

NI 43-101 TECHNICAL REPORT PIUQUENES PROPERTY

Calingasta Department, San Juan Province - Argentina

Prepared for Pampa Metals Corp.

Effective Date: January 31, 2025

Signature Date: April 22, 2025

Qualified Persons:

Maria Muñoz (QP) MAIG (Geo)

CERTIFICATE OF QUALIFICATION (Maria Muñoz Lizarve)

I, María del Carmen Muñoz Lizarve, P. Geol MAIG (QP), do hereby certify that I am author of the Technical Report titled NI 43-101 Technical Report Piuquenes Property, Calingasta Department, San Juan Province, Argentina (the Technical Report) with an effective date of January 31st, 2025, prepared for Pampa Metals Corp. (the Issuer). I hereby certify that:

- 1. I am an independent Principal Resource Geologist currently employed by Mining Plus Perú S.A.C.
- 2. My current work address is Avenida Jose Pardo 513, Office 1001, Miraflores, Lima, Peru, 15074
- 3. I graduated with a Bachelor of Science in Geological Engineering from the National University of Saint Agustine, Arequipa Perú in 2003.
- 4. I am registered as a Professional Geologist in Perú (CIP 115281) and as a Member of the Australian Institute of Geoscientists (Membership Number 7570).
- 5. I have practiced my profession continuously since 2003. I have read the definition of qualified person set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
- 6. I visited Piuguenes Property from November 5th to 6th, 2024.
- 7. I am responsible for all chapters of the Technical Report.
- 8. I have not had prior involvement with the property that is the subject of the Technical Report.
- 9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.
- 10. I am independent of Pampa Metals Corp. (the Issuer) and the Piuquenes Project, applying all the tests in section 1.5 of National Instrument 43-101.
- 11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 12. At the effective date of January 31st, 2025, to the best of my knowledge, information, and belief, the technical report, or part that I am responsible for, contains all scientific and technical information required to be disclosed and that the technical report is not misleading.

13. I consent to the filing of the Technical Report by the Issuer with any stock exchange and
other regulatory authority and any publication by them for regulatory purposes, including
electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
Dated this 22 nd day of April 2025.

María del Carmen Muñoz Lizarve P. Geo., (MAIG No. 7570)



1 EXECUTIVE SUMMARY

Mining Plus Peru S.A.C. (Mining Plus) has been engaged by Pampa Metals Corp. to prepare a Technical Report in accordance with the National Instrument 43-101 (NI 43-101) standards of the Canadian Institute of Mining, Metallurgy, and Petroleum (CIM) for the Piuquenes Property, located in the Calingasta Department, San Juan Province, Argentina. The objective of this report is to provide a compliant Property of Merit assessment, based on a thorough review of existing data and an on-site inspection.

Ms. Maria Muñoz, Principal Geologist at Mining Plus and a member of the Australian Institute of Geoscientists (MAIG), is the Qualified Person (QP) responsible for this report, as defined by NI 43-101. Ms. Muñoz conducted a site visit from November 4th to 7th, 2024 in order to validate data and assess the Property's conditions.

1.1 Property Description

The Piuquenes Property consists of ten early-stage exploration concessions, covering a total of 2,523.69 ha. It is located in the Calingasta Department, approximately 180 km west of San Juan Province, Argentina; and is located 5 km from the Chilean border, within the Andes Mountain range. The Property lies at an average elevation of 3,400 meters above sea level, with the operational area reaching up to 4,100 meters above sea level. It is situated near other significant copper porphyry projects in the San Juan Miocene porphyry belt, including Altar, El Pachón, and Los Azules.

The Piuquenes Property concessions contain the Piuquenes Copper-Gold Porphyry Project, located in the southern part of the property, including several copper-gold porphyry pulses distributed over an area of approximately 2.0 x 1.5 km. This has been supported with initial drilling.

In November 2023, Pampa Metals Corp. entered into an Option and Joint Venture Agreement with Compañia Minera Piuquenes S.A. to acquire an 80% interest in the Piuquenes Copper-Gold Porphyry Project. Initially covering 1,880 ha, the Property was expanded by 34% in October 2024, bringing the total area to 2,523.69 ha.

1.2 Geology and Mineralization

The Piuquenes Property is part of the Miocene Belt in Chile-Argentina and hosts copper-gold porphyry mineralization. Its geological setting is shaped by major fault systems (NNW, NW-WNW, and NE-ENE), which have played a key role in controlling rock formations, alteration, and mineralization. The Piuquenes Copper-Gold Porphyry Project (Piuquenes Project) is strongly influenced by structural controls, which have played a significant role in mineral deposition.



The Piuquenes Property is largely covered by unconsolidated glacial, fluvial, and mass movement deposits. Rock outcrops are associated with the Permo-Triassic Choiyoi Group. Forming the basement and consisting of andesitic to dacitic volcanic rocks in the lower sequence and peraluminous rhyolites in the upper sequence. This unit has been intruded by dikes, stocks, and small plutonic bodies. The main lithological units across the property belong to the Pachón Formation, which unconformably overlies the Choiyoi Group. It consists of andesitic lavas, dacitic breccias, and rhyolitic ignimbrites, subdivided into lower andesitic, middle dacitic, and upper rhyolitic members.

During the Middle Miocene (11.75–8.9 Ma), porphyritic intrusions cut through these units, leading to the primary mineralizing events. Exploration work has currently identified four main targets:

- Piuquenes Central and Piuquenes East, which correspond to the Piuquenes Project and are the primary focus of detailed geological studies.
- Piuquenes North and Piuquenes Northwest, still in an early exploration stage.

Alteration in the area follows a distinct zoning pattern. Propylitic alteration in the outermost zones, transitioning to quartz-sericitic and argillic alteration in the mineralized areas. Potassic alteration is associated with the earliest porphyritic intrusions.

Mineralization at the Piuquenes Property is associated with Cu-Au porphyry pulses over a 2.0 x 1.5 km area, mainly in Piuquenes Central and Piuquenes East. In Piuquenes Central, mineralization is characterized by copper oxides at 240–250 m depth, transitioning to sulfide mineralization (chalcopyrite, secondary chalcocite, cuprite, and native copper) down to 520 m. This is primarily within quartz veins, with gold closely correlating to copper. This mineralization occurs alongside potassic alteration (biotite and magnetite) and sericitic alteration in the early stages. Deeper levels exhibit propylitic alteration.

In Piuquenes East, mineralization is hosted in argillized volcanic breccias, cut by unaltered dykes of feldspar porphyry diorite. This is overprinted by advanced argillic alteration, including saccharoidal quartz, vuggy silica, alunite, and jarosite, indicating a superimposed epithermal event on the porphyry system.

1.3 Exploration and Drilling

The Piuquenes Property has been explored by five companies: Minera Aguilar S.A. (MA), Inmet Mining Corporation (IMC), Anglo American Argentina (AAA), Nittetsu Mining Co. Ltd. (Nittetsu), and Pampa Metals Corp. (PM).

The Project has four exploration targets: Piuquenes Central, Piuquenes East, North and Piuquenes Northwest. Piuquenes Central is the most advanced target, with indications of significant copper and gold mineralization. Recent drilling has confirmed significant



intersections, including 422 m with 0.48% Cu and 0.61 g/t Au (PIU01-2024DDH), 448 m with 0.42% Cu and 0.46 g/t Au (PIU02-2024DDH), and 801 m with 0.40% Cu and 0.51 g/t Au (PIU03-2024DDH). These results, along with surface geochemistry and historical drilling, provide strong evidence of mineralization.

Geophysical surveys, including 3D-induced polarization (IP) and resistivity studies, have further enhanced understanding of the mineralized system. These surveys reveal a high-resistivity zone and an annular chargeability anomaly, indicative of underlying mineralization. The chargeability anomaly suggests the presence of elevated pyrite content, consistent with phyllic alteration, a typical feature of porphyry-style systems. This combination of geological, geochemical, and geophysical data strengthens the case for Piuquenes Central as a highly promising target for further exploration and potential development.

Similar geophysical features at Piuquenes East indicate potential for additional mineralized centers. These targets represent important exploration opportunities with the potential to investigate geophysical anomalies at greater depth through additional drilling.

