the domains up to the third pass appear unbiased, giving, in most cases, errors of less than 5%. In some very low-grade domains of very low grade the error is greater, but only due to the proportional effect that indicates that at very low grades a percentage change in grade gives a higher error. The change in these cases is minimal and not problematic given that the mineral resource classification only includes blocks estimated up to the second pass.

Table 11-19 shows Global Bias revision for Cu.

Domain 183 is slightly over-estimated; however, when reviewing Table 11-20 and Figure 11-53 it is evident that in a neighborhood of 60 x 60 x 40 meters, the averages are unbiased.

Table 11-19: Review of estimation domain global bias for Cu

Evaluation by pass						Total Evaluation			
Dom Cu	Pass	Cu OK (%)	Cu NN (%)	Ton	Δ error (%)	Cu OK (%)	Cu NN (%)	Ton	Δ error (%)
103	1	0.31	0.31	128,610,560	1.4	0.31	0.32	385,176,480	-1.7
	2	0.33	0.33	169,983,840	-1.4				
	3	0.28	0.30	86,582,080	-7.3				
113	1	0.65	0.66	26,592,800	-1.9	0.59	0.60	41,687,360	-1.9
	2	0.46	0.46	9,191,520	1.5				
	3	0.49	0.53	5,903,040	-6.4				
123	1	0.05	0.05	83,000,320	8.0	0.04	0.03	317,984,160	12.7
	2	0.05	0.04	59,729,280	9.9				

Evaluation by pass						Total Evaluation			
	3	0.03	0.02	175,254,560	19.1				
133	1	0.07	0.08	1,774,240	-12.9	0.06	0.07	8,049,600	-12.6
	2	0.08	0.09	1,225,120	-10.8				
	3	0.06	0.07	5,050,240	-13.1				
143	1	0.29	0.29	340,654,080	2.4	0.23	0.23	1,619,646,080	-0.4
	2	0.24	0.24	539,400,160	0.4				
	3	0.19	0.19	739,591,840	-3.1				
153	1	0.13	0.13	11,562,720	1.8	0.12	0.11	127,668,320	9.7
	2	0.12	0.12	22,391,200	0.0				
	3	0.11	0.10	93,714,400	13.8				
163	1	0.16	0.16	576,777,760	0.0	0.15	0.15	1,146,050,880	1.4
	2	0.15	0.14	109,792,800	3.6				
	3	0.14	0.14	459,480,320	3.0				
173	1	0.87	0.83	36,162,880	5.0	0.45	0.44	139,020,960	2.7
	2	0.41	0.38	16,773,120	8.3				
	3	0.29	0.29	86,084,960	-1.4				
183	1	0.25	0.24	499,536,960	3.6	0.23	0.21	1,201,331,040	8.1
	2	0.23	0.20	325,318,240	12.7				
	3	0.20	0.18	376,475,840	11.4				
193	1	0.21	0.22	71,131,840	-0.5	0.21	0.21	213,790,720	0.5
	2	0.21	0.21	52,499,200	0.1				
	3	0.21	0.21	90,159,680	1.6				
213	1	1.04	1.04	43,363,840	-0.6	0.93	0.94	92,046,240	-1.0
	2	0.82	0.85	19,312,800	-2.9				
	3	0.85	0.85	29,369,600	-0.5				
223	1	0.12	0.12	282,341,280	-0.8	0.08	0.08	787,537,920	-1.4
	2	0.08	0.08	194,517,440	-1.5				
	3	0.05	0.05	310,679,200	-2.6				
233	1	0.37	0.37	488,723,040	-0.6	0.25	0.28	2,260,862,240	-8.2
	2	0.32	0.33	324,972,960	-2.6				
	3	0.20	0.23	1,447,166,240	-14.1				

Source: (SRK, 2023)

Global Block Bias

The review of the global block bias includes the analysis of the estimated value of Cu (OK) versus the value of the nearest neighbor (NN); the value estimated by the inverse of the squared distances (ID); and the average of the samples (Cu Avg) in large blocks of 60 x 60 x 40 meters.

SRK reviewed each estimation domain and compared the estimated Cu value of the blocks to the average value of the samples within that block and found that no domain is biased. Table 11-20 shows the analysis of the Global Bias by blocks of 60 x 60 x 40 meters for Cu.

Table 11-20: Review of estimation domain global bias 60 x 60 x 40 m blocks for Cu

Dom Cu	Cu OK (%)	Cu ID (%)	Cu NN (%)	Cu Prom (%)
103	0.331	0.325	0.316	0.326
113	0.648	0.667	0.673	0.675
123	0.070	0.070	0.065	0.069
133	0.060	0.051	0.054	0.062
143	0.311	0.311	0.312	0.309
153	0.147	0.147	0.144	0.148
163	0.183	0.182	0.182	0.181
173	0.794	0.787	0.767	0.784
183	0.267	0.273	0.274	0.274
193	0.212	0.211	0.212	0.212
213	1.112	1.102	1.083	1.104
223	0.154	0.153	0.154	0.154
233	0.403	0.390	0.389	0.390

Source: (SRK, 2023)

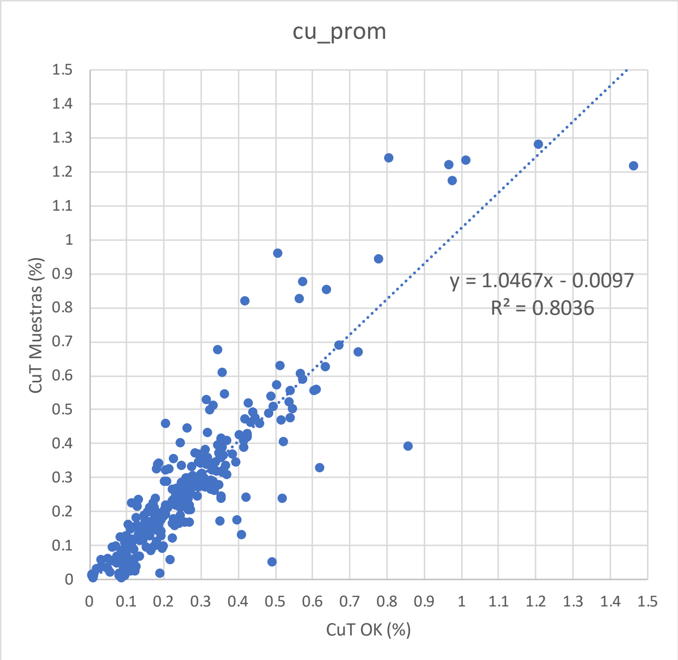


Figure 11-53: Conditional Bias review for domain 183.

Source: (SRK, 2023)

Figure 11-54 shows the scatter plot of domain 213 for Cu, where each point shows the average number of blocks estimated with the composites found in each 60 x 60 x 40 meters block. Scatter plots typically have a slope very close to 1, indicating low conditional bias.

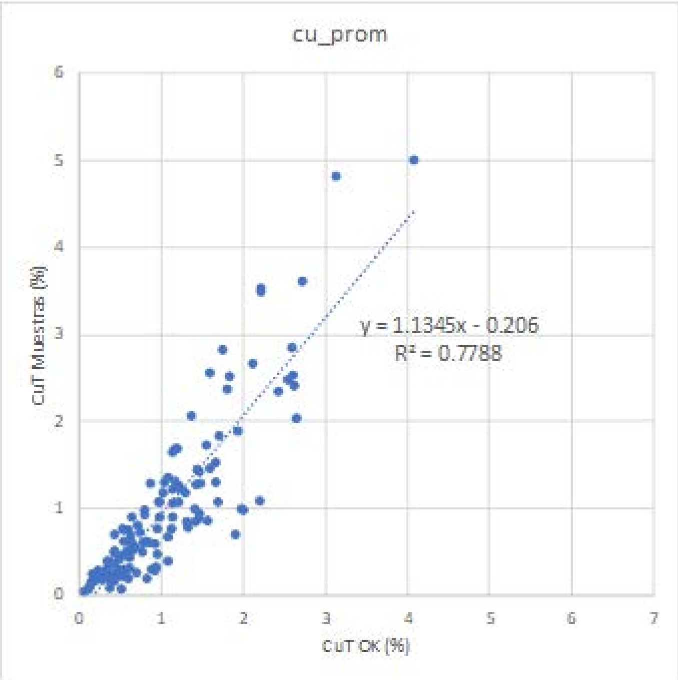


Figure 11-54: Conditional Bias review for domain 213.

Source: (SRK, 2023)

Local Validation

SRK performed estimation domain local validation for Cu. The analysis shows a small conditional bias when there is sufficient data; however, as the graphs approach the extremes, the variability between the NN and the one estimated by OK appears different (at the edge of the deposit). Figure 11-55 shows an example of the analysis of domain 213 for Cu.

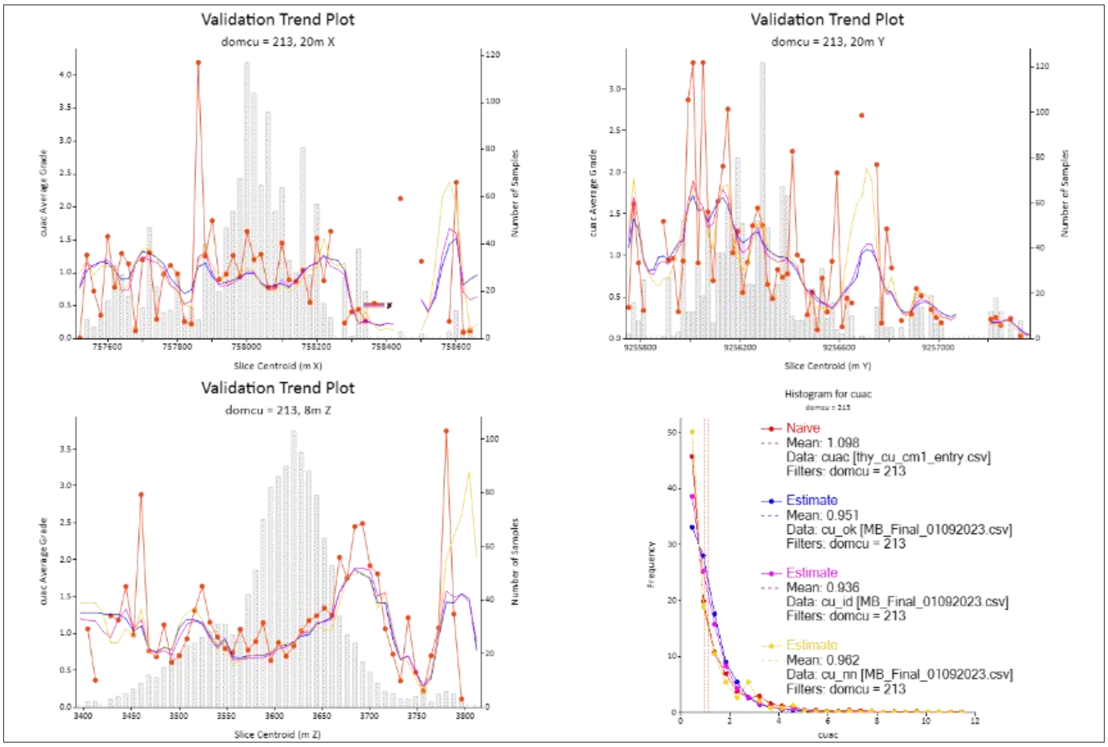


Figure 11-55: Swath plots for Cu (%) in domain 213. Estimation by OK in blue, ID in magenta, NN in yellow and samples of Au (ppm) in red.

Source: (SRK, 2023)

Visual Validation

SRK performed visual validation on sections and plans for each estimation domain. Visual checks show that the grade ranges show very good correspondence between the estimated Cu and the database Cu.

Figure 11-56 and Figure 11-57 show visual validation in a vertical section and for domain 213.

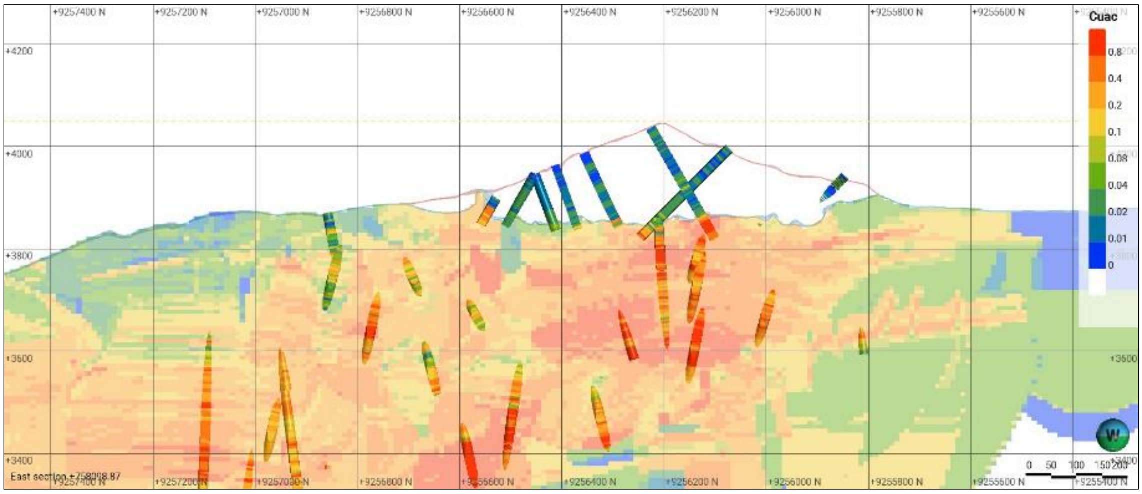


Figure 11-56: Vertical section E-758100. Comparison of Cu estimation versus composited data.

Source: (SRK, 2023)

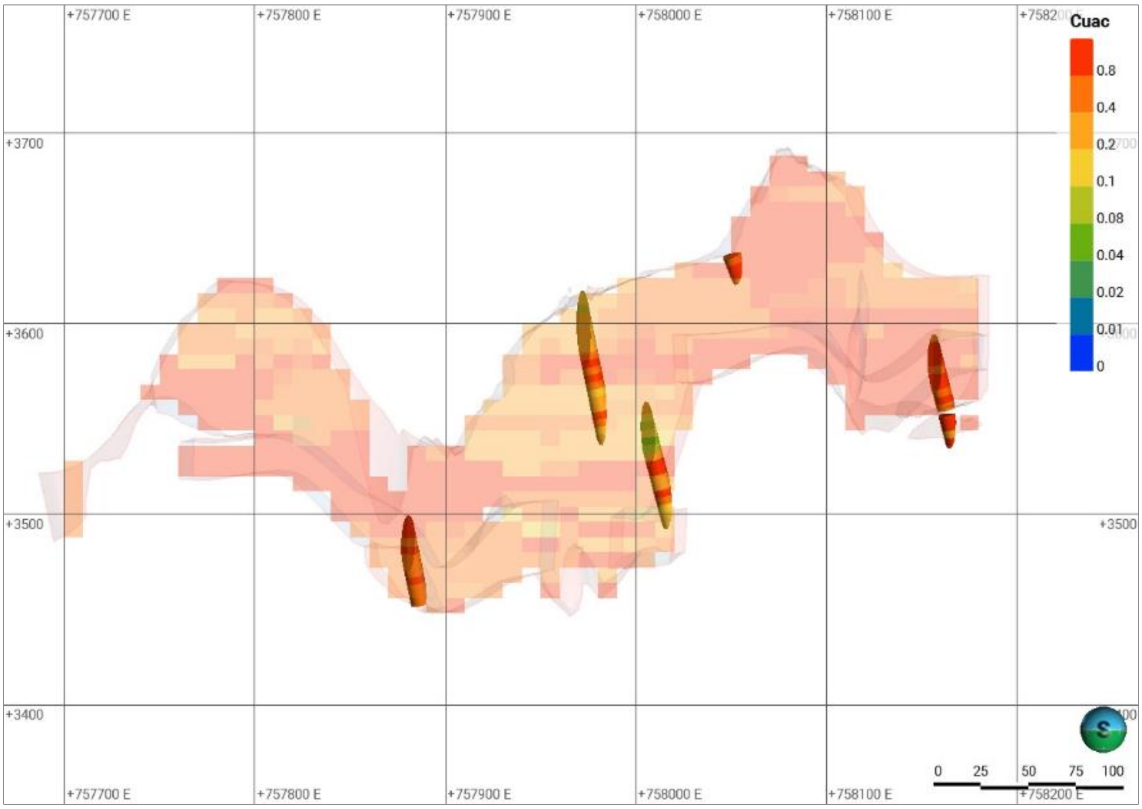


Figure 11-57: Vertical section N45°E for domain 213. Comparison of Cu estimation vs composited data.