MA first discovered copper and gold mineralization in 1970, followed by exploration between 1973 and 1975, confirming anomalous values through rock sampling. IMC in 1995 carried out further geological studies, geochemical assays and geophysical studies. This included 23 km of ground magnetics and 5.8 km of IP/resistivity studies, followed by 2,157 m of drilling. In 2015 and 2016, AAA continued exploration efforts with detailed geological mapping, geochemical sampling, 17.8 km of IP/resistivity studies and 920 m of drilling. Nittetsu reviewed and validated previous exploration results from 2020 to 2021, undertaking additional geological and geochemical studies.

At the beginning of 2024, PM completed a drilling campaign in Piuquenes Central, drilling 2,592 m in 3 diamond drill holes, validating historical data and providing new knowledge about mineralization.

In total, 14 diamond drill holes have been carried out on the Piuquenes Property for a total of 5,669 m. Around 38% of this was carried out by IMC, 16% by AAA and 46% by PM. The drilling distribution is irregular, although it is approximately 200 m by 200 m in the Piuquenes Central target.

The reinterpretation and integration of data carried out by PM has significantly improved the understanding of mineralization. Recent drilling has helped to refine key objectives, identifying areas that justify further exploration.

Mrs. Muñoz (QP) notes that PM drilling practices, quality assurance and quality control (QA/QC) procedures are well documented and that recent programs follow industry standards. The QA/QC program for PM's performance samples, results have demonstrated reasonable confidence in the precision and accuracy of the analytical data. This is no evidence



of contamination. The current QA/QC procedures are considered appropriate for the current stage of exploration.

Historical data (prior PM drilling), particularly IMC and AAA, has limited information considering sample recovery and measurement methods for downhole survey deviation. Historical QA/QC data from IMC (1996-1997) and AAA (2015-2016) are inconsistent and may not comply with industry standards. Additionally, the first (IMC) drilling campaigns used Aqua Regia and Methyl Isobutyl Ketone (MIBK) digestion methods, which could have underestimated the metal content.

1.4 Conclusions and Recommendations

Based on the site visit and subsequent evaluation of the data available of the Piuquenes Property, Ms. Muñoz notes the following conclusions and recommendations:

1.4.1.1 Conclusions

- The project is at an early exploration stage, with four exploration targets identified: Piuquenes Central, Piuquenes East, North and Piuquenes Northwest, with Piuquenes Central being the most advanced.
- The 2024 PM drilling campaign at Piuquenes Central confirmed porphyry-style copper and gold mineralization. Notable copper and gold grades make it a highly promising target for further exploration and potential development.
- Geophysical data highlight significant exploration potential at Piuquenes Central and East, with deep anomalies suggesting possible new mineralized zones. Additional lateral extensions along the northeast trend, identified through chargeability data, represent highly prospective targets.
- Drilling at Piuquenes Central indicates that copper and gold are closely associated with chalcopyrite as the primary copper mineral. Mineralization is the most intense in zones with abundant quartz veins.
- PM drilling, QA/QC and monitoring procedures are well documented and comply with industry standards. The QA/QC program includes one certified reference material, coarse blanks, and quarter-core duplicates. Results demonstrate no issues with precision, accuracy, or contamination, providing confidence in the reliability of the data for this stage of exploration.
- Historical data (IMC and AAA) presents limited information on procedures or information support.
- Historical methods for downhole surveys, such as the use of acid tubes, are less accurate than current standards, including the lack of correction for magnetic declination.



- Sequential copper analysis has not been conducted due to focus being on primary sulfide mineralization. However, this analysis could provide value by distinguishing soluble and sulphide copper, optimizing recovery, and guiding process adjustments, especially in the presence of secondary sulphides.
- Early analytical methods (IMC), such as Aqua Regia and MIBK, may have underestimated the metal content, particularly gold, copper and silver.

The potential uncertainties and risks identified at this stage of the Project are considered low, given the exploration status and the current scope of activities. These risks and uncertainties should be addressed in future stages as the Project advances.

- Due to the current exploration stage, the data is limited and has not yet defined the
 extent and continuity of the mineralization in sufficient detail to determine a Mineral
 Resource. Therefore, additional drilling, surface mapping, supporting geophysical and
 metallurgical studies are required to improve confidence in future interpretations.
- A title overlap with a third-party claim (Santa Rita) is currently under review by the Mining Registry. The affected area represents approximately 66 hectares within Piuquen 14, 16, 18, and 19. It includes part of the Piuquenes East exploration target but does not impact current exploration activities. The matter is expected to be resolved in the coming months through consultation with the San Juan Cadastre Office, as the Piuquenes claims predate Santa Rita.
- Seasonal access limitations due to high altitude and severe weather conditions restrict the exploration window and other field activities.
- Access and infrastructure requirements remain undefined due to the current stage of the Project. Although the site is accessible by road, it lacks electrical power and other essential services, requiring significant investment for future mining operations.

In the opinion of Ms. Muñoz, the exploration work completed to date meets industry best practices and provides a reasonable foundation for continued exploration. The risks and uncertainties identified are consistent with those typically encountered at this stage of a project and do not significantly affect the overall reliability of the exploration data. Nonetheless, additional work is required to strengthen confidence in the geological model and to address infrastructure and permitting aspects that could influence future development decisions.

1.4.1.2 Recommendations

 As the project advances and depending on the complexity of the mineralization, it is recommended to enhance the QA/QC program by incorporating additional controls.
 This should include fine blanks, coarse blanks, coarse and pulp duplicates, and low, medium, and high-grade certified reference materials. These measures will improve



- sample reliability, ensure precision during the subsampling process, mitigate contamination during chemical analysis, and increase confidence.
- Continue using comprehensive analytical methods, such as multi-acid digestion and fire assay.
- Historical data should serve as a guide for exploration. For use in advanced project stages, such as Resource estimation, a thorough review and reanalysis of a representative data portion will be needed to ensure reliability and confidence.
- Continue drilling, especially in the Piuquenes Central and East target, focusing on both
 infill and step-out drilling to delineate the lateral and vertical extent of mineralization.
 Additionally, prioritize deeper drill holes targeting geophysical anomalies at depths
 exceeding 800 meters, with the objective of refining the geometry of the mineralized
 system.
- Expand geophysical studies, including IP, resistivity, and magnetotelluric and magnetic surveys. Focusing on unexplored areas of the property to identify new exploration targets.
- Based on drilling results completed in 2024, a review of historical drill holes, and recent geological mapping by PetraGaia-Tocall Consultants in January 2025, a twophase exploration program is recommended to further assess the Piuquenes Project.
 - Phase I includes approximately 6,000m of drilling (3 holes at Piuquenes East and 3 at Piuquenes Central) with an estimated budget of USD 2.5 – 3.0 million, covering drilling, logistics, assays, and other operational work required to complete the drilling program.
 - As of the effective date of this report (January 31, 2025), a total of 2,900m has been drilled under Phase I, corresponding to two completed drill holes, with a third hole in progress. Assay results for these drill holes were pending as of the effective date.
 - The remaining budget for this phase is estimated to be approximately USD 1.3 to 1.5 million, which will cover the completion of the current hole, two additional planned holes and pending assays.
 - O Phase II, which will be based on the results of Phase I, preliminarily includes property-wide geophysical surveys, additional mapping and sampling, and approximately 10,000m of follow-up drilling to test extensions and new targets. The estimated budget for Phase II is USD 4.5 – 5.5 million, depending on the complexity of the targets and logistical requirements.
- Develop a more detailed structural model to enhance understanding of mineralization controls to optimize drilling orientation and exploration strategies.
- Focus on understanding the deposit's geometry by combining detailed structural mapping with oriented core drilling. This approach will help ensure that future drill holes are better aligned with the natural orientation of the mineralization. Ultimately providing clearer and more accurate results for potential future Resource estimates.



• The Piuquenes East target, which shows advanced argillic alteration, should be explored in greater detail. Current geophysical data indicates high potential for high-sulfidation Cu-Au systems and possible additional gold mineralization zones.



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2 INTRODUCTION

This Technical Report has been prepared for Pampa Metals Corp. by Mining Plus Peru S.A.C. (Mining Plus), an independent consulting firm. The report is prepared in accordance with the guidelines and standards set forth by National Instrument 43-101 (NI 43-101), a regulatory framework governing the disclosure of technical information in Canada.