Source: (SRK, 2023)

Estimation of Au, Ag, As, Pb, Zn, Sb, Bi, Cd and Hg

Local Validation

SRK checked for local biases by estimation domain. For this purpose, a series of strips were created by columns (east), rows (north) and levels (elevation), where the average grades of OK, ID and NN were compared with the average grades of the composites.

Overall, SRK considers the estimation of Au, Ag, As, Pb, Zn, Sb, Bi, Cd and Hg to be reasonable in all three directions. Figure 11-58, Figure 11-59 and Figure 11-60 show examples of the swath plots generated by estimation domain.

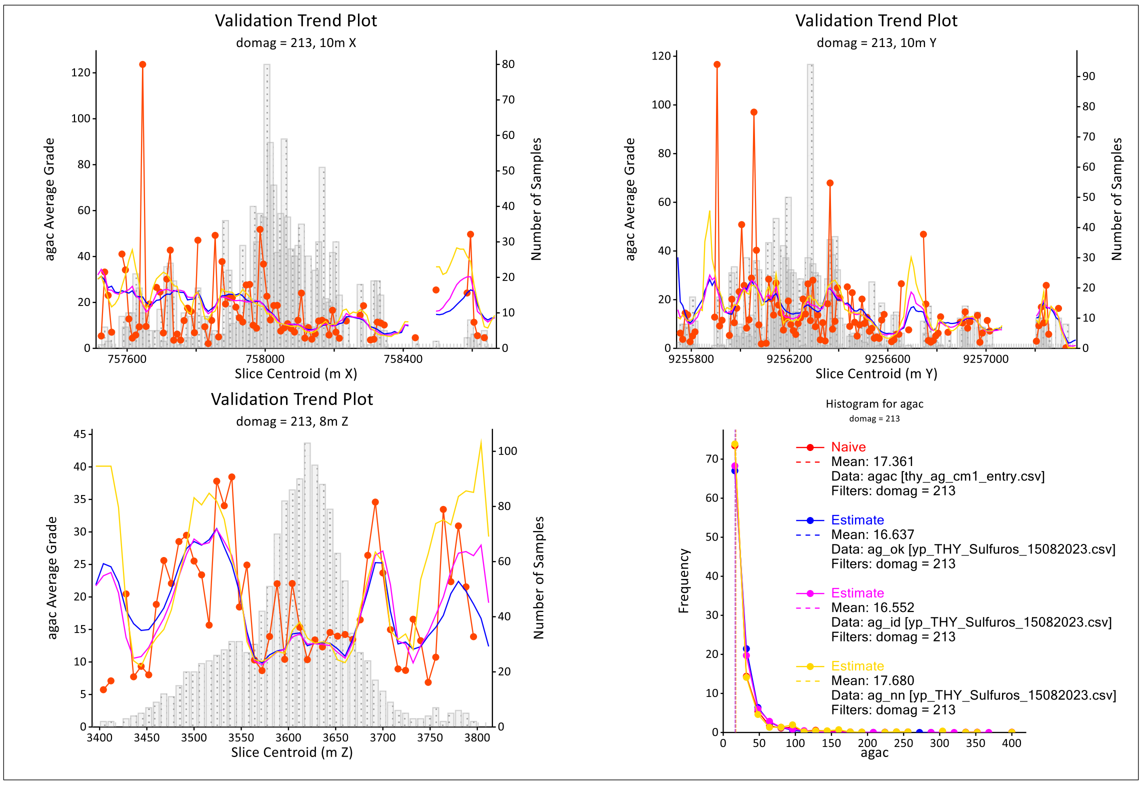


Figure 11-58: Swath plots for Ag (ppm) in domain 213. Estimation by OK in blue, ID in magenta, NN in Yellow and samples of Ag (ppm) in red.

Source: (SRK, 2023)

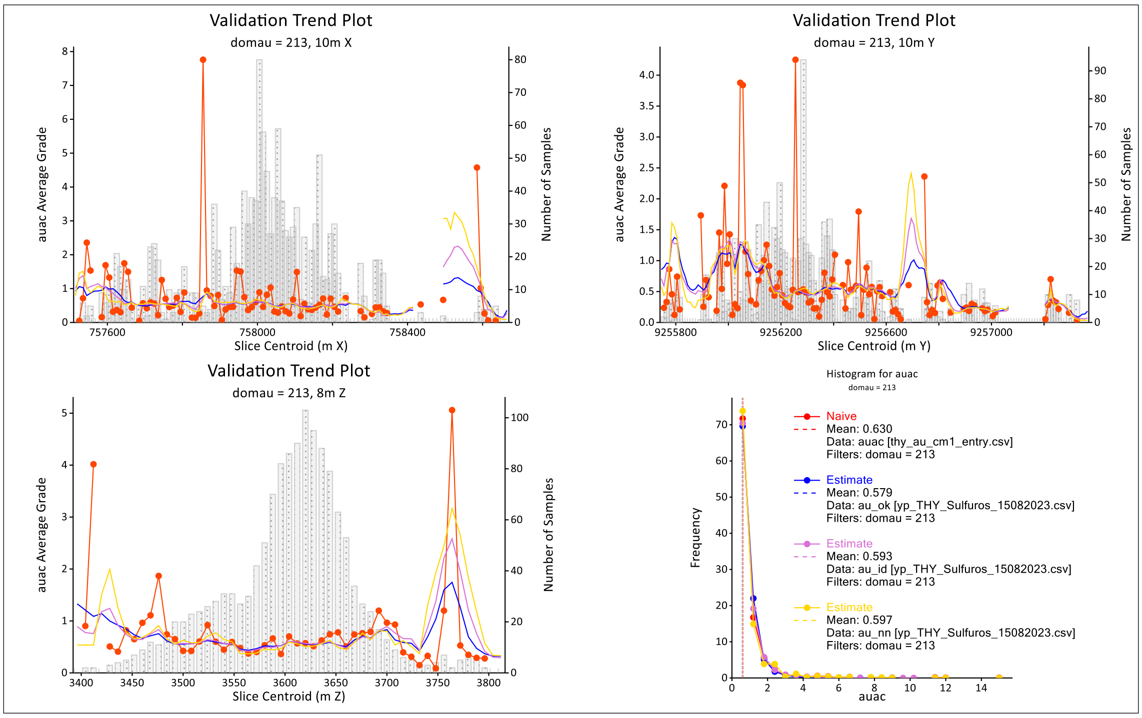


Figure 11-59: Swath plots for Au (ppm) in domain 213. Estimation by OK in blue, ID in magenta, NN in Yellow and samples of Au (ppm) in red.

Source: (SRK, 2023)

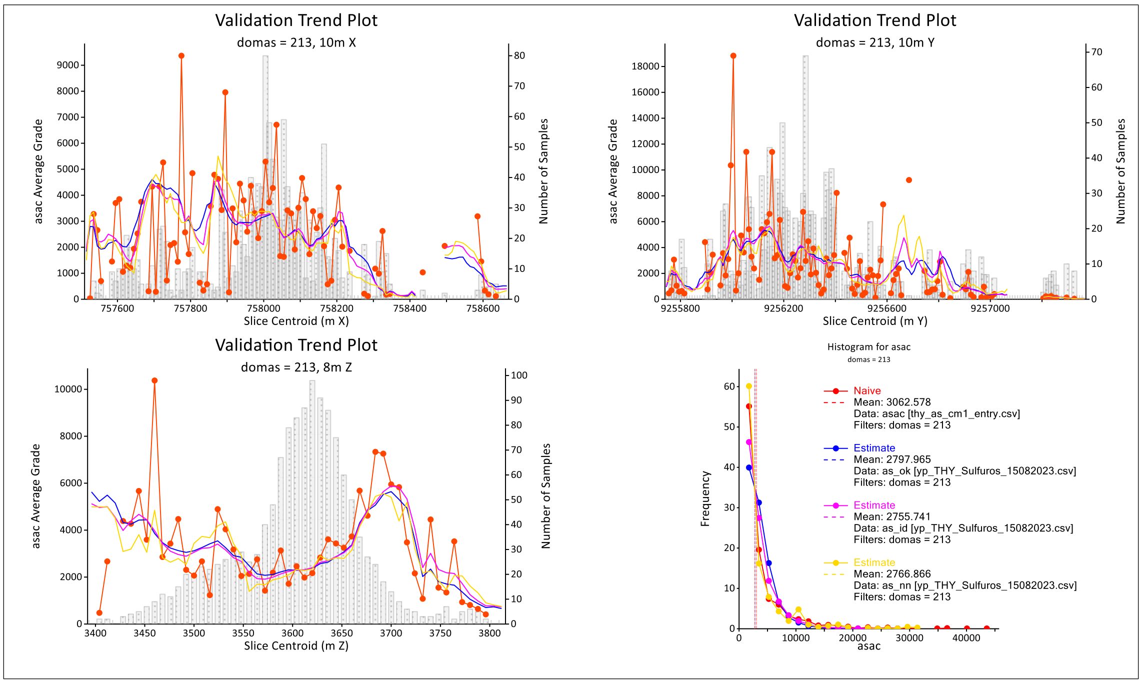


Figure 11-60: Swath plots for As (ppm) in domain 213. Estimation by OK in blue, ID in magenta, NN in Yellow and samples of As (ppm) in red.

Source (SRK, 2023)

Visual Validation

The estimation of Ag, Au, As, Pb, Zn, Sb, Cd, Bi and Hg were verified by estimation domain in E-W, N-S and NE-SW sections and plan views. The blocks were visually compared with the composites used in the estimation; agreement was acceptable. Figure 11-61 to Figure 11-66 show examples of Ag, Au and As in vertical section and for domain 213.

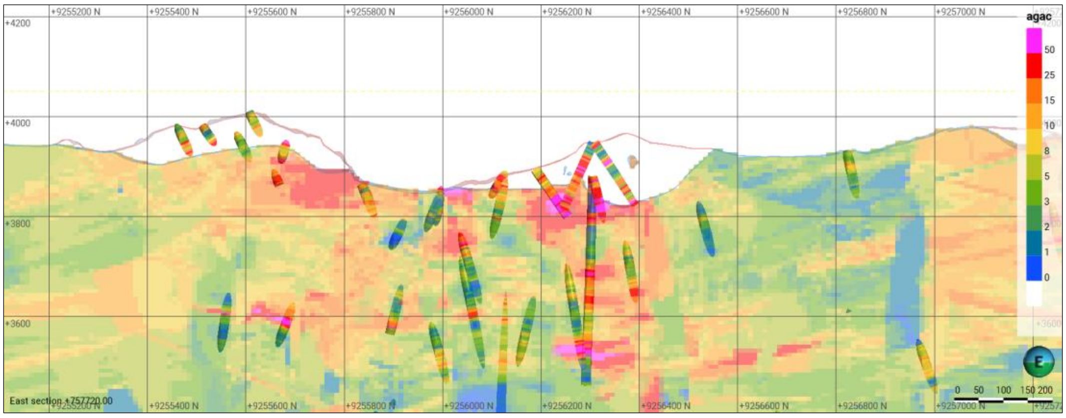


Figure 11-61: Vertical section E-758100. Comparison of Ag estimation vs composited data.

Source (SRK, 2023)

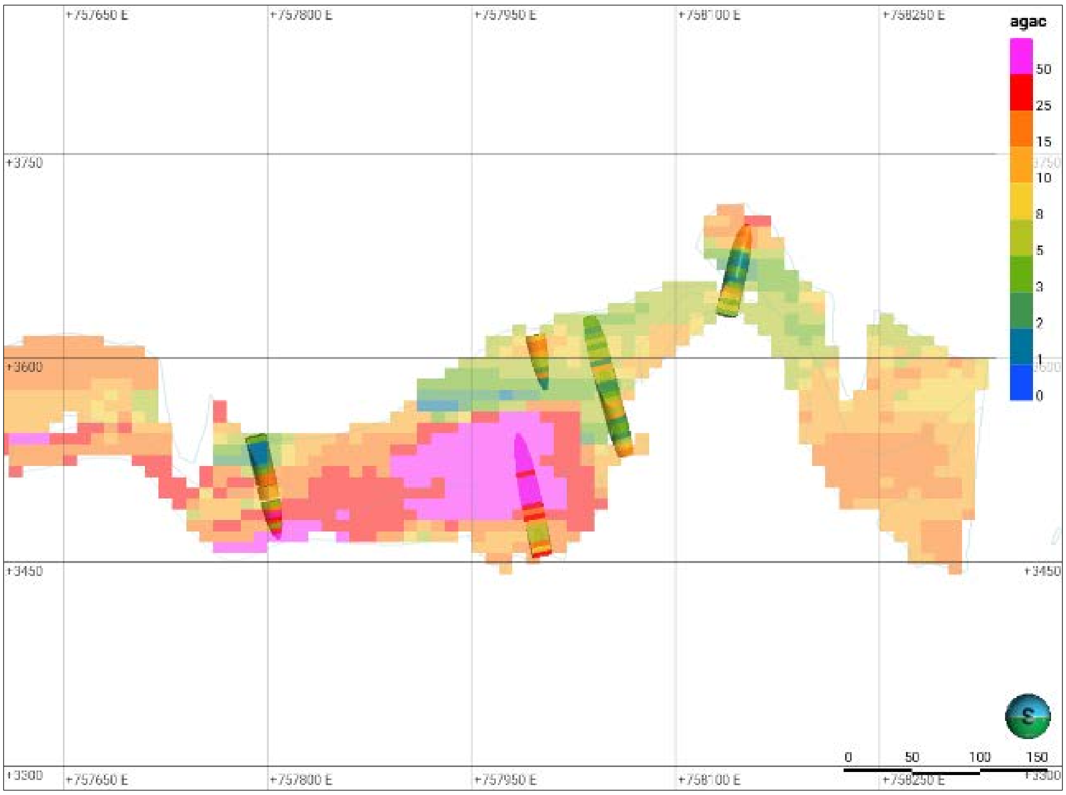


Figure 11-62: Vertical section N45°E for domain 213. Comparison of Ag estimation vs composited data.

Source (SRK, 2023)

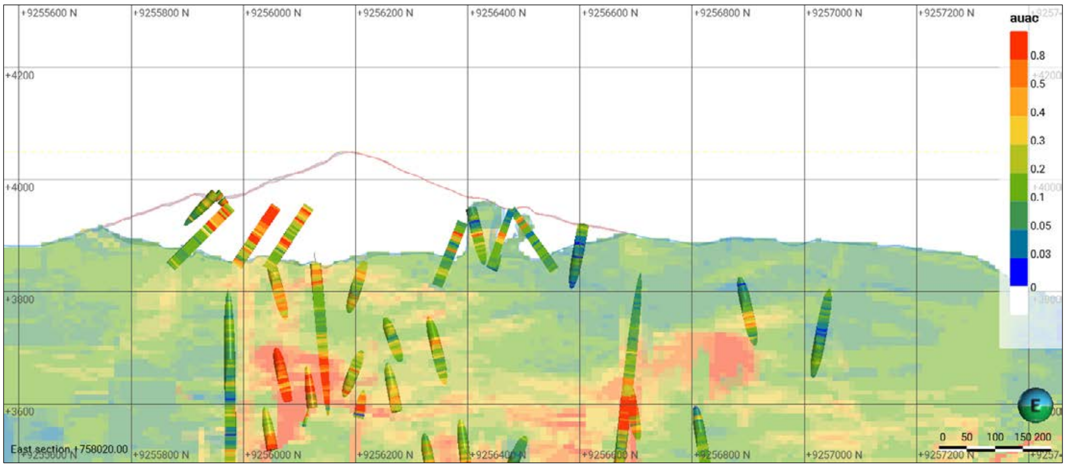


Figure 11-63: Vertical section E-758100. Comparison of Au estimation vs composited data.

Source (SRK, 2023)

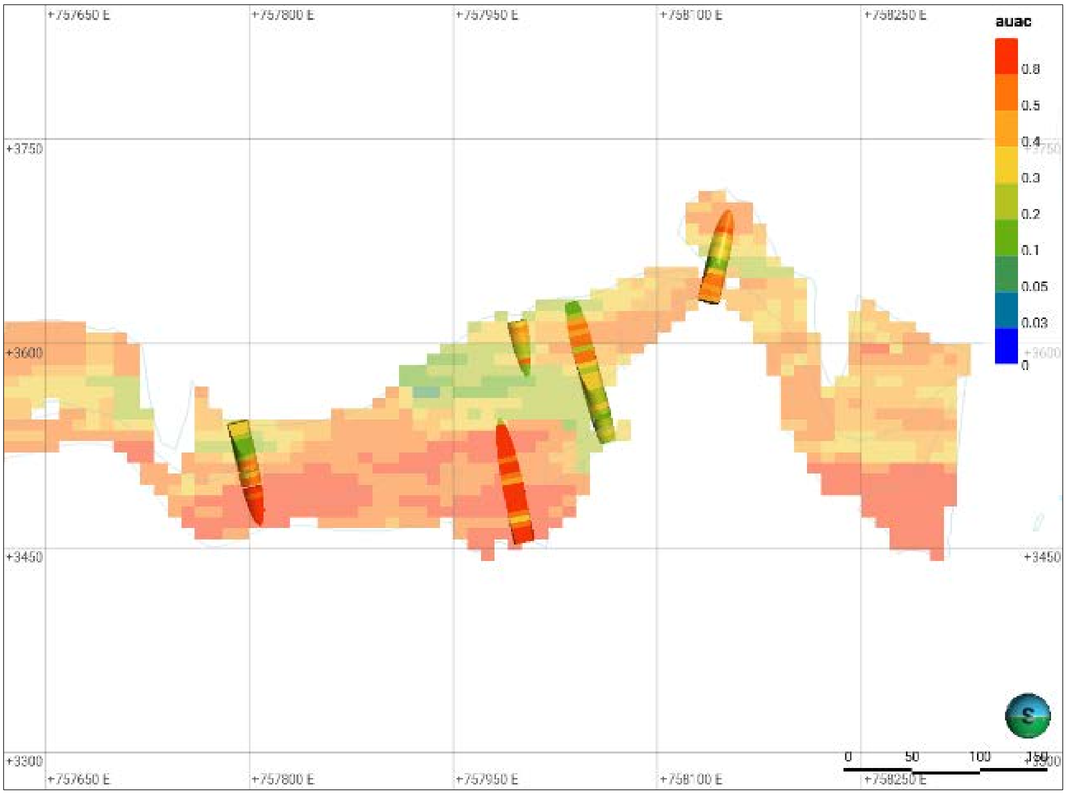


Figure 11-64: Vertical section N45°E for domain 213. Comparison of Au estimation vs composited data.

Source (SRK, 2023)

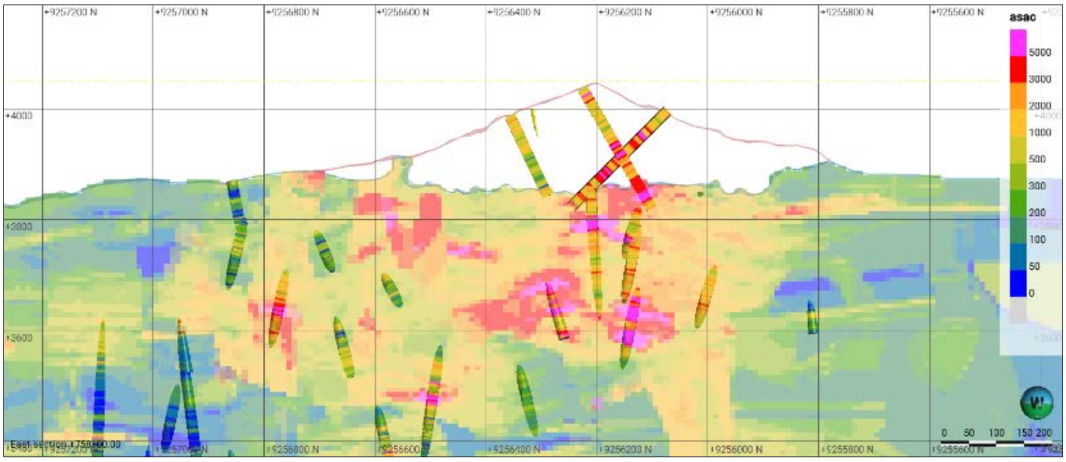


Figure 11-65: Vertical section E-758100. Comparison of As estimation vs composited data.

Source (SRK, 2023)

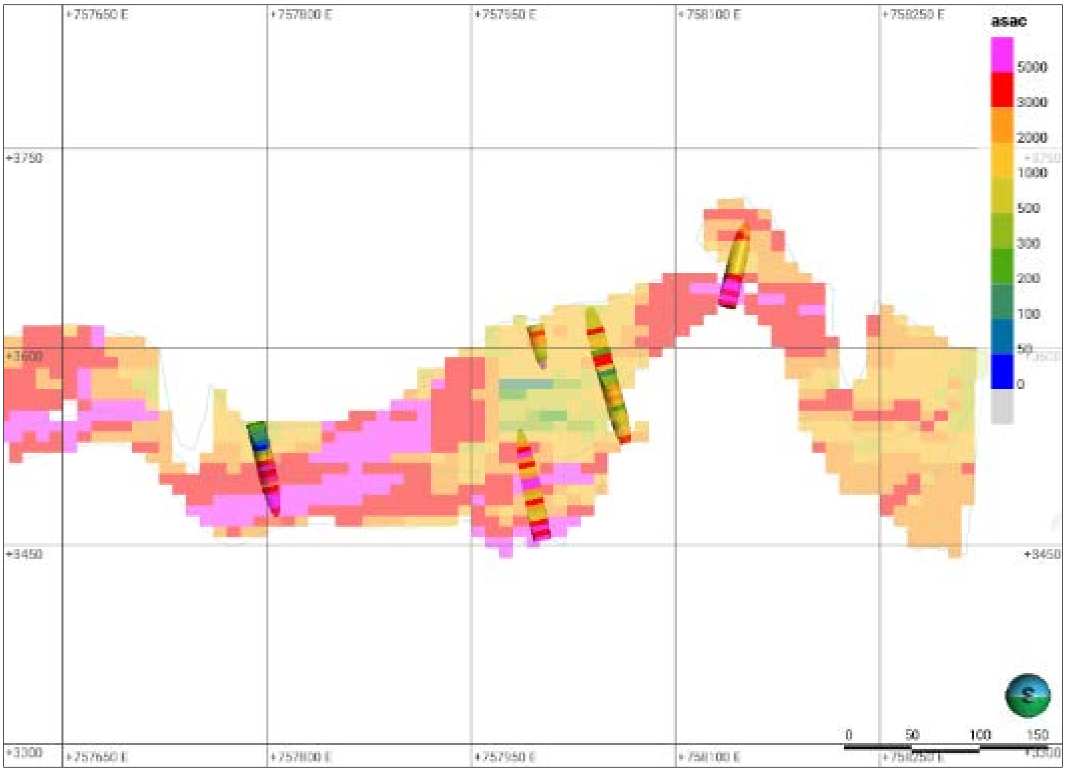


Figure 11-66: Vertical section N45°E for domain 213. Comparison of As estimation vs composited data

Source (SRK, 2023)

Global Validation

SRK performed the global bias analysis comparing the statistics of the block model grades interpolated by OK, ID, and NN. Table 11-21, Table 11-22 and Table 11-23 show the comparison between the global means of ID vs NN and OK vs NN, for Ag, Au and As respectively. In general, the differences are minimal and within the generally accepted ±15%.

Table 11-21: Estimation domain global bias analysis for Ag

Domain	Category	Grade Ag (ppm)			Global validation (%)	
		ID	OK	NN	ID vs NN	OK vs NN
103	2	9.74	9.16	10.20	-4.51	-10.21
103	3	8.08	8.04	8.04	0.45	0.02
113	2	8.35	8.31	8.22	1.64	1.14
113	3	6.61	6.52	6.24	5.90	4.48
123	2	5.59	4.78	9.29	-39.78	-48.56
123	3	2.72	2.31	3.36	-18.85	-31.27
133	2	2.69	2.76	2.27	18.37	21.77
133	3	2.93	3.05	2.96	-0.99	3.25
143	2	11.35	11.58	11.12	2.13	4.21
143	3	7.65	7.76	7.28	5.17	6.67
153	3	3.24	3.09	3.40	-4.72	-9.20
163	2	8.26	8.53	8.75	-5.53	-2.44
163	3	3.60	3.63	3.66	-1.59	-0.99
173	2	10.88	10.89	10.67	2.01	2.01
173	3	7.08	7.21	6.67	6.09	8.15
183	3	3.00	2.89	2.91	3.26	-0.63
193	3	2.26	2.24	2.13	6.40	5.45
213	2	17.56	17.42	17.32	1.39	0.60
213	3	16.22	16.38	17.80	-8.83	-7.95
223	2	10.49	10.53	10.49	0.001	0.35
223	3	6.33	6.67	6.10	3.65	9.22
233	2	7.47	7.36	7.76	-3.68	-5.14
233	3	5.92	6.10	6.32	-6.32	-3.39

Source (SRK, 2023)

Table 11-22: Estimation domain global bias analysis for Au

Domain	Category	Grade Au (ppm)			Global Validation (%)	
		ID	OK	NN	ID vs NN	OK vs NN
103	2	0.35	0.33	0.36	-2.14	-7.71
103	3	0.30	0.29	0.29	2.63	-0.25
113	2	0.31	0.31	0.30	1.10	1.61
113	3	0.25	0.25	0.25	0.16	-1.78
123	2	0.28	0.29	0.41	-31.16	-30.21
123	3	0.12	0.12	0.14	-17.64	-16.06

Domain	Category	Grade Au (ppm)			Global Validation (%)	
		ID	OK	NN	ID vs NN	OK vs NN
133	2	0.23	0.26	0.32	-28.20	-18.81
133	3	0.31	0.30	0.31	-2.60	-5.22
143	2	0.22	0.23	0.24	-8.25	-4.87
143	3	0.24	0.24	0.24	1.57	2.56
153	3	0.15	0.14	0.16	-4.04	-8.76
163	2	0.13	0.13	0.13	4.14	4.26
163	3	0.11	0.11	0.11	0.11	1.64
173	2	0.48	0.47	0.48	-1.22	-2.59
173	3	0.29	0.28	0.30	-4.88	-8.25
183	3	0.12	0.12	0.12	1.07	1.23
193	3	0.10	0.10	0.10	0.70	0.17
213	2	0.65	0.64	0.64	1.69	-1.01
213	3	0.57	0.56	0.58	-1.60	-3.80
223	2	0.18	0.18	0.18	0.489	0.68
223	3	0.11	0.11	0.11	1.92	4.55
233	2	0.21	0.21	0.21	0.09	-0.42
233	3	0.15	0.15	0.15	-3.48	-2.47

Source (SRK, 2023)

Table 11-23: Estimation domain global bias analysis for As

Domain	Category	Grade As (ppm)			Global Validation (%)	
		ID	OK	NN	ID vs NN	OK vs NN
103	2	318.63	309.11	336.69	-5.36	-8.19
103	3	702.23	704.80	680.94	3.13	3.50
113	2	2,892.08	2,848.30	2,904.81	-0.44	-1.95
113	3	1,840.36	1,797.53	1,855.18	-0.80	-3.11
123	2	324.20	198.48	305.33	6.18	-34.99
123	3	159.26	148.85	153.35	3.85	-2.94
133	2	67.09	60.37	71.74	-6.48	-15.85
133	3	122.53	123.95	123.94	-1.14	0.01
143	2	502.79	515.61	516.51	-2.66	-0.18
143	3	347.67	355.66	397.49	-12.53	-10.52
153	3	223.28	218.86	267.17	-16.43	-18.08
163	2	850.37	842.04	831.29	2.30	1.29
163	3	493.62	501.73	480.13	2.81	4.50
173	2	3,553.39	3,607.58	3,297.44	7.76	9.41
173	3	1,582.81	1,546.71	1,348.19	17.40	14.72
183	3	185.17	187.30	183.84	0.72	1.88

Domain	Category	Grade As (ppm)			Global Validation (%)	
		ID	OK	NN	ID vs NN	OK vs NN
193	3	370.99	347.46	380.20	-2.42	-8.61
213	2	3,936.05	3,849.58	3,762.23	4.62	2.32
213	3	2,372.62	2,456.62	2,443.78	-2.91	0.53
223	2	947.06	965.54	940.75	0.670	2.63
223	3	464.11	469.62	453.33	2.38	3.59
233	2	1,926.62	1,934.52	1,893.82	1.73	2.15
233	3	855.50	856.98	865.41	-1.14	-0.97

Source (SRK, 2023)

11.1.10 Bulk Density

In Tantahuatay, bulk density is determined with the solid paraffin method. This method consists of covering the samples with paraffin wax to prevent them from getting wet and to create a barrier to penetrating moisture; subsequently, the sample is immersed in water, where the volume of water displaced represents the volume of the sample. Density database include Regulus and Buenaventura information. Finally, bulk density is calculated using the following formula: $\rho = M/V$.

The database contains 13,187 density samples from diamond drilling in the sulfide zone. The data coded by lithological domain was analyzed only within the range: “mean value (per domain) ± 2 standard deviations”, excluding 464 outliers. Finally, the average value was obtained by lithological domain.

Table 11-24 summarizes the apparent density data. The average density values were assigned to the block model based on the lithological domain.

Table 11-24: Apparent density by estimation domain

Lithology	Domain	Samples	Min. (gr/cm^3)	Max. (gr/cm^3)	Median (gr/cm^3)
Phreatic Breccia	103	2,231	1.98	3.29	2.59
Skarn Hydrothermal Breccia	103	278	2.27	3.35	2.77
Hydrothermal Breccia Epitermal	113	271	2.16	3.62	2.87
Quartzites	123	120	2.31	3.19	2.73
Diatreme	133	86	2.08	3.11	2.54
Endoskarn	143	372	1.88	3.41	2.61
Skarn	143	1,638	1.96	3.43	2.65
Hornfels	153	87	2.13	3.51	2.80
PITAepithermal	163	1,201	2.07	3.12	2.56
PITAskarn	163	416	2.18	3.10	2.59
PTEepitermal	173	274	2.28	3.16	2.67
PTEskarn	183	670	2.25	3.25	2.75
PTETiwinza	193	29	2.36	2.92	2.67

Lithology	Domain	Samples	Min. (gr/cm^3)	Max. (gr/cm^3)	Median (gr/cm^3)
Vein	213	42	1.97	4.61	3.26
Volcaniclastic	213	402	2.07	4.18	2.90
Coherent Volcanic	223	800	2.20	3.02	2.60
Fragmental Volcanic	233	1,661	2.06	3.31	2.66

Source (SRK, 2023)

11.2 Mineral Resource Classification

Industry best practice guidelines suggest that mineral resource categorization should consider confidence in the geological continuity of mineralized structures, the quality and quantity of data supporting the estimate, and confidence in the geostatistical processing of the tonnage and grade estimation. Appropriate categorization criteria should aim to integrate these concepts to delineate regular areas in a resource categorization.

In this context, Buenaventura considered various aspects to determine categorization, including the representativeness of the data used for the estimation; lithological and mineral zone controls; the continuity of mineralization; the number of samples close to the estimated block; the number of drillholes used in the estimation; and the quality of the estimation.

Buenaventura defined the mineral resource classification strategy based on the spacing of the drillholes, the number of passes and the number of drillholes and samples (Table 11-25).