Pampa Metals Corp., the issuer of this report, is a mineral exploration company focused on the discovery and development of high-quality mineral assets. The company's primary project is the Piuquenes Property, located in San Juan Province, Argentina. Pampa Metals is publicly listed on the Canadian Securities Exchange (CSE) as PM.

2.1 Terms of Reference

PM engaged Mining Plus Peru to conduct an independent Property of Merit assessment in accordance with NI 43-101 requirements. This involved reviewing existing geological, geophysical, and geochemical data, alongside a site visit to the Piuquenes Property in San Juan Province, Argentina. The findings from these activities form the basis of this NI 43-101 Technical Report, prepared by an independent Qualified Person (QP) aligned with the NI 43-101 standards.

2.2 Qualified Person and Personal Inspection of the Property

Ms. Maria Muñoz, Principal Geologist at Mining Plus and member of the Australian Institute of Geoscientists (MAIG), is the Qualified Person (QP) for this report, as defined by NI 43-101. Ms. Muñoz conducted a site visit to the Piuquenes Property from November 4th to 7th, 2024. She was able to verify geological data, review surface conditions, and assess site accessibility. No active drilling was taking place during the visit.

The effective date of this report January 31st, 2025.

2.3 Report Contributors

This Technical Report for the Piuquenes Property was prepared by Ms. Maria Muñoz, Principal Geologist at Mining Plus, with key contributions from PM's geology team and other collaborators. Their input, along with the expertise of the Mining Plus geology team, ensured a thorough and comprehensive evaluation of the Piuquenes Property. The report was developed following a detailed review of existing data and observations from the site visit. The conclusions drawn were in accordance with the guidelines of NI 43-101.



2.4 Information Source and References

The information and data used to prepare this Technical Report was derived from multiple sources. This data provided by PM included historical exploration data, geological maps, drilling logs, assay results and geophysical studies alongside public information. Where applicable, references have been cited to ensure transparency and to acknowledge original data sources. In addition, Ms. Muñoz's site visit provided valuable insights and allowed direct validation of the data.



3 RELIANCE ON OTHER EXPERTS

Ms. María Muñoz, Qualified Person (QP) for this report, is not an expert in legal matters such as the assessment of mining claims, mineral rights, or property agreements in Argentina or elsewhere. She has not independently verified the legal status or title of the concessions or exploration permits associated with the Piuquenes Property.

Ms. Muñoz has therefore relied upon information and opinions provided by Pampa Metals Corp. (PM).

The information in Subsections 4.2 and 0, 4.5, 4.6 and 4.7 are based on the reports:

- "Due Diligence Piuquenes Project Calingasta San Juan República Argentina", prepared by Estudio Novoa Abogados, dated November 7th, 2024
- "Opinion on Mining Titles regarding certain rights and mining properties that comprise
 the Piuquenes Project in San Juan, Argentina", also prepared by Estudio Novoa
 Abogados, dated November 29th, 2024, along with follow-up discussions held in early
 2025 with Ms. Carolina Soria, legal counsel at Estudio Novoa, to clarify specific matters
 related to the mining titles.

The following sections of this Technical Report are noted as being influenced by the information in these reports:

- Section 4.2, which pertains to Mineral Tenure and Interest.
- Section 4.4, which pertains to Surface Rights.
- Section 4.5, which pertains to Royalties, Agreements, and Encumbrances.
- Section 4.6, which pertains to Environmental Liabilities.
- Section 4.7, which pertains to Permitting.

Ms. Muñoz has fully relied on PM to provide complete information concerning the pertinent legal status of PM and its affiliates, the current legal title, the material terms of all agreements, and the material environmental and permitting information pertaining to the Piuquenes Property.



4 PROPERTY, DESCRIPTION AND LOCATION

4.1 Property Location

The Piuquenes Property consists of ten concessions in an early exploration stage. These are located in the Calingasta department, approximately 180 km west of the San Juan Province in Argentina and 5 km from the Chilean border. A notable nearby city is Mendoza, located 220 km northeast of the Property (Figure 4-1). The Piuquenes Property is furthermore located to the north of the Altar Project (Aldebaran Resources Inc.) and is in proximity to other significant copper porphyry projects in the San Juan Miocene porphyry belt. These include El Pachón (Glencore) and Los Azules (McEwen Mining).

The geographic coordinates at the center of the property are 31° 26.826'S and 70° 29.051'W.



Figure 4-1: Location Map of the Piuquenes Project (Source: Pampa Metals, 2024)



4.2 Mineral Tenure and Interest

There are ten titles under the denomination of mining concessions that form part of the Piuquenes Property, with a total area of 2,523.69 ha, all of which are 100% owned by Compañia Minera Piuquenes S. A. (CMP). Concession details are provided in the Table 4-1 and Figure 4-2. These concessions contain the Piuquenes Copper-Gold Porphyry Project (Piuquenes Project), which includes several copper-gold porphyry pulses distributed over an area of approximately 2.0 x 1.5 km. This is supported with initial drilling.

In November 2023, Pampa Metals Corp. (PM) entered into an Option and Joint Venture Agreement with CMP to acquire an 80% interest in the Piuquenes Copper-Gold Porphyry Project. Initially covering 1,880 hectares; in October 2024, PM has expanded the mineral tenure package at 34% (adding 643 hectares) after a detailed assessment following a 2,592 m diamond drilling program in early 2024. The total area now stands at 2,523.69 ha, the ten titles are under the administration and operation of PM.

As of August 8, 2024, an overlap of approximately 66 ha was identified between the Piuquen 14, 16, 18, and 19 mining claims and the Santa Rita Manifestation of Discovery claim (File No. 1042-C-96) held by a third party and submitted after the Piuquen claims. As of January 7, 2025, the Mining Cadastre Director recommended adjusting the Santa Rita claim to include only the available unclaimed area with no prior mining rights, located outside the boundaries of the Piuquenes properties. This area corresponds to the lower left portion of the Piuquen 19 claim, forming a triangular zone adjacent to the Piuquen 18 claim. A formal resolution by the Mining Council is pending to confirm this adjustment.

The overlapping area includes part of the Piuquenes East exploration target, located between the Piuquén 14 and 18 claims; however, it does not impact current exploration activities. The matter is expected to be resolved over the coming months through ongoing consultation with the San Juan Cadastre Office, given that the Piuquenes claim predates the Santa Rita claim.

Mining concessions are granted for an indefinite period, as long as CMP and PM fulfill their legal and regulatory obligations. These obligations include complying with work commitments, paying annual fees (canon), and making required investments as specified by the mining authority. If the companies meet these requirements, they can maintain their rights to exploit the mineral resources indefinitely.

Type of Mining Item Name **Title holders File Number** Area (Ha) concession Concessions 1 Mine Piuguen 1 Compañia Minera Piuguenes S. A 156.061-C-75 7 63.89 2 Mine Piuquen 11 156351-C-75 6 52.65 Compañia Minera Piuquenes S. A 3 Mine Piuquen 13 Compañia Minera Piuquenes S. A 156353-C-75 6 53.67 4 6 Mine Piuquen 14 Compañia Minera Piuquenes S. A 156354-C-75 54.76 5 Mine Piuquen 15 Compañia Minera Piuguenes S. A 156355-C-75 6 54.23

Table 4-1: List of Mining Concessions in the Piuquenes Property



Item	Type of concession	Name	Title holders	File Number	Mining Concessions	Area (Ha)
6	Mine	Piuquen 16	Compañia Minera Piuquenes S. A	156356-C-75	6	54.32
7	Mine	Piuquen 17	Compañia Minera Piuquenes S. A	156357-C-75	6	53.55
8	Mine	Piuquen 18	Compañia Minera Piuquenes S. A	156358-C-75	6	53.46
9	Mine	Piuquen 19	Compañia Minera Piuquenes S. A	520-0490-P-99	-	1,623.83
10	Mine	Piuquen 20	Compañia Minera Piuquenes S. A	258.903-C-84	-	459.33
Total					2,523.69	

Note: In the context of this report, 'Mining Concessions' refer to 'pertenencias' as defined under the Argentine Mining Code, where each 'Mining Concessions' corresponds to a mining right covering an area of 9 hectares. Piuquén 20: This area may be subject to changes, either an increase or decrease, depending on variations in the international boundary due to the mine's location.