Table 11-25: Definition of the mineral resource category parameters.

Category	Drillhole spacing (m)	Pass	No. of drilling holes	No. of samples
Measured	0 a 20	<=2	>=3	>=5
Indicated	0 a 45	<=2	>=2	>=3
Inferred	0 a 100	<=2	>=1	>=2

Source (SRK, 2023)

The categorization parameters have been verified by Buenaventura and SRK. The parameters were initially too restricted (drillhole spacing) and were updated at the end of October. The final parameters that were used in the categorization are those shown in Table 11-25. Subsequently, blocks categorized as measured were downgraded to the indicated category.

SRK considers that the parameters used by Buenaventura are acceptable but, nonetheless suggest that in order to avoid the "Spotted Dog" effect and eliminate any categorization artifacts, the boundaries between categories be softened.

To perform the categorization smoothing process, SRK generated multiple plan and cross sections based on the original category. From these sections, solids were generated for each of the categories to guarantee geological continuity and improve the precision of the categorization. The block model was coded based on these solids in a new variable corresponding to a smoothed category, which was used to prepare the mineral resource declaration. To verify that the categorization smoothing process had been effective, SRK confirmed that the distribution, tonnage, and grades of the blocks corresponding to each category reported no changes in values that were more than 5% above initial values.

Figure 11-67 shows the mineral resource model of Tantahuatay Sulfuros before and after smoothing using the aforementioned methodology.

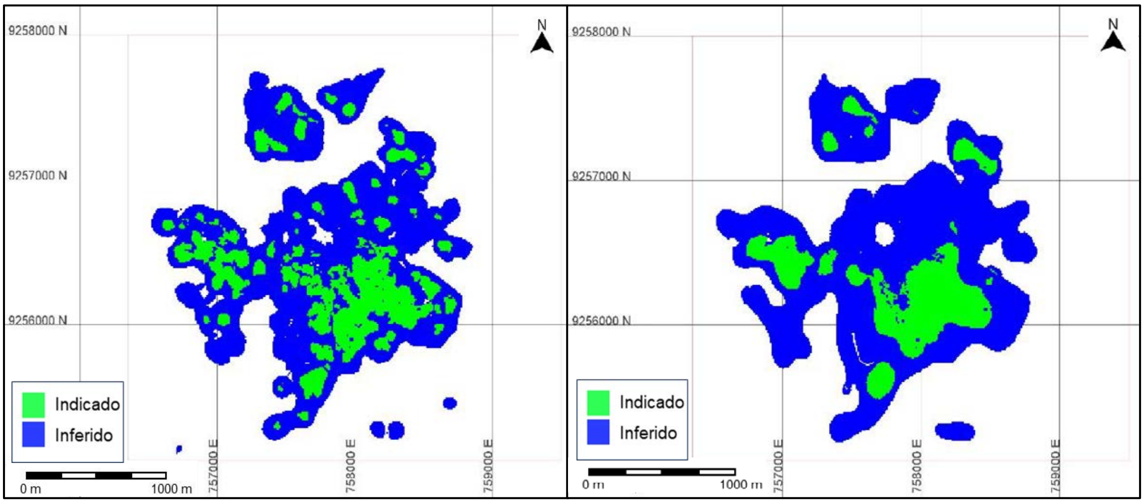


Figure 11-67: Plan view of the Tantahuatay Sulfuros mineral resource model, before and after smoothing.

Source (SRK, 2023)

11.3 Basis for Establishing the Prospects of Economic Extraction for Mineral Resources (RPEEE)

A mineral resource is defined as the portion of the mineral inventory that has reasonable prospects for economic extraction, which in principle involves blocks above the grade or cut-off value and at the same time comply with other aspects such as spatial distribution and geological continuity, grades, etc.

The evaluation of the RPEEE of the Tantahuatay Sulfuros project has been developed exclusively for open pit mining at a processing level of 60 kt/d. The only restriction considered to generate the economic cone was the Regulus property limit. The mineral resources report was generated based on the block model estimated jointly by Buenaventura and SRK with an effective date of June, 2023.

Given that the project is at a conceptual level, the reasonableness of its economic exploitation has considered the following aspects:

- Considerations of the mineralized zone
- Description of valuation parameters
- Definition of the NSR value assignment function and equivalent copper grade
- Calculation of the NSR cut-off value and equivalent copper cut-off grade

11.3.1 Considerations of the mineralized zone

The block model fields considered in mineral resource estimation are:

- Category: Measured, Indicated, and Inferred (field: category_s) and,
- The zone defined as sulfides (field: minz).

No values have been reported in the Measured category.

11.3.2 Description of valuation parameters

SRK has reviewed economic parameters based on the following costs, all provided by Buenaventura: plant, general, administrative, and selling expenses (commercial terms) while mine unit costs are determined by benchmarking with other similar operations. SRK and Buenaventura agreed determined to set the copper mineral processing level at a capacity of 60,000 t/d.

Table 11-26 contains details on the economic parameters.

Table 11-26: Economic parameters

Parameter	Unit	Value
Copper price	US$/t	8,800.00
Gold price	US$/oz	1,750.00
Silver price	US$/oz	23
Copper treatment charge	US$/DMT conc.	228
Copper refining charge	US$/lb	0.23
Gold refining charger	US$/oz	6
Silver refining charge	US$/oz	0.5
Penalty for arsenic	US$/DMT conc.	485.5
Transportation and freight	US$/DMT conc.	140
Copper royalties	%	2.6
Copper grade in concentrate	%	28
Copper recovery	%	85
Gold recovery	%	60
Silver recover	%	50
Arsenic recovery	%	91
Copper payable	%	96.35
Minimum copper deduction	%	1
Gold payable	%	90
Minimum gold deduction	oz	0.03
Payable from silver	%	90
Minimum silver deduction	oz	0.96
Waste	%	0.3

Parameter	Unit	Value
Humidity	%	9
Global slope angle	°	42
Mineral mining cost	US$/t	2.58
Waste mining cost	US$/t	2.32
Incremental cost per bank	US$/t_bank	0.018 by 16m bank
Plant cost	US$/t	5.5
G&A Costs	US$/t	2

Source (SRK, 2023)

11.3.3 NSR and copper equivalent value assignment function

NSR value assignment function

The NSR value allocation function considers the value contribution of copper, gold, and silver. To this end, the point value of each element was estimated and includes the value of the net price payable less charges for smelting, refining, arsenic penalty, freight, transportation, royalties, and waste. The economic parameters used are detailed in Table 11-26.

Table 11-27 shows the point values for each value contribution element of the NSR value assignment function.

Table 11-27: Point value per element of the NSR value assignment function

Element	Unit	Point Value
Vp1_Cu	US$ / t Cu	39.6300
Vp1_Au	US$ / g Au	30.1875
Vp1_Ag	US$ / g Ag	0.3245

Source (SRK, 2023)

The following expression details the NSR value assignment function:

$$NSR\left(\frac{US\$}{t}\right) = 39.6300 * Cu(\%) + 30.1875 * \left(\frac{g}{t}\right) + 0.3245 * Ag(\frac{g}{t})$$

Using the NSR assignment function, a value has been assigned to the NSR field in the block model.

Equivalent copper allocation function

The copper equivalent (CuEq) allocation function considers the copper equivalent contribution of gold and silver . The point value of each element has been estimated and includes the net payable amount and value of metallurgical recovery less charges for smelting, refining, arsenic penalty, freight, transportation, royalties and waste. The economic parameters used are detailed in Table 11-26.

Table 11-28 shows the point values for each value contribution element of the copper equivalent allocation function.

Table 11-28: Element point value of the CuEq grade assignment function

Element	Unit	Point Value
Vp2_cu	t Cu / t Cu	1.0000
Vp2_au	t Cu / g Au	0.7617
Vp2_ag	t Cu / g Ag	0.0082

Source (SRK, 2023)

The following expression details the equivalent copper assignment function:

$$CuEq(\%) = 1 * Cu(\%) + 0.7617 * Au\left(\frac{g}{t}\right) + 0.0082 * Ag(\frac{g}{t})$$

Using the copper equivalent assignment function, a value has been assigned to the CuEq field in the block model.

11.3.4 Calculation of NSR cut-off value and equivalent copper cut-off grade

NSR cutoff value

The NSR cut-off value was determined from the sum of the plant, general and administrative costs, and the differential of the mineral mining and stripping costs. Table 11-29 shows the NSR cut-off value.

Equivalent copper cut-off grade

The equivalent cut-off grade CuEq was determined from the sum of the plant, general and administrative costs and the differential mineral mining and stripping costs with the metallurgical recovery times the price times the net payable less selling expenses. Table 11-29 shows the equivalent copper cut-off grade.

Table 11-29: NSR Cut-Off Value and CuEq Cut-Off Grade

Cut-off	Unit	Value
NSR cut-off value	US$/t	7.7600
CuEq cut-off grade	% Cu	0.1958

Source (SRK, 2023)

11.3.5 Restrictions on the flotation of the economic cone

Buenaventura has provided the property limit with its concessions as the only restriction to generate the economic cone.

11.3.6 Definition of the envelope of the mineral resource economic cone

SRK used GEOVIA Whittle software to generate the optimal economic cone envelope. This software uses the Lerch & Grossmann algorithm in its structure and configures the mineral selection method by CASH FLOW, which optimizes the cash flow at a rate 10% annual discount.

The configuration of the Whittle modules to generate the economic cone envelope considered the economic parameters described in Table 11-26.

The results of the optimization process are displayed in the pit-by-pit graph in Figure 11-68, whereby tons of ore and waste material, expressed in Mt (secondary axis), are graphed in bars and a value curve, expressed in M US$ (principal axis) for each of the nested cones (PitShells), reflects the NSR sensitivity generated by the "revenue factor" (RF) between 0.20 (PitShell 1) to 1.20 (PitShell 51).

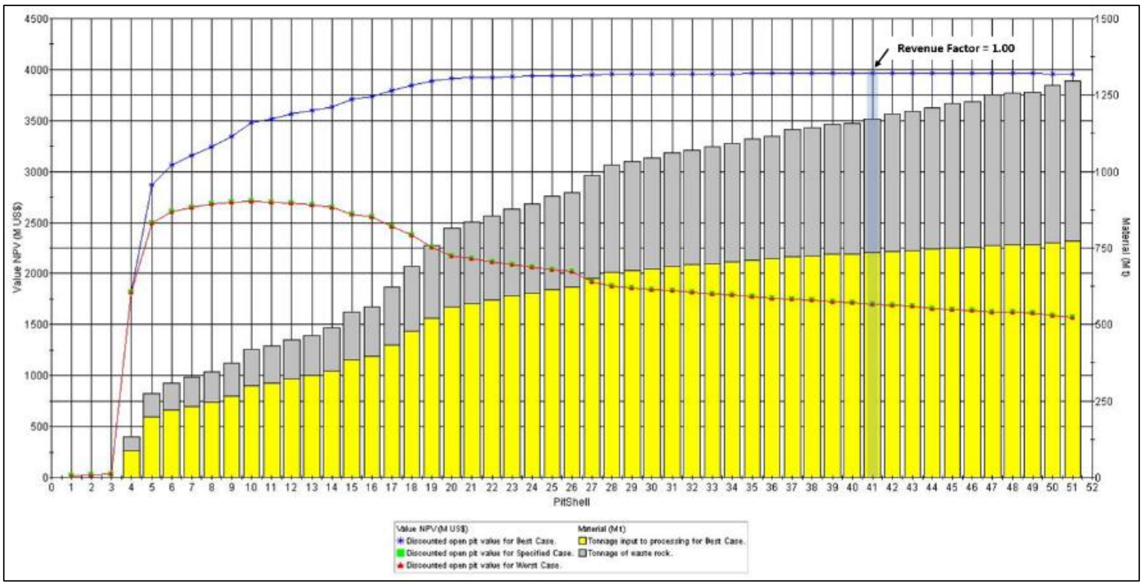


Figure 11-68: Pit by Pit Graph

Source (SRK, 2023)

SRK has considered using the envelope of a "revenue factor" equal to 1.00 (PitShell 41) as the surface area used to report mineral resources.

The results of the economic cone (PitShell 41), which were generated with Whittle Software, are shown in Figure 11-69.

Pit summary for pit 41

Movement	tonne			
Ore	734.796.024			
Waste (reject)	113.914.405			
Waste (other)	322.294.895			
Total	1.171.005.324			
Strip Ratio	0,59			
Product	**Input**	**Recovered**	**Input grade**	**Pit util. %**
nsr2 (value)	18.775.994.642	18.775.994.642	25,553	95,1%
cue2 (%m)	473.785.583	0	0,645	0,0%
cu (%m)	318.865.472	0	0,434	0,0%
au (gram)	139.549.282	0	0,190	0,0%
ag (gram)	5.936.607.808	0	8,079	0,0%
as (ppm)	821.151.681.305	0	1.117,523	0,0%
Measures	**Best**	**Specified**	**Worst**	
NPV (US$)	3.962.151.313	1.701.998.947	1.701.998.947	
Life (year)	33,55	33,55	33,55	
Payback (year)	0,00	0,00	0,00	
Payback ratio	0,00	0,00	0,00	
IRR%	0,00	0,00	0,00	

Figure 11-69: PitShell 41 economic cone report

Source (SRK, 2023)

Figure 11-70 shows the heat map of PitShell 01 to PitShell 51, representing zones from higher to lower copper equivalent grade.

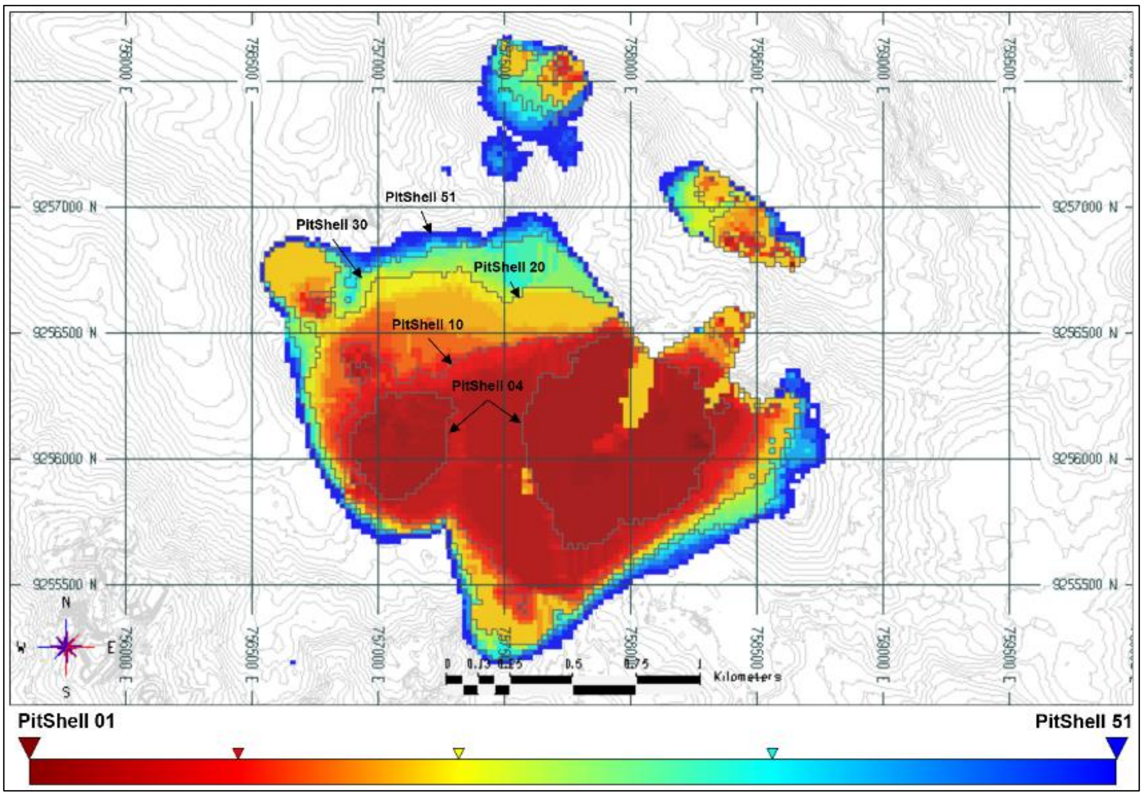


Figure 11-70: PitShells heat map (01 to 51)

Source (SRK, 2023)

11.4 Mineral Resources Estimates

This subsection contains forward-looking information related to the mineral resource estimate for the project. Factors that could lead actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant difference in one or more of the material factors or assumptions relative to geological interpretations, controls, ore grades or economic extraction prospects.

The mineral resource estimate for the project is reported here in accordance with SEC S-K 1300 regulations.

To estimate the Mineral Resources of Tantahuatay, the following definition established in the S-K 1300 Definition Standards adopted on December 26, 2018 was applied.

According to S-K 1300, a mineral resource is defined as:

"…is a concentration or appearance of material of economic interest in or on the Earth's crust in such form, degree or quality and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, probable dimensions of extraction, location or continuity, which, under assumed and justifiable technical and economic conditions, is likely to occur, in whole or in part, to become economically extractable. It is not simply an inventory of all mineralization drilled or sampled".

Note to readers: The Mineral Resources presented in this section are not Mineral Reserves and do not reflect demonstrated economic viability. The reported Inferred Mineral Resources are considered too geologically speculative and as such, not apt for use in economic considerations to determine Mineral Reserves. There is no certainty that all or part of this Mineral Resource will become a Mineral Reserve. All figures are rounded to reflect the relative precision of the estimates and totals may not add up correctly.

SRK has estimated the mineral resources based on the block model with a closing date of June 13, 2023 and within the envelope of the economic cone PitShell 41 (RF=1.00) and mineral above the NSR cut-off value of 7.76 US$/t (or CuEq cut-off grade of 0.1958 % Cu), reporting 734.8 Mt of ore with an average grade of 0.43 % Cu, 0.19 g/t Au and 8.08 g/t Ag. Table 11-30 provides details on mineral resources by category. The mineral resources presented in the table are in accordance with the definitions presented in S-K 1300. The effective date of the mineral resource estimate is December 31, 2022.

The mineral resource estimate was reported from within a restricted pit developed using the criteria presented in this TRS to establish reasonable prospects for economic extraction.

Table 11-30: Mineral Resources Report by category

Category Type	Mineral	NSR	CuEq	Cu	Au	Ag	As	Sb	Zn	Pb	Hg	Bi	Cd
	(M t)	(US$/t)	(%)	(%)	(g/t)	(g/t)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Indicated	133.6	34.71	0.88	0.59	0.27	10.24	2,020	171	197	297	1.04	9.31	1.93
Inferred	601.2	23.52	0.59	0.40	0.17	7.60	917	69	252	513	0.82	10.34	2.56
Total*	734.8	25.55	0.64	0.43	0.19	8.08	1,118	88	242	474	0.86	10.15	2.45

*No mineral was reported in the measured category.

Source: (SRK, November 2023)

Notes:

The evaluation of the reasonableness of economic extraction has been developed exclusively for open pit mining of a processing level of 60 kt/d.

The Regulus property limit is the only restriction to generate economic cone that has been considered.

The mineral resources report was generated based on the block model estimated jointly by BVN and SRK with an effective date of June, 2023.

The evaluation has considered metal prices of US$8,800/t Cu, US$1,750/oz Au and US$23.0/oz Ag.

Unit cost of mineral exploitation 2.58 US$/t, stripping 2.32 US$/t, processing 5.50 US$/t, general and administrative 2.00 US$/t.

Cu metallurgical recovery = 85% and 96.35% payable, Au metallurgical recovery = 60% and 90% payable, Ag metallurgical recovery = 50% and 90% payable

The NSR value assignment formula (US$/t) = 39.6300*Cu% + 30.1875*Au g/t + 0.3245*Ag g/t

NSR cut-off value = 7.76 US$/t.

The equivalent copper assignment formula CuEq (%) = Cu% + 0.7617*Au g/t + 0.0082*Ag g/t

CuEq cut-off grade = 0.1958 %.

Totals may not add up due to rounding procedures.

Figure 11-71 shows a 3D view of the PitShell41 mineral resource economic cone.

Table 11-31 shows the values of the CuEq Tonnage-Grade Curve report, for the range of cut-off grades between 0.00 and 1.00 % CuEq.

Figure 11-72 shows the grade tonnage curve generated on the PitShell 41 economic cone.

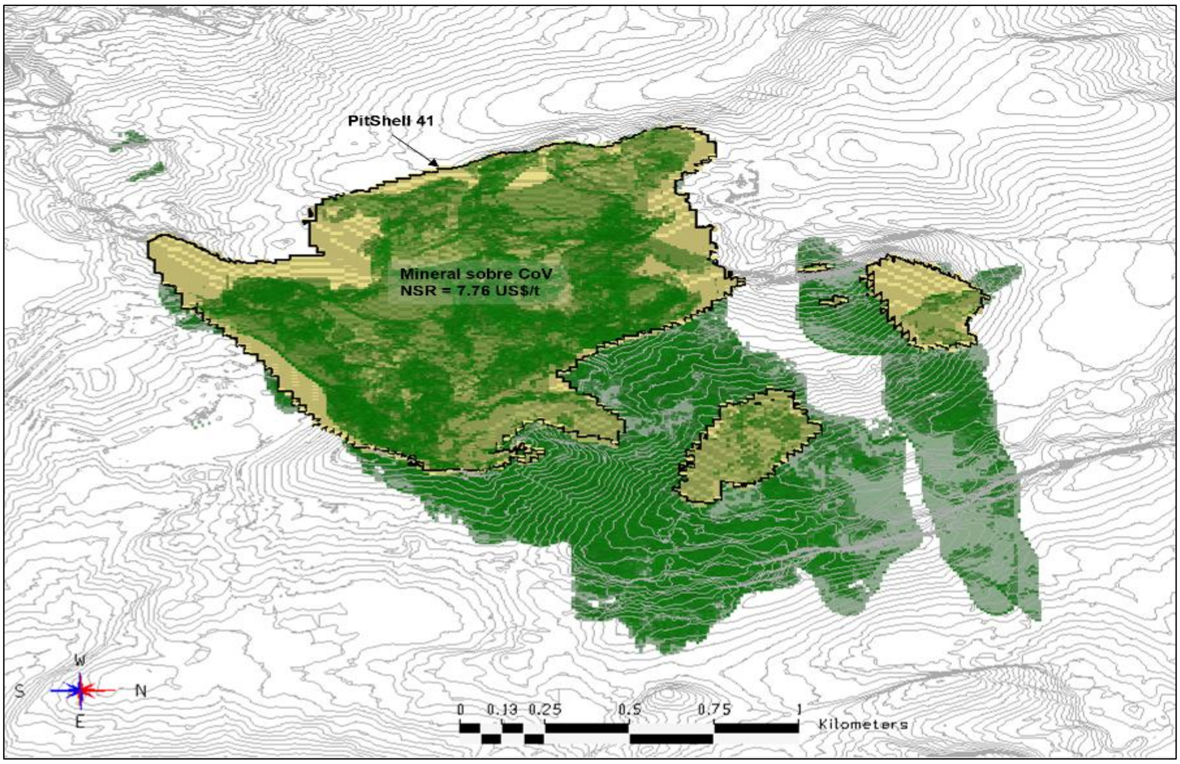


Figure 11-71: 3D View Mineral Resources economic cone

Source: (SRK, November 2023)

Table 11-31: CuEq Tonnage-Grade Curve Report

CoG CuEq (%)	Mineral (Mt)	NSR (US$/t)	CuEq (%)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	Zn (ppm)	Pb (ppm)	Hg (ppm)	Bi (ppm)	Cd (ppm)
0.00	846.4	22.86	0.58	0.38	0.17	7.44	1,000	79	257	455	0.85	9.93	2.51
0.02	846.4	22.87	0.58	0.38	0.17	7.44	1,000	79	257	455	0.85	9.93	2.51
0.04	843.1	22.95	0.58	0.39	0.17	7.47	1,004	80	257	456	0.85	9.94	2.51
0.06	836.1	23.13	0.58	0.39	0.18	7.52	1,012	80	256	459	0.85	9.95	2.50
0.08	827.6	23.33	0.59	0.39	0.18	7.58	1,021	81	255	461	0.85	9.95	2.49
0.10	816.7	23.60	0.60	0.40	0.18	7.66	1,033	82	253	463	0.85	9.96	2.49
0.12	804.8	23.88	0.60	0.40	0.18	7.73	1,045	83	251	465	0.86	9.99	2.48
0.14	789.2	24.25	0.61	0.41	0.18	7.82	1,061	84	249	466	0.86	10.02	2.47
0.16	770.9	24.69	0.62	0.42	0.18	7.92	1,080	85	246	468	0.86	10.07	2.46
0.18	751.1	25.16	0.63	0.43	0.19	8.01	1,100	87	243	471	0.86	10.12	2.45
0.20	734.8	25.55	0.64	0.43	0.19	8.08	1,118	88	242	474	0.86	10.15	2.45
0.22	705.8	26.26	0.66	0.45	0.19	8.20	1,149	90	241	478	0.86	10.22	2.45
0.24	678.7	26.95	0.68	0.46	0.20	8.31	1,179	92	240	481	0.86	10.29	2.46
0.26	651.6	27.66	0.70	0.48	0.20	8.40	1,211	94	240	485	0.87	10.37	2.46

CoG CuEq (%)	Mineral (Mt)	NSR (US$/t)	CuEq (%)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	Zn (ppm)	Pb (ppm)	Hg (ppm)	Bi (ppm)	Cd (ppm)
0.28	622.2	28.46	0.72	0.49	0.21	8.50	1,248	97	241	489	0.87	10.45	2.48
0.30	592.7	29.30	0.74	0.51	0.21	8.60	1,288	100	241	492	0.88	10.54	2.49
0.32	562.6	30.21	0.76	0.53	0.22	8.69	1,330	103	242	495	0.89	10.64	2.51
0.34	533.0	31.16	0.79	0.55	0.22	8.78	1,376	106	242	498	0.90	10.75	2.53
0.36	505.3	32.11	0.81	0.57	0.23	8.86	1,421	109	243	501	0.91	10.87	2.54
0.38	478.4	33.10	0.84	0.59	0.23	8.93	1,469	112	244	503	0.92	10.99	2.56
0.40	452.8	34.09	0.86	0.61	0.24	8.98	1,516	115	245	506	0.93	11.11	2.58
0.42	428.2	35.12	0.89	0.63	0.24	9.04	1,566	119	247	509	0.95	11.24	2.61
0.44	404.1	36.20	0.91	0.65	0.25	9.09	1,619	122	250	512	0.96	11.37	2.63
0.46	381.4	37.29	0.94	0.67	0.26	9.14	1,673	126	253	514	0.98	11.51	2.66
0.48	359.9	38.40	0.97	0.69	0.26	9.18	1,727	130	257	517	0.99	11.64	2.69
0.50	339.3	39.56	1.00	0.72	0.27	9.24	1,783	134	260	519	1.01	11.76	2.72
0.52	320.3	40.70	1.03	0.74	0.28	9.30	1,838	138	263	522	1.02	11.88	2.74
0.54	302.8	41.84	1.06	0.76	0.28	9.37	1,893	142	267	525	1.04	11.99	2.78
0.56	286.4	42.99	1.08	0.78	0.29	9.44	1,950	146	270	528	1.06	12.09	2.81
0.58	270.8	44.17	1.11	0.81	0.30	9.51	2,007	150	271	531	1.07	12.18	2.83
0.60	255.8	45.39	1.15	0.83	0.31	9.59	2,066	154	274	533	1.09	12.27	2.86
0.62	241.6	46.63	1.18	0.86	0.32	9.67	2,125	158	276	535	1.10	12.37	2.89
0.64	228.5	47.88	1.21	0.88	0.33	9.75	2,186	163	279	537	1.12	12.45	2.91
0.66	216.5	49.11	1.24	0.90	0.33	9.84	2,246	167	280	539	1.13	12.54	2.93
0.68	205.2	50.35	1.27	0.93	0.34	9.95	2,306	172	281	541	1.15	12.64	2.96
0.70	193.9	51.68	1.30	0.95	0.35	10.08	2,370	177	283	542	1.17	12.76	2.98
0.72	183.5	53.02	1.34	0.98	0.36	10.21	2,432	181	286	544	1.18	12.90	3.01
0.74	174.3	54.30	1.37	1.00	0.37	10.33	2,491	185	289	546	1.20	13.02	3.03
0.76	165.9	55.54	1.40	1.03	0.38	10.45	2,548	190	292	549	1.21	13.14	3.05
0.78	158.3	56.73	1.43	1.05	0.39	10.59	2,603	194	294	551	1.22	13.26	3.08
0.80	151.4	57.90	1.46	1.07	0.40	10.70	2,658	198	295	552	1.24	13.38	3.10
0.82	144.7	59.09	1.49	1.09	0.41	10.83	2,712	202	298	555	1.25	13.51	3.12
0.84	138.7	60.23	1.52	1.12	0.41	10.95	2,762	206	300	557	1.26	13.63	3.15
0.86	132.6	61.44	1.55	1.14	0.42	11.09	2,817	210	303	560	1.27	13.76	3.18
0.88	127.0	62.63	1.58	1.16	0.43	11.23	2,870	214	307	562	1.28	13.88	3.21
0.90	121.7	63.84	1.61	1.18	0.44	11.38	2,926	218	310	565	1.30	13.98	3.23
0.92	116.7	65.01	1.64	1.20	0.45	11.53	2,980	222	313	566	1.31	14.09	3.26
0.94	112.0	66.21	1.67	1.23	0.46	11.67	3,036	226	315	568	1.32	14.21	3.28
0.96	107.5	67.40	1.70	1.25	0.47	11.83	3,093	230	317	571	1.34	14.33	3.30

CoG CuEq (%)	Mineral (Mt)	NSR (US$/t)	CuEq (%)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	Zn (ppm)	Pb (ppm)	Hg (ppm)	Bi (ppm)	Cd (ppm)
0.98	103.2	68.59	1.73	1.27	0.47	11.99	3,151	235	321	575	1.35	14.47	3.33
1.00	99.2	69.79	1.76	1.29	0.48	12.15	3,210	239	325	577	1.36	14.59	3.36

Source: (SRK, October 2023)