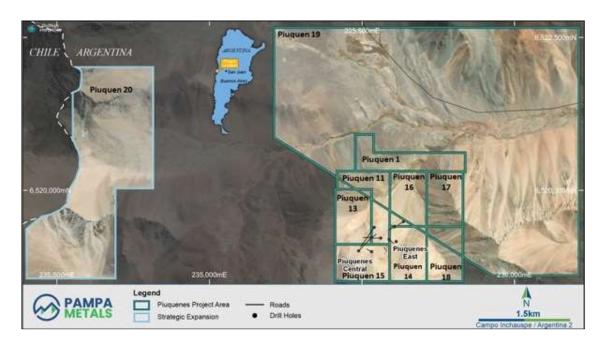


Figure 4-2: Piuquenes Property Concession Claims (Source: Pampa Metals, 2024)

4.3 Mining Rights and Obligations in Argentina (Province of San Juan)

In Argentina, the Mining Code establishes a clear legal framework that separates mineral rights from surface rights. Mineral rights are owned by the state, while private parties can apply for concessions to explore and exploit these resources. The process is managed at the provincial level, allowing each province to regulate the development of its mineral resources while adhering to the national legal framework.

Mining rights are governed by the Código de Minería de la Nación Argentina (Law N°1919). Below is a summary of key provisions from the Argentine Mining Code (CMA), the Mining



Procedure Code of San Juan (CPM), and other applicable mining legislation to facilitate understanding of mining rights in the country:

- a) Provinces own natural resources within their territories and have the authority to regulate and manage mining rights according to CMA and local laws.
- b) Surface rights are independent of mining rights. Surface owners cannot prevent mining activities but are entitled to compensation for land use and damages caused by mining activities. Mining areas are subject to servitudes (e.g., right of way, land occupation, water usage) with compensation granted to the surface owner.
- c) Mining rights are considered real property and can be sold, leased, or transferred to third parties.
- d) Granting mining rights is subject to priority rights of other users and environmental and safety regulations established by provinces.
- e) Water rights are governed by provincial agencies, such as the Department of Hydraulics of San Juan, which grants permits for mining water use.
- f) Before commencing mining activities, an Environmental Impact Report (IIA) must be submitted. The provincial mining authority issues an official "Environmental Impact Declaration" (D.I.A.) upon approval. The IIA must be updated every two years, and operators are responsible for environmental damages. Non-compliance with environmental regulations may result in the suspension or closure of mining operations.

The process of securing mining rights in Argentina begins with the acquisition of exploration permits (cateos), which lead to the creation of Manifestations of Discovery (MDs). These MDs serve as the basis for acquiring mining concessions (pertenencias). The entire process is governed by both national and provincial regulations, with specific legal frameworks applied in provinces like San Juan. Each type of title comes with its own set of obligations, including fulfilling work commitments, making required payments (canon), and adhering to environmental standards. Compliance with regulations is essential for maintaining land rights as well as exploration and mining titles.

4.3.1.1 Exploration Permit - Prospecting (Cateos):

A prospecting permit grants the holder the right to explore a specific area for minerals within the boundaries set by the Mining Code (CMA). Although the permit does not authorize commercial mining, it gives the holder an exclusive right to apply for a mining concession (pertenencia) once a discovery is made.



The permit holder is required to fulfill specific work commitments including exploration, to prove the project's viability. These obligations must be met within designated timelines, failure to do so may result in the loss of the permit.

To obtain a permit, a one-time fee (canon) per 500-hectare unit must be paid, alongside an application stamp duty. Payments are handled by the Provincial Mining Authority.

The maximum area for a prospecting permit is 10,000 hectares (20 units), and no individual can hold more than 200,000 hectares (400 units) in one province. The duration of the permit varies depending on the size: 150 days for the first unit (500 ha) and 50 days for each additional unit. After 300 days, 50% of the area exceeding 2,000 ha must be released, and after 700 days, the remaining 50% must be released. Prospecting can lead to the creation of Manifestations of Discovery (MDs), which are the basis for mining concessions.

4.3.1.2 Mining Concessions (Minas)

Once a Manifestation of Discovery (MD) is granted, it becomes a mining concession. Mining concessions are granted by the provincial mining authority following the CMA and the CPM. Mining areas are measured in units called "pertenencias", with conventional pertenencias covering 6 hectares and those for disseminated deposits covering 100 hectares. Mining concessions last indefinitely if the required legal obligations are fulfilled (including payments, labor and measurement requests).

To obtain a mining concession, the following steps are required:

- Application: Anyone can apply for a mine in an area not under a prospecting permit or a registered MD.
- Registration: The MD is registered by the provincial mining authority. After registration the holder can begin exploitation, subject to environmental regulations.
- Publication: The concession is published in the official provincial bulletin for potential objections.

4.3.1.3 Concession Holder Obligations:

- Legal Works: Specific work must be completed within 100 days of registration to avoid cancellation.
- Measurement Request: The holder of the mine has a period of 30 days from the completion of the legal work to request the mining authority to carry out the survey of the mine, under penalty of losing the concession.



- Exploitation Fee: This fee is payable starting three years after the concession is registered, updated annually based on the Consumer Price Index. It must be paid in two equal installments annually. Failure to pay within two months leads to the cancellation of the concession.
- Investment Plan: A fixed capital investment plan must be presented within a year, detailing required investments. This cannot be lower than 300 times the annual fee, with a five-year timeline to complete the investment.
- Activation/Reactivate Plan: If a mine remains inactive for four years, a reactivation plan must be submitted.

CMP presented an Investment Plan on March 17, 2021, covering the entire project, despite Article 217 of the CMA requiring individual plans per mine. Although traditionally the Mining Authority in San Juan accepted project-wide plans, new political leadership since December 2023 has relaxed requirements for individual plans and proposals. On May 14, 2024, PM, as the new operator, submitted a 5-year Investment Plan totaling ARS 330,630,210 for all the mining concessions as a single project, this plan is pending approval by the Mining Authority. The first annual compliance declaration is due on May 14, 2025, with further declarations required annually to avoid concession expiration.

4.4 Surface Rights

In Argentina, surface rights are generally owned by private individuals or entities, while mineral rights are retained by the state. As a result, mining companies must negotiate agreements with landowners to access surface land for exploration and mining activities. These agreements often involve compensation for land use and potential damage caused by mining activities.

In San Juan province, these agreements are typically formalized through Servitudes, which are real rights (either temporary or permanent) granted over someone else's land. According to the Civil and Commercial Code of the Nation, servitudes allow the holder to use the land or restrict the owner's property rights for specific purposes, such as mining activities.

Servitude can be requested either within or outside the mining concession area. If requested within the concession area, they can be established without prior authorization, and landowners can only oppose them if there is a legal violation or if compensation is not paid. If the servitude affects land outside the concession, approval from the mining authority is required, with proof that the servitude cannot be established within the concession and that it is necessary for mining operations.

In cases where the land is unoccupied, an extension of the mining concession may be requested. Servitude requests must be submitted to the Mining Authority, including details



about the servitude type, the affected land, and involved parties. Landowners and mine holders will be notified and can oppose the request. If there is no opposition, or if it is resolved in favor of the applicant, the servitude is granted subject to compensation for the landowner.

It is important to note that water servitudes are managed separately by the Department of Hydraulics in San Juan Province and are not under the jurisdiction of the Mining Authority.

Maintaining good relations with surface landowners and local communities is important for the smooth operation of mining projects. Conflicts over land access or environmental concerns can lead to delays or disruptions in exploration or mining activities.

Campos Cortes Monroy S.A. has claimed ownership of the surface rights for Piuquen I, Piuquen 11, Piuquen 13, Piuquen 14, Piuquen 15, Piuquen 16, Piuquen 17, Piuquen 18, Piuquen 19, and neighboring mining projects. The company has consistently opposed exploration and other related activities by various entities seeking access to the surface property. Despite legal challenges by the claimant, appeals to the Mining Council and the Civil, Commercial, and Mining Appeals Court of San Juan were consistently denied, upholding the rights of CMP. To prevent further disputes, the company has taken proactive measures to formalize access and operational rights.

Furthermore, there are no restrictions on surface access to any areas covered by the mining titles. None of these rights are located within parks, populated areas, ecological reserves, or nationally, provincially, or municipally protected areas.