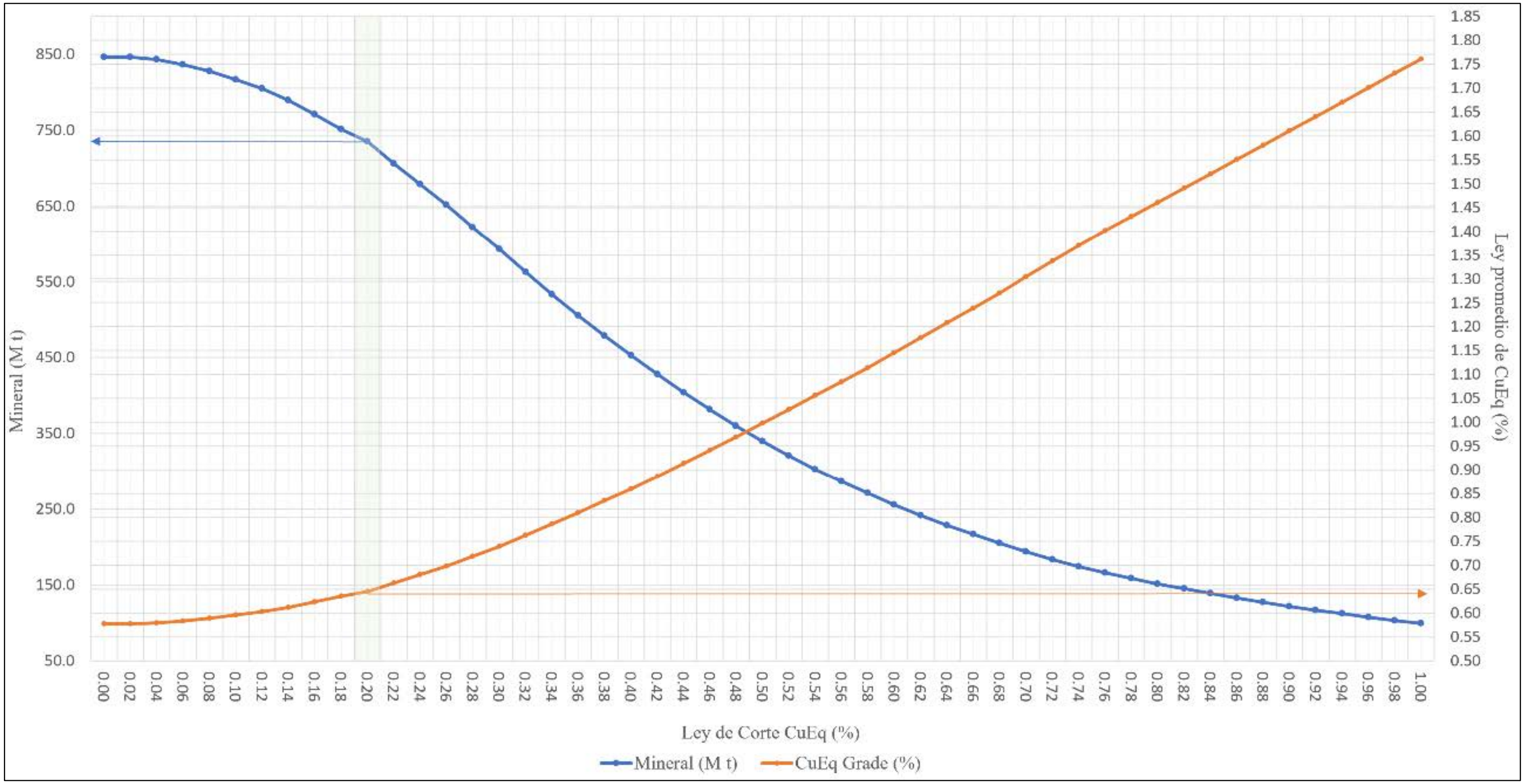


Figure 11-72: CuEq Tonnage-Grade Curve

Source: (SRK, October 2023)

11.4.1 Arsenic report in the mineral resources economic cone

Table 11-32 shows the tons of ore and grades extracted from the mine (ROM, for its acronym in English: Run Of Mine) and the grade of arsenic in the copper concentrate expressed in % and ppm.

The arsenic grade in the copper concentrate was estimated considering a metallurgical recovery of 85% Cu and 91% As and a Cu grade in the concentrate of 28% Cu.

The arsenic zone between 0 – 200 ppm As, reported 67.5Mt of ore with an average grade of 0.24 % Cu, 0.12 g/t Au, 7.50 g/t Ag and 139 ppm As with an As grade in the concentrate of Cu of 1.8% As.

The arsenic zone greater than 1,000 ppm As, reported 256.9 Mt of ore with an average grade of 0.73 % Cu, 0.29 g/t Au, 9.36 g/t Ag and 2,317 ppm As with an As grade in the Cu concentrate of 9.5% As.

Table 11-32: Mineral report of arsenic ranges

ROM As Zones (ppm)	ROM											Grade As conc. Cu	
	Mineral (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Sb (ppm)	Zn (ppm)	Pb (ppm)	Hg (ppm)	Bi (ppm)	Cd (ppm)	As (%)	As (ppm)
As < 100	14.1	0.28	0.11	5.06	69	27	503	418	0.58	9.38	3.09	0.7%	7,401
As 100-125	8.9	0.22	0.11	6.60	113	30	521	511	0.69	8.55	3.14	1.5%	15,203
As 125-150	12.0	0.22	0.11	7.93	138	28	494	479	0.73	8.90	3.07	1.8%	18,465
As 150-175	14.5	0.23	0.12	8.25	163	30	532	536	0.74	8.85	3.15	2.1%	20,970
As 175-200	18.0	0.21	0.12	8.98	187	27	439	574	0.76	9.08	2.79	2.6%	26,155
As 200-250	37.8	0.21	0.11	7.82	225	30	318	548	0.76	8.88	2.46	3.2%	32,355
As 250-300	41.5	0.21	0.12	7.50	276	29	263	513	0.72	9.18	2.35	3.9%	38,715
As 300-350	37.0	0.23	0.12	7.41	324	33	261	534	0.72	8.91	2.37	4.3%	42,707
As 350-400	33.6	0.24	0.13	7.37	374	38	253	515	0.72	9.03	2.34	4.7%	47,340
As 400-450	30.1	0.24	0.13	7.70	424	43	216	456	0.74	9.23	2.20	5.3%	52,765
As 450-500	27.5	0.26	0.14	7.03	475	47	226	451	0.72	9.54	2.26	5.5%	55,035
As 500-600	52.7	0.29	0.15	7.03	549	51	193	443	0.75	10.01	2.18	5.8%	57,519
As 600-700	46.5	0.30	0.15	7.52	649	56	152	429	0.77	9.63	1.98	6.5%	64,763
As 700-800	39.8	0.33	0.16	7.25	748	63	135	429	0.80	10.07	1.99	6.7%	67,186
As 800-900	34.4	0.37	0.17	7.10	849	68	143	445	0.79	10.21	2.03	6.9%	68,837
As 900-1000	29.5	0.40	0.17	7.40	948	76	162	449	0.82	10.35	2.12	7.1%	70,597
As > 1000	256.9	0.73	0.29	9.36	2,317	167	227	466	1.06	11.40	2.69	9.5%	94,645
Total	734.8	0.43	0.19	8.08	1,118	88	242	474	0.86	10.15	2.45	7.7%	77,196

Source: (SRK, October 2023)

The reference values of arsenic penalties in copper concentrate are shown in Table 11-33.

Table 11-33: Reference values of arsenic penalty in copper concentrate

Tolerance			Penalty	
Element	Unit	Value	Unit	Range Position
As	%	0.20	US$/t - 0.1%	1.5 - 2.5
As	%	0.50	US$/t - 0.1%	6.0 - 7.5
As	%	1.00	US$/t - 0.1%	8.5 - 15

Source: (Cochilco, 2015)

Figure 11-73 shows a 3D view of the ROM mineral above 1,000 ppm As.

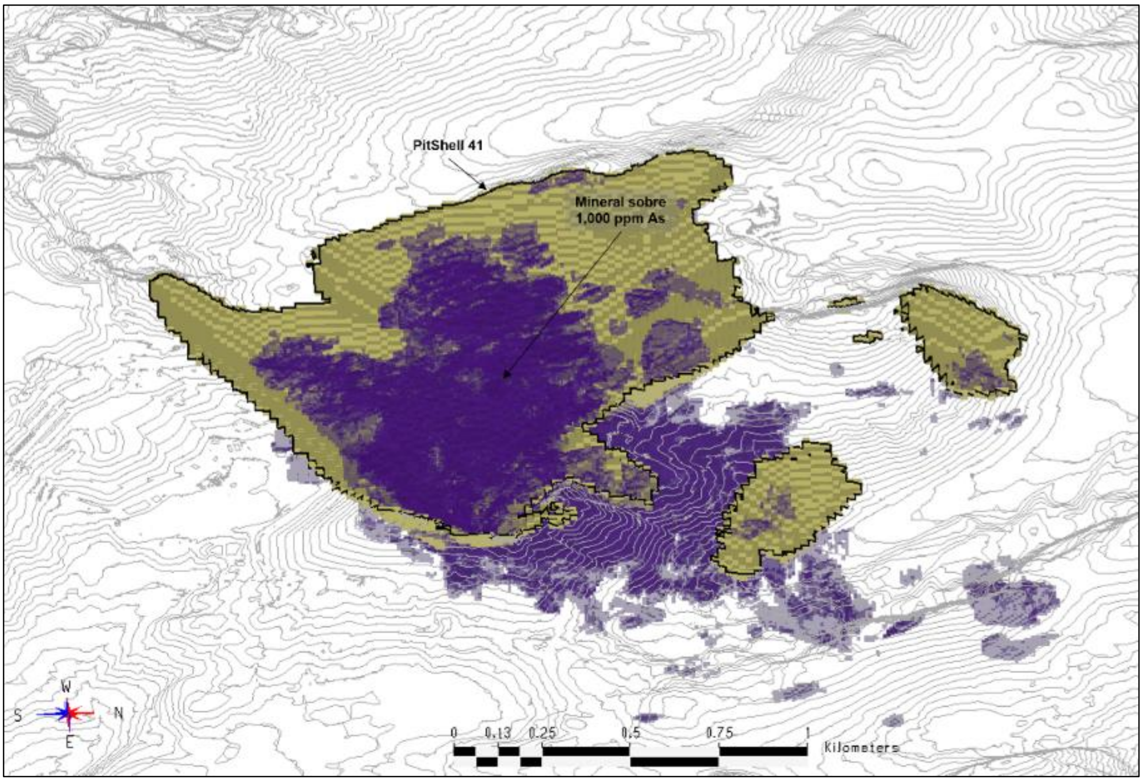


Figure 11-73: 3D View of ROM mineral over 1,000 ppm As.

Source: (SRK, October 2023)

11.5 Mineral Resource Uncertainty Discussion

Mineral Resources are not Mineral Reserves and do not necessarily demonstrate economic viability. There is no certainty that all or part of this Mineral Resource will become a Mineral Reserve. Inferred mineral resources are too geologically speculative to apply economic to classify them as mineral reserves. Mineral resource estimates may be materially affected by data quality; the natural geological variability of mineralization metallurgical recovery; and the accuracy of the economic assumptions to support reasonable prospects for economic extraction, including mineral prices. Metals and the costs of extraction and processing. Tantahuatay has its own information, which is suitable for use in the estimation of Mineral Resources. However, as discussed in the previous section, there are some issues related to lack of QA/QC; discrepancies regarding deviation measurements; and a lack of electronically recorded geological information. In the opinion of the QP, this may impede adequate classification of Measured Mineral Resources. Areas where the spacing between drillholes is on average less than 45 m were classified as Indicated Mineral Resource, while areas where the spacing between drillholes is greater than 45 m and less than 100 m were classified as Inferred Mineral Resource. Subsequent infill drilling with appropriate QA/QC could potentially confirm the continuity of mineralization and improve mineral resource categories and associated quantities. Action plans have been defined and are being implemented to address existing concerns. These plans will be reviewed in the future as mineral resources are re-determined. Although mineral resources may also be affected by the estimation methodology and the parameters and assumptions used in the grade estimation process, including upper cut (capture) data or search and estimation strategies, the QP believes that these factors are unlikely to generate a material impact on mineral resource estimation.

11.6 Assumptions for Multiple Commodity Mineral Resource Estimate

Does not apply to this TRS.

11.7 Qualified Person's Opinion on Factors that are Likely to Influence the Prospect of Economic Extraction

It is the opinion of the QP that the mineral resource block model is representative of the informative data and that the data is of sufficient quality to support the 2023 mineral resource estimate. The December 31, 2023 mineral resource estimate for the Tantahuatay Project was estimated in accordance with SEC regulations S-K 1300 of December 26, 2018. However, the QP is of the opinion that a detailed validation of the database should be conducted- especially on data from historical campaigns that are still available in unmined areas of the mine- to increase the data's confidence level. The 2023 mineral resource estimate may be materially affected by any future changes in the equilibrium COG, which may result from changes in mining costs, processing recoveries, metal prices, or geological knowledge based on new exploration data.

12 Mineral Reserve Estimation

Does not apply to this TRS.

13 Mining Methods

Does not apply to this TRS.

14 Processing and Recovery Methods

Does not apply to this TRS.

15 Infrastructure

Does not apply to this TRS.

16 Market studies

16.1 Coimolache markets (considering the process of sulphides ores)

16.1.1 Overview of the copper market

The copper industry is the world's largest base metal industry. Some of the key properties of this metal are that it is malleable, ductile and a good conductor of heat and electricity when in a pure form. Copper is water resistant and obtains a green patina when oxidized (as seen in construction when roofs turn green). Furthermore, it is germicidal, and can kill a variety of potentially harmful pathogens; this means that it can be used to make water safe for drinking or as an anti-germicidal surface to be used in buildings such as hospitals.

Refined copper is transformed into various semi-fabricated products – wire rod, rods, bars and sections, strip, sheet, plate, and tubes – which are subsequently used in construction, the automotive industry, manufacturing, architecture, etc.

- Copper wire rod is used to make copper wire and cable, primarily for power distribution, but also for telecommunications. Of all wire rod applications, building wire is the most frequently used; the majority of this type of wire is made from copper.
- Copper tube & alloy tube have a wide variety of end-uses. However, the two most significant end-uses are as plumbing tubes or as a component of HVACR (Heating, Ventilation, Air Conditioning & Refrigeration) products.
- Copper flat rolled products are widely used in applications such as electrical products, building & construction, automotive and military segments. Copper and copper alloy sheets and strips are used in the building industry to manufacture doors and hinges, switches, wiring, locks, and electrical outlets.

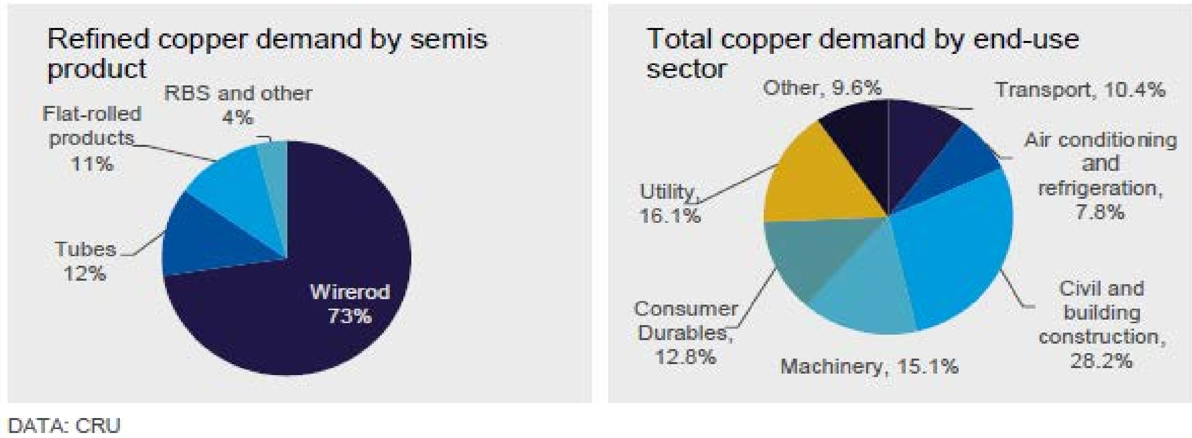


Figure 16-1: Copper demand by end-use product and sector

Source: CRU 2022

On the supply side, refined copper is made by mining, processing, and refining a variety of copper oxide and sulphide ores. Approximately ~70% of mined ore comes from open pit operations; the remaining ~30% is sourced from underground mines.

Sulphide ores are processed via smelting. Ore is crushed, ground and concentrated by froth flotation to produce a concentrate that can vary between 20%-40% copper contained. Concentrates are fed into a smelter, where copper oxidizes them at high temperatures to produce blister copper (purity of 97-99% Cu). Blister copper is cast into large slabs that are used as anodes in the electrolytic refining process, which produces 99.99% pure (LME grade) copper.

Oxide ores are processed via the hydrometallurgical process. This process involves the leaching of the ore using sulphuric acid. The Solvent Extraction and Electrowinning processes (SX-EW) recovers copper from the solution generated by the leaching process.

Depending on its quality, scrap can be used at different stages of the copper production chain. Low-grade scrap can be used as feedstock for integrated smelter-refinery operations that seek to increase blister production, whilst high-grade scrap can be sold directly to refining-only operations, where they are cast into copper anodes.

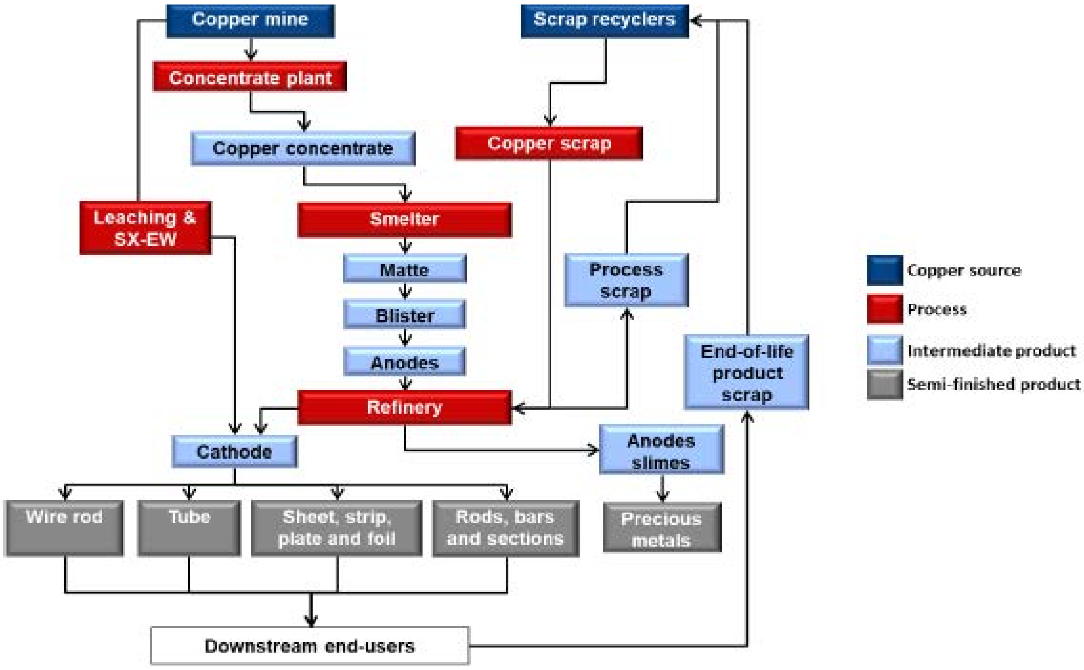


Figure 16-2: Copper value chain.

Source: CRU 2022

16.1.2 Copper value chain

The following figure shows a simplified version of the copper value chain:

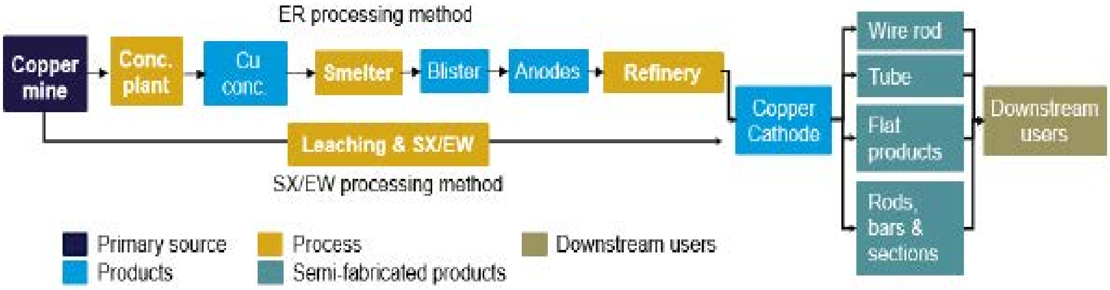


Figure 16-3: Simplified Copper value chain.

Source: CRU 2022

The primary trading form for copper is copper cathodes. This refined copper is also used in various semi-fabricated products – wire rod, rods, bars and sections, strip, sheet, plate and tubes. These forms are usually traded at a premium to the benchmark copper price.

In addition, intermediate products, such as copper concentrates, copper blister and copper anodes, are also traded. Around 80% of copper cathode production comes from copper concentrates; the remaining 20% comes directly from cathodes produced through the hydrometallurgical route (leaching & SX/EW).

Selling cathode is a much less complicated commercial activity than selling copper concentrate. Cathode is a standardized product, whereas concentrate can vary widely in quality and value. Pricing for the two products is also different given that concentrate is subject to penalties for impurities but also generates credits for payable metals such as gold and silver. Similarly, the logistics requirements and customers for each product also vary. Cathodes are often sold to manufacturing customers, namely semi producers of wire rod, wire and cable, and can also be sold to traders. Concentrate, on the other hand, is sold to copper smelters or to traders.

16.1.3 Copper concentrates

The value of copper concentrates is determined by several factors other than the value of the content of each main metal in the concentrate.

As part of the agreements between concentrate sellers and buyers, a percentage of metal payable by the smelter is defined, as well as Treatment Costs (TCs) and Refining Costs (RCs) for key elements present in the concentrate.

In most copper concentrate contracts, copper, gold and silver are specified as the only payable metals:

- For copper, typically 96.50-96.75% of the copper content is paid for, subject to a minimum deduction of 1 unit. However, this might vary from contract to contract and many contracts specify a sliding scale whereby increases in copper content trigger increases in the percentage of copper content that the trader or buyer pays for.
- For gold and silver, a sliding scale is applied, with payables normally ranging from 90.00% to 98.25% for gold and 90% to 95% for silver, subject to a minimum deduction of 1 g/t concentrate in the case of gold, and 30-50 g/t concentrate in the case of silver.

Treatment and refining charges for copper concentrates include a TC expressed in US$/dmt of concentrates and a RC expressed in US$ cents/lb of copper. For gold and silver content, a, RC is considered and expressed in US$/troy oz.

When it comes to penalties, there are a number of elements that routinely qualify for penalties if they are present above a fairly low level in copper concentrates. These elements include arsenic, bismuth, antimony, mercury, lead, fluorine and chlorine. Other elements may also incur penalties, though only at higher concentrations. They include zinc, nickel, cobalt, silica, alumina and tellurium. If present in significant quantities, they may affect the recovery of copper or cause problems during smelting and refining. Finally, if a certain element falls below fixed thresholds, penalties may be payable or the material may only be suitable for blending. This is particularly true for sulphur and iron, where there is a minimum ration of copper to sulphur and iron that makes the material suitable for smelting.

16.1.4 Copper market balance and price

Global refined copper demand is expected to grow from 23.9 Mt in 2021 to 26.5 Mt in 2026 at a 2.14% CAGR. This 2.6 Mt increase in consumption will be partially driven by the post Covid-19 pandemic economic recovery, but also by growing use of electric vehicles and renewable energies. The refined copper supply is expected to hit slightly below 26.5 Mt in 2026, which reflects an increase of 2.6 Mt from the 23.9 Mt produced in 2021 and represents 2.07% growth in CAGR for this period. The committed mine supply will peak in 2024 at 22.7 Mt, up from 21.3 Mt in 2021, and is expected to subsequently drop to 21.4 Mt in 2026 due to a lack of committed projects. Ultimately, copper nominal prices are expected to temporarily decrease from 9,315 US$/t in 2021 to 8,222 US$/t in 2024 as the refined copper supply outpaces demand within this period. After 2024, CRU expects prices to climb back up to 9,308 US$/t in 2026, impacted by growing copper demand from electric vehicles (EV) and renewable energies and by the lack of committed mine projects.

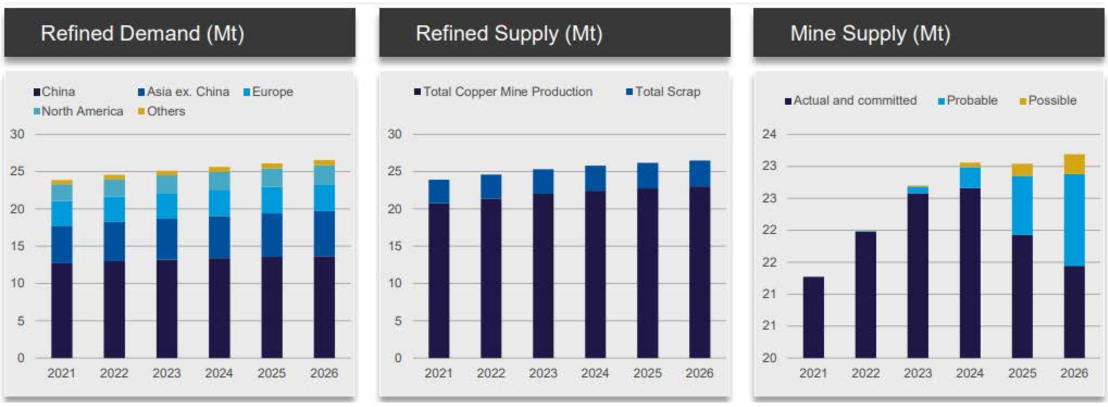


Figure 16-4: Copper supply-demand gap analysis, 2021 - 2036, kt

Source: CRU 2022

Coming from a strong 4.7% year-to-year rebound from 2020 to 2021, refined copper demand growth is expected to slow down during the forecast period, hitting y-to-y growths of >2% from 2021 to 2024 and 1.7% from 2025 to 2026 as the effects of the pandemic wear off. CRU expects copper demand to grow by 2.6 Mt in the next five years, reaching 26.5 Mt consumed in 2026, with particularly strong growth of 3.6% CAGR coming out of Asia (and China in particular) in 2021-2026. During this period, demand is expected to be driven mainly by the recovery of the industrial and automotive sectors, coupled with a rapid penetration of EVs and renewable energies in coming years. On the supply side, refined production will continue to grow strongly, increasing by 2.9% y/y in 2022 and 2023, aided by several smelter projects that are due to start-production in China. Meanwhile, Asian smelter projects, namely those in Indonesia and India, will play a more prominent role from 2024 onwards with refined supply reaching 26.5 Mt in 2026 versus 23.9 Mt in 2021. The committed mine supply is expected to return to pre-pandemic levels YoY; peak in 2024 with a production of ~22.7 Mt; and then drop to 21.4 Mt in 2026, leaving a gap of ~1.8 Mt to be filled by projects currently classified as probable and possible.

As mine supply and smelter capacity recover, the market balance is expected to register rising surpluses to 2024. Going forward, this surplus is expected to become a deficit in 2026, as production is unable to keep up with demand.

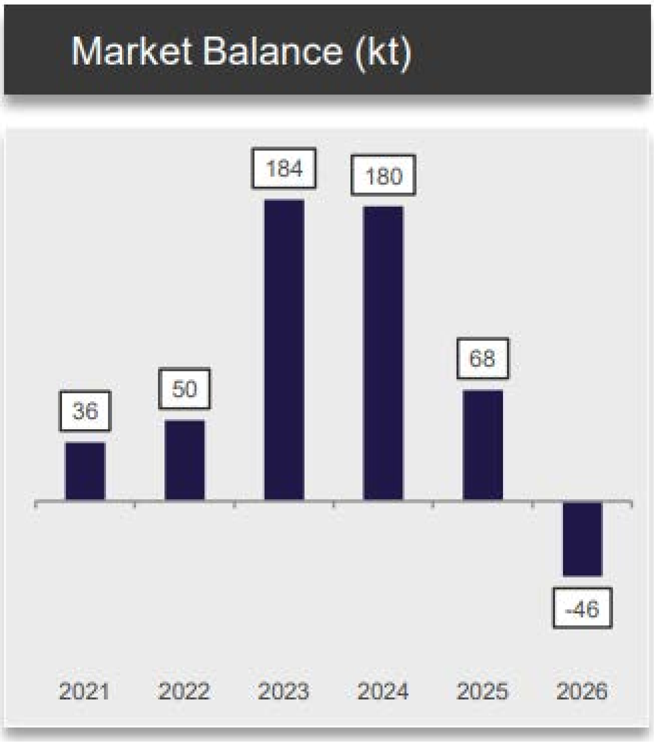


Figure 16-5: Copper Market Balance 2021 – 2026 (kt)

Source: CRU 2022

Ramping up of new projects in the 2021 – 2024 period, which will generate a market surplus, is expected to drive nominal prices downward from 9,315 US$/t in 2021 to 8,222 US$/t in 2024. After this, the prevailing narrative constructed around the green energy transition and a prospective lack of new mine supply, which is forecasted to move the market into deficit after 2025, is expected to start influencing medium-term prices. As a result, copper price is forecast to swing back up to 8,758 US$/t in 2025, to eventually hit 2021-levels in 2026, reaching 9,308 US$/t in nominal terms.

Based on the previous analysis developed by CRU in 2021 and consensus information from different banks and investment entities, the following price forecast represents Buenaventura's forecast as of July 2023, memorandum: “Precio de metales para presupuesto 2023” (BNV, 20 de julio de 2023).

16.2 Coimolache products

16.2.1 Summary of Coimolache products

The following tables summarizes the main specifications of the concentrate to be produced in Coimolache through sulphide ore processing:

Table 16-1: Expected specifications of Coimolache’s concentrate product

Grades in Cu concentrate			
Cu	Au	Ag	As
(%)	(g/t)	(g/t)	(ppm)
28.0	8.6	306.6	77,196

Source: SRK using information from Buenaventura

This section aims to assess and compare Coimolache’s product to that of other players in the industry. This is done by showing where each product stands when compared to the estimated specification from a large sample of mines. The figures presented show the minimum and maximum content of each element under analysis in the samples of mines used, as well as the median and the distribution around it segmented in quartiles in the following way:

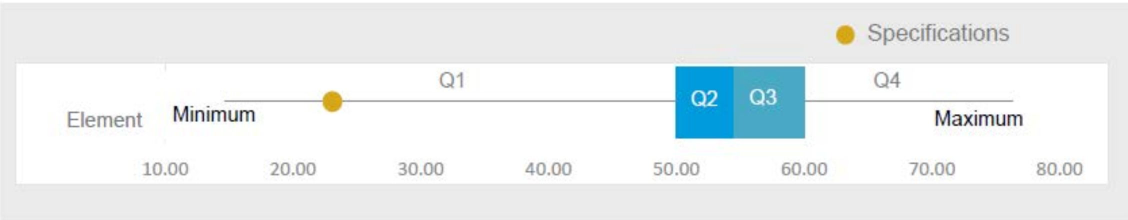


Figure 16-6: Sample boxplot

Source: CRU

16.2.2 Cu concentrate

To compare Coimolache’s future copper concentrate production against other industry players, a sample of 337 mines from CRU’s Copper Cost Model (out of which 110 are located in Latin America) was used to compare copper grade specifications, considering data from 2015 to 2019. Additionally, at the same time, a sample of 238 mines was used to compare gold and silver content in copper concentrate, excluding those copper concentrates for which no gold or silver content was found in the original samples.

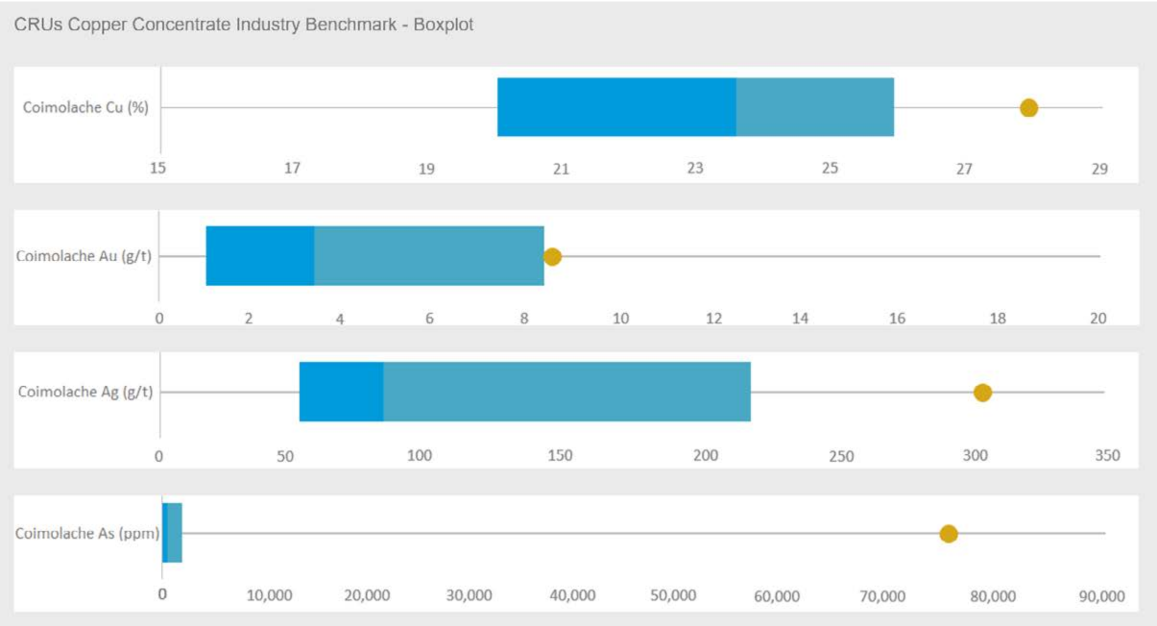


Figure 16-7: Copper concentrate of Coimolache (considering the process of sulphides ores)

Source: CRU 2022 updated by SRK using information from Buenaventura

Currently, El Brocal is the only mine in Buenaventura's portfolio that produces copper concentrate. In 2019, Buenaventura produced ~43 kt Cu contained in concentrates. The company does not have smelting capacity to process the material; hence it needs to sell the product to the market.