4.4.1.1 Road Easement

The 18.22 km long and 5 m wide road easement guarantees access to main concessions such as Piuquen Uno, 11 and 13 to 19, facilitating the transport of personnel, equipment and essential materials. To comply with legal regulations, an insurance policy (N° 63,364) was ensured that supports possible claims or damages related to the use of the road.

4.4.1.2 Camp Easement

Located in the Piuquen 19 concession, the 1.5 ha area serves as a strategic base for personnel and exploration equipment. This service counts on the approval of the Catastral Registry, including its graphic representation, which guarantees its legality and normative compliance.

4.5 Royalties, Agreements, and Encumbrances

In Argentina, mining operations are subject to provincial royalties, capped at 3% of the runof-mine value, calculated as the sale price minus direct extraction and processing costs. Companies make bi-annual payments, with penalties for non-compliance. Additionally, projects may involve private Net Smelter Return (NSR) royalties or financial agreements with



third parties. These can affect project finances, and companies often disclose or buy out such agreements to streamline operations.

The Piuquenes Property has no recorded liens, encumbrances, or third-party royalties that need to be considered, except for the current Option & Joint Venture Agreement between PM and CMP.

4.5.1.1 Option & Joint Venture Agreement

On 27th November 2023, the Pampa Metals Corp. entered into an Option & Joint Venture Agreement with Compañia Minera Piuquenes S.A. (a Panamanian entity) to acquire an 80% direct interest in the Piuquenes Copper-Gold Porphyry Project. The agreement consists of the following commercial terms:

Option Payments (Total: \$1.25M USD)

- \$50,000 USD upon signing (paid).
- \$200,000 USD upon commencement of drilling (paid).
- \$250,000 USD six months following the commencement of drilling (paid).
- \$250,000 USD on the first anniversary of signing (paid).
- \$250,000 USD on the second anniversary of signing.
- \$250,000 USD on the third anniversary of signing.

Work Commitments

- A minimum of 6,000 meters of drilling.
- \$6M USD in additional exploration expenditures.

Option Exercise Price

- \$14.75M USD and a 1.25% Net Smelter Return (NSR) royalty.
- Pampa Metals may elect to settle up to \$2.5M USD of the option exercise price through shares (scrip settlement).

As of October 28th, 2024, according to the Certificate of Ownership, all mining concessions are free of liens, attachments, mortgages, and any other types of guarantees, as recorded in the corresponding Registry of the Mining Notary at the Ministry of Mining of San Juan.



4.6 Environmental Liabilities

Mining projects in Argentina must comply with the Environmental Protection Act (EPA), which requires an Environmental Impact Assessment (EIA). In San Juan province, the EIA process is overseen by provincial authorities. Once approved, an Environmental Impact Declaration (EID) is issued, which must be updated every two years or when significant changes occur. Mining companies must also conduct ongoing environmental monitoring. Failure to comply with environmental obligations can result in liabilities, including fines or the suspension of the project.

The Piuquenes Property has an Environmental Impact Assessment (EIA) report for the exploration stage, registered under file N° 1100.242-C-08. This was approved through the Environmental Impact Declaration (EID) under resolution N° 171-SEM-2009, dated September 6, 2009, covering the Piuquen 1, 11, 13, 15, 17, 18, and 19 mining concessions.

Subsequent updates were made as follows:

- First update: Approved under resolution N° 302, dated October 4, 2013.
- Second update: Approved under resolution N° 405-MM-18, including the Piuquen 20 mine.
- Third and fourth updates: Approved under resolution N° 163-MM-21, dated March 17, 2021.
- Fifth update: Submitted on November 17, 2023, and currently under evaluation. This
 update covers all titles for Piuquen 1, 11, 13, 14, 15, 16, 17, 18, 19, and 20. In the
 province of San Juan, operations can proceed without issues under an expired EID,
 provided they comply with the scope of work approved under Resolution N° 163-MM21.

4.7 Permitting

Mining operations in San Juan province require permits from both provincial mining and environmental authorities. The key permit is the Environmental Impact Assessment (EIA), which must be approved before any major activity begins. The EIA evaluates environmental risks.

Additional permits, such as water use and land use may additionally be necessary, especially in areas with limited water resources like San Juan. Once permits are granted, companies must comply with ongoing environmental monitoring and reporting. Non-compliance can result in penalties or project shutdowns.



The currently valid permits are listed below, registered under the name of CMP and operated by PM:

- Road Easement: Registered under file N° 1124.077-2024, granted on October 1, 2024, specifying PM as the operator. The easement is currently active.
- Camp Easement: Registered under file N° 1124.313-2024, granted on October 1, 2024, also specifying PM as the operator. This easement is currently active.
- The fifth EIA update for the Exploration Stage is under evaluation, covering all property concessions. In San Juan, operations may continue under an expired EID if compliant with Resolution N° 163-MM-21.
- Temporary Surface Water Extraction Permit (Drilling): The Department of Hydraulics
 of San Juan issued the Temporary Surface Water Extraction Permit for drilling, under
 resolution N° 1710-DH-2024. This permit is valid until December 31, 2024, and is
 identified by permit number 506-002497-24. It allows for the temporary extraction of
 water for drilling purposes, necessary for ongoing exploration activities.
- Temporary Surface Water Extraction Permit (Domestic Camp Use): A second Temporary Surface Water Extraction Permit was granted for domestic use at the camp, under resolution N° 1712-DH-2024 by the Department of Hydraulics of San Juan. The permit, number 506-002498-24, is also valid until December 31, 2024, and allows for the extraction of surface water for domestic needs associated with the project's camp facilities.
- Mineral Sample Transport Certificate: The Ministry of Mining issued a certificate for the transport of mineral samples, under certificate number 1124-641-2024. This certificate, which was granted on November 22, 2024, is valid until August 22, 2025. It permits the transportation of mineral samples necessary for the ongoing exploration and testing processes.

4.8 Significant Factors and Risks

Mining projects in San Juan province face key risks related to environmental management and regulatory compliance, particularly regarding the protection of glaciers and periglacial zones. These areas are protected under Law 26.639 (2010), which aims to preserve glaciers and periglacial environments as vital water reserves. Mining activities near these zones are heavily restricted unless it can be shown that they will not harm these sensitive environments.

In San Juan, Provincial Law N° 8144 complements the national law, focusing on rock glaciers, although it doesn't explicitly include permafrost areas. This can pose challenges for mining projects in areas where both features exist.



Additionally, water management is critical due to the region's arid climate. Companies are required to obtain water use permits and implement conservation strategies. Permits are subject to annual reviews and fees based on water consumption.

There are notably no permanent glaciers near the Piuquenes Property, nor are there any significant factors or risks that could affect access, title, or the ability to execute ongoing work programs. The only considerations are future environmental license applications, approvals and potential agreements for the use of surface land. It is noted that these may take a considerable amount of time for finalization.



5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Property Access

The Piuquenes Property is located in the Andes of San Juan, Argentina, near the border with Chile, a high-altitude area, more than 2,500 meters above sea level. Access to the Piuquenes Property is via the main access road Ruta Provincial No. 400 from Barreal.

This route passes by the El Pachón project, operated by Glencore. The road then continues along the Santa Cruz, Las Lagunas and Salinas rivers, before heading west along the Los Piuquenes River. This route takes approximately 3 hours. There is an alternative route that leads to the Los Azules Project, following the course of the Calingasta River and crossing the La Totora Mountain range. This path; however, is longer and more complicated, taking around 7 hours and including several difficult river crossings.

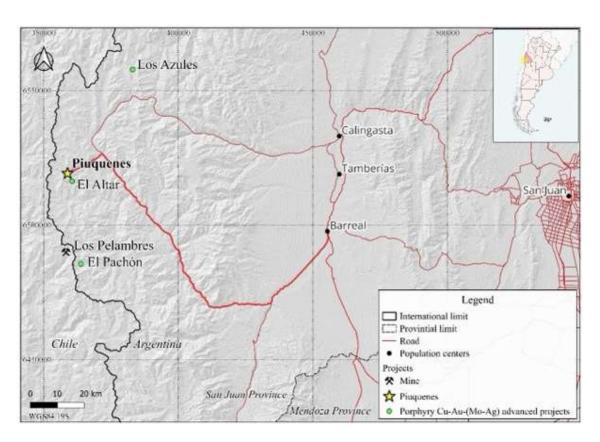


Figure 5-1: Location of Piuquenes Property, Nearby Towns, Roads, and Cu/Cu-Au Project (Source: Mining Plus, 2024)



The Piuquenes Property is located on the western margin of Argentina, within the "Cordillera de Los Andes". This section of the Andes is made up of two main mountain ranges: the Frontal Cordillera to the east and the Main Cordillera to the west. The project area is located in the Main Cordillera, close to the border with Chile.

5.2 Physiography, Seismic Risk and Climate

The topography of the property area is defined by extensive mountain ranges running north to south, intersected by narrow valleys that primarily facilitate eastward drainage. Over thousands of years, the region has been profoundly shaped by glacial and periglacial processes. While there are no permanent glaciers in the area, occasional snow events can temporarily restrict access.

A seismic study carried out by the University of San Juan, using data from both Argentina and Chile, indicates that the project area is exposed to considerable seismic risk, with potential events estimated between 7.0 and 7.5 Mw. The main source of seismic activity in the region is the subduction of the Nazca plate beneath the South American plate in the Pacific Ocean. There is also additional seismic risk due to active faults in the cortex located on the western and eastern flanks of the Main Cordillera, which can generate earthquakes of up to 7.0 Mw.

Due to elevation, the climate is cold throughout the year. In winter temperatures can drop to -25°C, in summer they rarely exceed 15°C. Annual precipitation varies between 600 and 1,000 mm, and in winter from May to August, rain, snow and strong winds are common. In contrast, summers are dry, with a high rate of evaporation exceeding rainfall, creating semi-arid conditions. In the highest areas snow can remain for much of the year, making access and exploration difficult.

Humidity in the region is always low due to the high altitude and semi-arid climate. The dry winds that come from the Pacific, together with the natural barrier of the Andes, keep the atmosphere very dry.

The project area is located in a high-Andean ecosystem, predominantly characterized by subshrubs of the Adesmia genus, along with species such as poposas, llaretas and other plants typical of steppe and wetland habitats.

The effective field season for exploration activities typically extends from late October to late April, when snow cover recedes, temperatures are more moderate, and ground conditions allow for safe access and logistics. Outside this window, exploration activities are limited or halted due to adverse weather and restricted accessibility in the terrain.



5.3 Population Centers, Resources and Infrastructure

The closest neighborhood centers to the Piuquenes Property are the towns of Barreal and Calingasta, both located off the provincial route that connects Uspallata with San Juan. These towns offer basic supplies and accommodation options. Barreal is approximately 160 km away by road, while Calingasta is around 150 km from the project.

The largest urban center nearby is the city of San Juan, located some 180 km east. San Juan is an important 450,000 population regional center that offers complete health services, including hospitals, and supports educational institutions including universities. The National University of San Juan, with more than a century of history, has outstanding programs in mining engineering, geology, science, humanities and medicine.

The Piuquenes Property benefits from nearby regional infrastructure. The closest international airports in Argentina are in San Juan and Mendoza, located approximately 180 km east and 220 km southeast respectively. In Chile, the closest international airport is in Santiago, about 250 km to the southwest. There is no direct access to the project site by railway or air, and the closest ports on the Chilean coast are Los Vilos, some 120 km to the west, and Coquimbo, approximately 170 km to the northwest. Los Vilos is a deep-water port used by the Los Pelambres mine, which transports concentrate via a pipeline. On the Argentine coast, the closest port is Bahía Blanca, some 700 km south of the project.

The Piuquenes Property is located in a treaty zone designated by the governments of Chile and Argentina to facilitate cross-border mining operations. Although the possibility of enabling a border pass and an access route to Chile has been explored, this option has not yet been fully developed. The project is in an early phase of exploration; thus, access and infrastructure requirements have not yet been defined in detail. This includes energy resources, there is currently no electrical infrastructure available on site.

5.4 Power and Water

At the project's exploration camp, energy for lighting, heating, water, and a core cutting machine is supplied by a 120 KVA / 380 Volts generator. A backup generator is used in case the first one fails. These units are powered by internal combustion engines running on gasoline or diesel, operating approximately 12 hours a day. For night drilling, a 240-watt lighting system (equivalent to 3 vehicle lights) is used, powered by a separate generator for the drilling equipment.

The water for human consumption will be brought from Barreal, Villa Calingasta, or San Juan in 20-liter containers. Domestic water for a camp is estimated at 100 to 150 liters per person per day and is extracted with a pump from the Los Piuquenes River, under the conditions of Temporary Surface Water Extraction Permit issued by the Department of Hydraulics. For diamond drilling (0.8 to 1 m³ per meter drilled), water could also be sourced from the



Piuquenes, Verde, or Salinas Rivers, again requiring a corresponding permit. If a permanent camp is established, a cistern will be installed, sized according to the number of people.

5.5 Potential Location of Mine Facilities

At this early stage of the project, specific locations for infrastructure have not yet been defined. Significant infrastructure locations will depend on the results of additional exploration, the definition of resources and technical studies. These studies will evaluate the most suitable and efficient locations for infrastructure, considering environmental, logistical and operational factors.



6 HISTORY

6.1 Pre-ownership History, Exploration and Development

The first evidence of copper oxides at Piuquenes was reported in 1970 by Compañia Minera Aguilar S. A. (CMA). Exploration activities were initiated in 1973 leading to the discovery of copper and zinc anomalies originating from the headwaters of Piuquenes Creek. During the summer of 1973, the company focused on identifying the source of these anomalies and resulted in the discovery of a porphyry copper system (Compañía Minera Aguilar S.A., 2000). An exploration permit was then requested, considering 8 claims covering a total of 200 hectares in the name of Cía. Minera Aguilar S.A. (Andrés Lencinas, 2005).

Several years later, the project was optioned for two years by Inmet Mining Corporation (IMC) and two exploration campaigns were conducted. The first campaign took place from December 1995 to April 1996 and included geological mapping, soil geochemistry, surface rock chip sampling, aerial geophysics, and two diamond drill holes (P1 and P1A) totaling 262.5 meters. The second campaign occurred from September 1996 to February 1997, during which geophysics, geological mapping, and rock chip sampling was conducted, along with eight additional drill holes, totaling 1,964.1 meters. (Inmet Mining Corporation, 1997). All these efforts confirmed the presence of hydrothermally altered Cenozoic intrusions with surface copper and gold mineralization. The primary focus was the "West Area," where the project showed the most promising characteristics. However, IMC concluded that the Piuquenes Copper-Gold Porphyry Project (Piuquenes Project), located within the Piuquenes Property, did not meet their expectations, despite noting the "property still has additional potential". The property was subsequently returned to its original owners (Andrés Lencinas, 2005).

6.2 Ownership History, Exploration and Development

In March 2006, CMP conducted a one-week campaign aimed at better understanding the geology and mineralization of the "East Intrusive". Of 51 rock samples collected, 41% came from the intrusive and the rest from host rock within 181 meters. The results showed the "East Intrusive" had negligible copper (max 133 ppm) and gold values below anomaly levels (max 70 ppb). This was despite its geological similarity to the mineralized West Intrusive. This lack of mineralization is likely due to the absence of potassic alteration, suggesting it was outside the main alteration (Lencinas & Depetris, 2006).

The study area has been monitored since 2007 due to its >10 km² hydrothermal alteration and Miocene position. In 2008, a Confidentiality Agreement allowed Anglo American Argentina (AAA) access to the available information. After reviewing data and conducting field visits, a Joint Venture with CMP was signed on July 31, 2015. This agreement was for a duration of 72 months, allowing AAA to begin exploration. In January and February 2016, AAA conducted geophysical studies, geological mapping, and geochemical sampling (including



trenches, rock, and screes samples). From March to April of the same year, drill hole PIU16DDH001 (920.2 m) was completed, showing underwhelming copper and gold grades but a lithology similar to DDH08A, particularly in the mineralized intermineral porphyry. This drilling corresponds to Target 1 out of a total of six targets identified by AAA. (Anglo American, 2016)

During 2020 to 2021, Nittetsu Mining Co. Ltd. (Nittetsu), reviewed CMP's exploration data and conducted a field survey of the Piuquenes Project to evaluate an option contract. The results of the investigation indicate that the porphyry copper-gold mineralization extends to the surface, supported by geochemical anomalies at outcrops. The oxidation zone reaches depths of at least 180 meters, while primary mineralization continues to 770 meters below surface. Re-analysis of geophysical exploration and drilling data suggested the Piuquenes Project may extend to approximately 2,600 meters above sea level (masl). The Piuquenes East target showed similar potential. K-Ar dating indicates the mineralization age to be 11-14 Ma, like large porphyry copper-gold deposits in Argentina. However, the report concludes that, given the conditions, the exploration risk is high (Nittetsu Mining Co., Ltd, 2021). In the years 2022 to 2023, CMP conducted sampling along six trenches, collecting a total of 16 samples with average copper grades of 84.44 ppm and gold grades at the detection limit (0.01 ppm) (Compañía Minera Piuquenes S.A., 2023).