Global smelting capacity in 2019 was 24 Mt of copper per year. Copper concentrates are mostly sold to Asia, where most of the world's smelting capacity is located. Approximately ~40% of copper smelting capacity can be found in China, followed by Japan (~7% of global smelting capacity) and South Korea (~3% of global smelting capacity). Outside of Asia, another relevant location is Europe, which represents 16% of the global smelting capacity. The Americas account for 15% of smelting capacity, while Africa accounts for a comparatively small percentage of global capacity at ~6%.

Some major Asian companies have bought stakes in copper mines to secure future feedstock material to fulfil domestic demand for the material down the line.

Expected Tantahuatay's copper concentrate will have substantial payable metal content. It has high copper and silver, with reasonable gold content. However, the product has very high arsenic content. With arsenic levels of 6.5-9.5%, this would make selling the concentrate directly to smelters almost impossible, as they would have to extensively blend the product to reach a more generally acceptable level of 0.2% As content (although certain smelters are capable of processing higher levels).

Blending is a relatively simple physical process of mixing different products into a new homogeneous concentrate. This process is used particularly for low-grade and complex material. In places like Peru, where a considerable amount of variable material is produced, blending is a common practice.

Given that Tantahuatay's copper concentrate will have levels of arsenic that will be difficult for smelters to process and for traders to position in the market, high penalties will be levied, which is reflected in other Buenaventura's past contracts, including active contracts signed by Buenaventura to trade El Brocal concentrates. However, despite challenges, the concentrate is ultimately sold to players in the industry who have experience handling material of this kind. Looking forward, Buenaventura has mid-term contracts and experience trading copper concentrates with higher arsenic contents. The company has long-standing relationships with these buyers, and it is likely that conversations will be on-going to position this concentrate in the market.

17 Environmental studies, permitting, and plans

Does not apply to this TRS.

18 Capital and operating costs

Does not apply to this TRS.

19 Economic analysis

Does not apply to this TRS.

20 Adjacent properties

Tantahuatay is located in the mining district of Hualgayoc, within the Chicama-Yanacocha corridor, in the Cajamarca-Cutervo deflection of the western Andes Mountain range of northern Peru ((Lecaros, Palacios, Vargas , & Sanchez, 2000); (Carlotto, y otros, 2009) and (Carlotto, y otros, 2010)). This region is known for hosting epithermal Au-Ag-Cu deposits. The most important neighboring ore deposits are:

- Cerro Corona mine is located in the region of Cajamarca, province of Hualgayoc, district of Hualgayoc. It is situated in the El Tingo peasant community, La Jalca annex, in the hamlets of Coimolache and Pilancones. This mine produces copper concentrate with high-grade gold through conventional open pit mining methods and sulfide ore treatments via concentration floatation extraction. In 2021, production totaled 113,278 ounces of gold (Au); 25,948 tons of copper (Cu); and 248,282 equivalent ounces of gold (Au). In 2022, Cerro Corona produced 129,267 oz of gold (Au); 26,995 tons of copper (Cu); and 260,455 equivalent ounces of gold (Au) (Gold Fields, 2021).
- La Zanja mine produces gold through open pit mining and is located in the district of Pulán, province of Santa Cruz, in the region of Cajamarca. This mine began operating in 2010 and is a gold epithermal deposit in oxides. Additionally, there are several recognized low-to-intermediate sulphuration vein systems in the periphery as well as copper-molybdenum-gold mineralization related to porphyry-type systems. La Zanja produced 29,616 oz of gold in 2022 versus 22,611 in 2021 (Buenaventura, 2022).
- Sipan mining unit, located in the department of Cajamarca, produced gold through heap leaching of material from an epithermal deposit. The reserves were depleted in 2000 and for this reason, the mine stopped extraction and proceeded to the closure stage. The closure plan for the Sipan mining unit was approved by the corresponding environmental authority through Directorate Resolution R.D. 067-2009-MEM-AAM.
- Yanacocha is a mining district with several volcanic events that have generated oxide deposits in gold surfaces with underlying copper sulfide deposits containing arsenic. The operation is located 54 km north of the city of Cajamarca. Newmont has operated the Yanacocha mine since 1993 and became the sole owner of this stake in 2022. Yanacocha has produced approximately 40 M oz of Au to date.

21 Other relevant data and information

21.1 Independent Audits

In February 2020, SRK Consulting Perú S.A. (SRK) conducted an independent audit to Update the Mineral Resources Model with the geological database. The effective date of the report is January 17, 2020.

- SRK's key conclusions from the 2020 audit are presented below. Additional specific technical conclusions are presented throughout the report.
- The majority of intrusive features exhibit a sub vertical geometry, but some align with the stratification. SRK advocates for a reassessment of the model to determine the accurate geometry.
- SRK asserts that there are no fatal inconsistencies in the Tantahuatay database.
- While SRK believes that the values stored in the certified sections of the database are accurate, it cannot affirm the same for information that was not made available. The method used by SRK to define and estimate mineral resources is coherent with the best practices.
- Mineral resources were estimated by SRK in 2020 in accordance with the information provided by Buenaventura and with an effective date of January 17, 2020.
- SRK contends that the distances employed for Indicated Mineral Resources are conservative. However, for Inferred Mineral Resources, the 120-meter distances are based on a mining rate of 20 thousand tons; these distances will change as the mining operation expands.
- SRK believes that employing more than one drill hole for Indicated Mineral Resources mitigates the discontinuity effect by presenting a more contiguous view of the Mineral Resources instead of isolated patches.

In a comprehensive assessment, SRK asserts that no critical discrepancies were discerned during the audit conducted in the year 2020. Furthermore, SRK affirms that the mineral resources reported by the organization until January 17, 2020 align with established SEC regulations and best practices.

22 Interpretations and conclusions

22.1 Database Verification

- It was observed that 14% of the total drill holes have no core recovery data and 15% of the total drillholes present core recovery percentages less than 90% (Most of this information comes from the period 2014-2018).
- Only minor inconsistencies were detected in the data reviewed.
- SRK believes that the database is acceptable for mineral resource estimation purposes.

22.2 Sample Preparation, Analyses, and Security

- SRK believes that the insertion rate of control samples is adequate and aligned with current best practices.
- SRK believes that there is no evidence of significant contamination for Au, Ag, Cu and As.
- SRK is of the opinion that the sample preparation, chemical analysis, quality control, and the security procedure are sufficient to provide reliable data to support resource estimation and mineral reserve estimation.
- SRK believes that there is good sampling, sub-sampling and analytical precision in the samples sent to the ALS laboratory. In the samples sent to the Certimin laboratory, Ag and Au have good sampling, sub-sampling and analytical precision; however, As and Cu have precision close to acceptable limits and the percentage of samples within parameters varies from 80% to 87% in the three types of duplicates.
- SRK believes that the analytical accuracy of the ALS laboratory for Ag, Au, As and Cu is within acceptable limits. In the case of the Certimin laboratory, the analytical accuracy of Au and Cu is within acceptable limits and in Ag and As it is close to acceptable limits.
- Inter-laboratory bias results (SGS versus Certimin) are within acceptable limits for Au, Ag, As and Cu.

22.3 Lithological Model

- SRK observed that some modeled bodies have no drillhole sample information. In other cases, modeled bodies were supported by information from a limited number of drillhole samples and were subsequently extrapolated to the periphery of the model as uncategorized areas.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.
- SRK identified that Coimolache is not equipped with a structural model that helps users understand the interaction between stratification and the geometry of the intrusions.
- According to the analysis of the grades contained within each unit, it can be expected that some lithological units have more than one population of grades. Nonetheless, SRK believes that for this stage of study, the definition of domains is acceptable.

- The Tantahuatay Sulfur's Project Lithological model in general shows geological continuity and geological coherence; it is consistent with the input information and the cross-sectional relationships that are defined are correct between the events represented.

22.4 Alteration Model

- SRK used the same criteria to subdivide phyllic alteration domains (Fil1, Fil2, FIl3 and Fil4) and advanced argilic alteration domains (ArgAvd1, ArgAvd2, ArgAvd3 and ArgAvd4; this subdivision generates some very small bodies due to the limited number of samples. SRK believes that the subdivision of the alteration domains is coherent with the type of deposit to which it belongs.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.
- SRK found that some of the identified sections did not match the interpreted sections received; in these cases, SRK coordinated directly with the team that defined the geological model and the database was corrected.
- The Tantahuatay alteration model, in general, has continuity and geological coherence. Back flagging analysis indicates a good relationship between the modeled solids and the samples used to build the model.

22.5 Mineralization Model

- SRK identified cases where lithological solids did not match the interpreted sections of the mineralization; these discrepancies were generated by the modeling strategy, which prioritized lithological solids over interpreted sections.
- Coimolache provided a surface that differentiates oxides, mixed and sulfides.
- The model was based on interpreted 2D sections with a NE-SW orientation, which produces an artificial tendency of some bodies in this direction.
- To reproduce the trends of some mineralization domains, SRK used structural trends to build the corresponding lithological domain.
- The Tantahuatay Sulfuros Project mineralization model in general has continuity and geological coherence. Back flagging analysis indicates that model is consistent with input information and the cross-cutting relationships are correct between the represented events.

22.6 Mineral Resource Estimation

- Coimolache developed the mineral resource estimation of Cu; SRK was responsible for the mineral resource estimation of Au, Ag, Pb, Zn, Hg, Cd Sb, Bi and Cd in the Tantahuatay Sulfuros Project. In its assessment, SRK validated the diamond drilling database and confirmed that the lithological model generated by Coimolache restricts and controls the shapes of the mineralized bodies that host Cu. Diamond drilling data within the relevant geological domains and their Au, Ag, Cu and As grades were interpolated into a block model using ordinary kriging (OK) and inverse distance (ID) methods. The results were validated visually and through statistical comparisons. The estimate generated was consistent with industry standards across categorizations.

- Mineral resources were reported within optimized limits and based on economic and mining assumptions to support reasonable potential for economic extraction of the resource. A cut-off grade has been derived from these economic parameters and the resource reported was above the cut-off grade of 0.1958% CuEq.
- Regarding the mineral resource estimation, SRK found that:
  - Global biases show no significant differences.
  - The drifts show a small conditional bias when there is enough data, but as the graphs approach the extremes (at the edge of the deposit), the variability between the nearest-neighbor and that estimated by ordinary kriging appears different; and,
  - There are domains with greater conditional bias, but the graphs show little variability when the R2 (coefficient of determination) is reviewed in each domain.

22.7 Block Model: Resource Category

- The mineral resource categories “indicated” and “inferred” were considered in the estimation. Measured category was not considered due to drilling mesh spacing; consequently, no tonnage was reported for this category.

22.8 Economic parameters

- SRK reviewed the economic parameters based on the following costs:
- Plant, general & administrative costs and commercial terms (selling expenses), as provided by BVN.
- Mining unit costs by benchmarking with other similar operations, evaluated by SRK.
- SRK and BVN agreed to set the copper mineral throughput rate at a capacity of 60 kt/d.

22.9 Calculation of NSR and its cut-off value

- The NSR value allocation function considers the value contribution of copper, gold, and silver. For this, the point value of each element has been estimated and includes in the calculation the value of the net price payable less charges for smelting, refining, arsenic penalty, freight, transportation, royalties, and concentrate loss.
- The NSR cut-off value of 7.76 US$/t was determined from the sum of the plant, general and administrative costs, and the difference between ore mining cost and waste mining cost.

22.10 Arsenic grade in copper concentrate

- Within the mineral resource cone, zones over 1,000 ppm As have been identified that report 256.9 Mt of mineral with an average grade of 0.73 % Cu, 0.29 g/t Au, 9.36g/t Ag and 2,317 ppm As. These mineral zones generate a copper concentrate with a grade of 9.5 % As.

23 Recommendations

23.1 Database Verification

- It is recommended that deviation measurements be more frequent, at least every 10 m, especially in drillholes that are more than 100 m in length.
- SRK recommends that Coimolache periodically monitor and/or review the drilling recovery results. SRK considers a recovery percentage greater than 90% acceptable for drillhole samples.
- It is suggested that, in future drilling campaigns, the minimum and maximum drillhole sampling length be respected, as indicated in the Coimolache sampling protocol.
- It is suggested that the number of decimal places used for data stored in the database coincide with the values reported in the laboratory analysis certificates because this is a strong indicator of the precision of laboratory analysis methods.

23.2 Sample Preparation, Analyses, and Security

- SRK recommends that Coimolache increase the insertion of external control samples, as established in its Quality Control protocol (2020). Sending external control samples to the secondary laboratory must include a review of the granulometry in 10% of the samples, as well as the insertion of fine blanks and SRMs (Standard Reference Material) in said lots.
- SRK recommends that Coimolache check that the inserted SRMs utilize the same methods chemical analysis digestion as that applied for primary samples, for example the SRM M2AL20 (inserted in 2023) has been analyzed by aqua regia digestion, while the primary samples have been analyzed by digestion by four acids.
- SRK recommends that Coimolache investigate the origin of the error rates in the results of pulp, coarse, and twins duplicate samples of As and Cu from the Certimin laboratory by reviewing the sampling, preparation, and sample analysis processes.
- SRK recommends frequently reviewing the behavior of the quality control results and informing the laboratory about any problems detected to implement corrective measures in the shortest possible time.

23.3 Geological Model

- SRK recommends working on a structural model to help better delineate bedding planes and the geometry of the intrusions.
- SRK recommends completing the information corresponding to the sections interpreted in 2D with information on sections that are located further north of the L1400 section.
- SRK suggests complementing the information obtained from the lithological model with the alteration and mineralization models generated.
- SRK recommends reviewing the definitions of alterations with the types of deposits described. (Corbett & Leach, 1998)

- SRK recommends adapting the names of the alteration domains to the terminology currently used in the industry. (Corbett & Leach, 1998)

23.4 Mineral Resource Estimation

- The mineral resource estimation was based on the lithological model and the Minzone model of the sulfide zone, both delivered by Coimolache (Minzone Model refers to the division of the deposit into Oxide and Sulfide zones). SRK recommends that for future work, both alteration and mineralization models be included to define estimation domains.
- SRK recommends that density be estimated by domains (defined based on lithology or a combination of criteria). To this end, subsequent drilling campaigns must include taking bulk density samples systematically to generate a larger of samples (per domain) for the estimation process.
- The mineral resource report does not include measured resources due to lack of drilling mesh support. SRK recommends conducting drilling mesh spacing studies to define and classify measured resources.
- SRK recommends including QA/QC parameters within the mineral resource classification analysis.

23.5 Processing level and costs

- SRK recommends evaluating the use of a processing level between 80 kt/d or 100 kt/d and updating unit costs.

23.6 Arsenic grade in copper concentrate

- SRK recommends developing studies regarding the definition and presence of arsenic in the deposit and the impact of the arsenic grade in the copper concentrate commercialization possibilities.

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25 Reliance on information provided by the registrant.

Does not apply to this TRS.