On November 30 of 2023 Pampa Metals Corp. (PM) announced an option and joint venture agreement with Compañia Minera Piuquenes S.A. to acquire an 80% interest in the Piuquenes Copper-Gold Project.

During 2023, PM issued a memorandum including historical information from CMP and an assessment of the project's potential mineral resources and economic feasibility, with additional details from the Due Diligence process. (Pampa Metals Chile SPA, 2023). It supports discussions on the option to purchase agreements currently in place between PM and CMP.

From January to April 2024, PM completed a 2,592 m drilling program with three diamond drill holes. The results are detailed in Section 10.

6.3 Historical Mineral Resource and Mineral Reserve Estimate

At this early stage of the project, no historical mineral resource or mineral reserve estimates have been reported. As such, there are no historical Mineral Resource or Mineral Reserves for the property.



7 GEOLOGICAL SETTING AND MINERALISATION

7.1 Regional Geology

The property is part of the Miocene Belt of Chile-Argentina characterized by copper-gold porphyry systems. These deposits are associated with the subduction of the Nazca Plate beneath the South American Plate during the Miocene, approximately 10 Ma. The belt is defined by arc magmatic activity, resulting in mineralization both in the magmatic arc and the forearc region. This belt hosts notable mining projects, including the Altar-Piuquenes Cluster. Other major porphyry-type mineralization within the metallogenic belt includes the significant copper-gold deposits of Pelambres, Los Azules and Pachón. Other projects are located in different stages of exploration, including Calderón, Rincones de Araya-Bagres, El Yunque Cerro Mercedario, and Patos Norte. These occurrences are associated with Mioceneaged intrusives.

The Piuquenes project is situated in the Main Cordillera, immediately to the west and north of the boundary with the Frontal Cordillera. It lies within a regional NNW mega-structure (Pelambres Fault). Jurassic sedimentary rocks are found to the west, where they are in fault contact with the Choiyoi Group intrusives (Permian–Triassic). Overlying a prominent paleorelief, a volcanic-volcaniclastic sequence of the Pachón Formation (Miocene) is present. The Choiyoi Group intrusives serve as the dominant geological feature in the area (PetraGaia-Tocall Consultants, 2025).

The basement Choiyoi Group consists of two main volcanic sequences. The lower sequence is made up of calc-alkaline andesite-dacites, which are products of a subduction-related magmatic arc. The upper sequence is formed by peraluminous rhyolites, associated with a period of post-orogenic extensional collapse. The composition of these volcanic rocks changes from mafic to acidic over time. Both sequences exhibit propylitic alteration, with fractures containing epidote, chlorite, albite, and calcite veining.

The volcanic sequences were intruded by shallow-level plutons, stocks, and dyke-like bodies, commonly composed of peraluminous A-type and S-type granites. These intrusions are coeval with the rhyolitic volcanics and typically exhibit weak propylitic alteration, consistent with the observed regional alteration.

The Pachón Formation primarily consists of marine sediments from the Jurassic, including redbed sandstones and claystones, which fill the Triassic rift and unconformably overlie the Choiyoi Group. However, Jurassic sediments are not observed in the immediate vicinity of the Piuquenes Property. In the project area, the Pachón Formation is represented by rhyolitic ignimbrites and andesitic volcanics, overlying the Choiyoi basement sequence (Mpodozis & Perello, 2009).



The region is characterized by thin-skinned tectonics, with significant north-south striking faults. Notable faults include the Pelambres Fault to the west and the Río Teatinos Fault to the east. Both controling the boundaries of geological formations in the area. The Pelambres Fault separates the Pachón Formation from the Paleogene Pelambres Formation to the west, while the Río Teatinos Fault juxtaposes the Pachón Formation with Paleozoic to Lower Mesozoic metasedimentary and intrusive basement rocks to the east.

A map of the regional geology is provided in Figure 7-1.

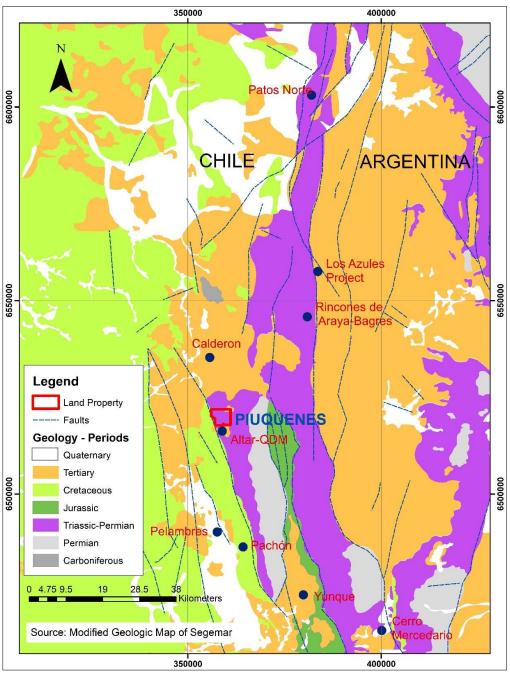


Figure 7-1: Regional Geology Map (Source: Modified Geological Map from Segemar)



7.2 Property Geology

The following description is mainly based on the "Update Geological Mapping Report for the Piuquenes Project, San Juan, Argentina, January 2025", prepared by PetraGaia-Tocall Consultants.

Piuquenes Project includes a variety of lithologies, with the oldest outcrops consisting of granodioritic plutonic bodies, likely from the Permo-Triassic period. These apparently correspond to the Choiyoi Group. These bodies intrude marine limestone sediments, containing numerous concretions showing mild to moderate skarnification, and are associated with the Middle to Upper Jurassic (possibly part of the Pastillos Formation).

Overlying is a volcanic-volcaniclastic sequence. Based on historical geochronological data and the experience of the PetraGaia-Tocall exploration team in the Central Miocene district, the mapped volcanic units are considered pre-mineral or basement rocks. The estimated age range is 21.9 ± 0.2 to 20 ± 0.3 Ma, assigned to the Pachón Formation.

Surface exploration work has identified two primary targets in the zone: Piuquenes Central and Piuquenes East. Alongside are two additional targets, Piuquenes North and Piuquenes Northwest. Piuquenes Central is the most advanced target, having undergone diamond drilling. PetraGaia-Tocall Consultants conducted a geological reconnaissance of the property, focusing primarily on the Piuquenes Central and Piuquenes East.

The following lithological units are described in order from oldest to youngest, based on outcrop observations. Figure 7-2 illustrates the identified lithological units, while Figure 7-3 provides a detailed representation of the lithological units in Piuquenes Central and Piuquenes East.

7.2.1.1 Lithological Units

Jurassic Unit: These units consist of fine to medium-grained calcareous sandstones, typically exhibiting a north-south strike and a sub-vertical dip. The sedimentary structures include oscillation ripple marks, abundant sedimentary concretions, and a range of fabric types from laminated to massive.

Three distinct sedimentary basement zones have been identified. The first is located to the northwest of Piuquenes Central. The second is situated to the north of the Los Piuquenes River at the northern end of the property. It is in fault contact with northeast-striking dacitic breccias and in intrusive contact with a granodioritic body at the northeastern corner of the property. Lastly, calcareous sandstone outcrops with significant metasomatism have been identified along the western property boundary.



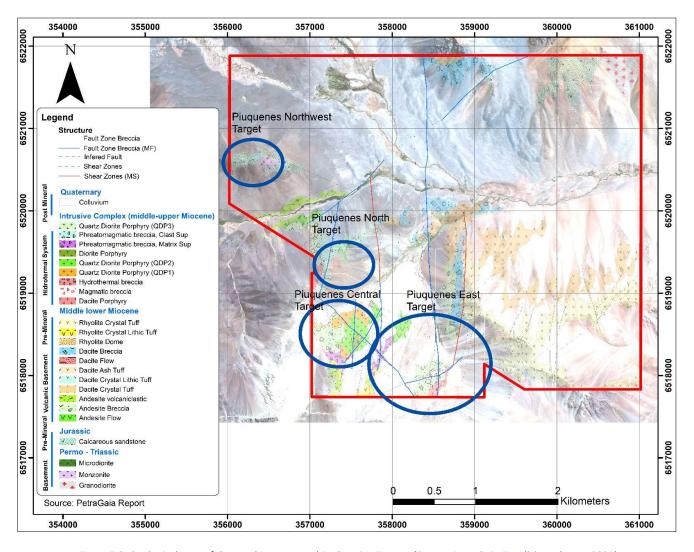


Figure 7-2: Geological Map of the Local Property and Exploration Targets (Source: PetraGaia-Tocall Consultants, 2025)



Early Miocene Units: The main lithological units found throughout the property. These units have been assigned to the Pachón Formation, a complex of volcanic, volcaniclastic, and sedimentary rocks. The sequence begins with a Lower Andesitic Member, consisting of andesitic lavas, breccias, and volcaniclastic deposits. This is followed by a Middle Dacitic Member, made up of dacitic crystal tuffs with a trachytic texture, few lithics, dacitic breccias, and reworked tuffaceous or laminated sediments. The Upper Member is rhyolitic, composed of crystal tuffs, lithics with ignimbritic textures, porphyritic features, and cooling fronts defined by columnar jointing.

A series of intrusive bodies with granodioritic to monzonitic composition were identified, likely of Early Tertiary age (tentatively assigned to the Río Calderón Plutonic Complex); exhibiting medium to coarse-grained textures. These rocks contain enclaves or xenoliths of microdiorites, along with small aplite dikes. The plutons display northwest and west-northwest dips, following inherited structures from the basement. The intrusion occurred into marine sedimentary rocks rich in concretions. These bodies are exposed to the northeastern and northwestern sectors of the mining property and show medium to high-grade metasomatism.

Middle Miocene Units: The Early Miocene Units are intruded by porphyritic bodies that share similar ages to those identified in the Altar area in the south of the property. These range from 11.75 to 8.9 Ma. Three phases of mineralization have been identified:

- Pre-Mineral Phase: This phase is represented by Quartz Diorite Porphyry 1 (QDP 1), identified in the Piuquenes Central target.
 - QDP 1 exhibits a fine to medium "crowded" porphyritic texture with flow textures.
 This porphyry shows weak to moderate pervasive quartz-sericitic alteration, with very few fine quartz + pyrite veins.
- Early Mineral Phase: This phase includes Quartz Diorite Porphyry 2 (QDP 2) identified in the Piuquenes Central target, as well as a dacitic porphyry identified in the Piuquenes East target.
 - QDP 2 is characterized by a microgranular to fine porphyritic texture with fragments of QDP 1. It shows early potassic alteration, with quartz veins surrounded by biotite halos and disseminated specularite (EDM type). QDP 2 also contains type A and type M veins, with type M veins reworked by type A veins. Additionally, pervasive quartzsericitic alteration is present.
 - Dacitic Porphyry: It has a coarse porphyritic texture with a "crowded" appearance, exhibiting strong pervasive quartz-sericitic and argillic alteration. It contains quartz veins with sericite halos (former D veins), possibly linked to a sericitic alteration zone with intense leaching. Indicating superimposition of a late-stage event.
- Intermineral Mineral Phase: In the Piuquenes Central target, a dioritic porphyry is present, along with phreatomagmatic breccias. The morphology suggests emplacement along a



major NE fault, in contrast to a WNW structure. In the Piuquenes East target, a system of magmatic, polymictic phreatomagmatic and hydrothermal breccias was identified, hosted in andesitic rocks with an alteration footprint of 1 km by 1 km. The morphology of these bodies and the structural evidence suggest a close association with major ENE, NE, and WNW fault systems.

- Dioritic Porphyry: This rock has a fine to medium porphyritic texture and shows potassic alteration with secondary biotite and disseminated magnetite. It contains intense quartz veins of type A, with sinuous morphology, and type B veins, which cut through type A veins. These early veins are superimposed on the EDM veins described in QDP 2. Suggesting a temporal relationship between these events. The veins are mainly "sheeted veins," oriented between N 30° and N 50° (See Figure 7-4).
- Phreatomagmatic Breccia: It presents a light gray to beige color, polymictic, with a matrix of crushed rock cemented by tuffaceous material and gray silica. Exhibiting intense pervasive argillic alteration, without the presence of porphyry fragments.
- Magmatic Breccia: Two bodies of intrusive breccias were mapped, containing fragments of quartz diorite and dioritic porphyries with early-stage A and B veins, as well as banded veins similar to the Maricunga type, cutting through the entire breccia. These breccias have a porphyritic matrix with euhedral plagioclase phenocrysts and sparse quartz crystals, exhibiting strong pervasive quartz-sericitic alteration on the plagioclase tablets.
- o Polymictic Phreatomagmatic Breccia: A large polymictic phreatomagmatic breccia was observed west of the Piuquenes East target, with a N-S to NE strike and a SE plunge. The breccia contains deformed juvenile fragments, cataclastic fragments, and a matrix of rock powder cemented by tuffaceous material and residual silica with a saccharoidal texture. The fragments are rhyolitic, andesitic, and quartz dioritic with silica halos. This body includes quartz diorite and dioritic porphyry fragments with early-stage quartz veins (type A and B) in a matrix of crushed rock and gray to beige silica. The breccia is intruded by hydrothermal breccia.
- Hydrothermal Breccia: with saccharoidal quartz, vuggy silica, alunite, and jarosite, indicating advanced argillic alteration. Small pebble-type dikes with gray quartz and possible tourmaline.

Late Miocene Unit: Corresponding to the Late Mineralization Phase, represented by Quartz Diorite Porphyry 3 (QDP 3), located in the Piuquenes Central target.

 QDP 3 has a medium to coarse texture and shows weak propylitic alteration, with chlorite on mafic minerals and epidote in fractures. It intrudes into the dioritic porphyry, indicating a late mineral origin.



Holocene-Pleistocene-Quaternary Units: These units consist of a series of unconsolidated deposits of glacial, glaciofluvial, mass movement, and current fluvial origin. This covers the majority of the Piuquenes Property.

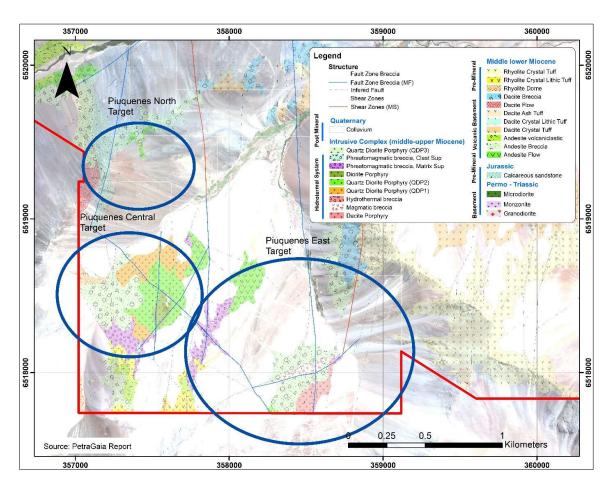


Figure 7-3: Lithological Map of Piuquenes Central and Piuquenes East (Source: PetraGaia-Tocall Consultants, 2025)





Figure 7-4: Dioritic Porphyry with A and B Veins, Sheeted, CuOx (Source: PetraGaia-Tocall Consultants, 2025)

7.2.1.2 Alteration

The alteration observed in the Piuquenes Project varies across targets, with distinct alteration events associated with exploration phases. The alteration types reflect the complex geological processes, and these alterations provide important insights for further exploration. Below is a simplified description of the alteration observed in the Piuquenes Central and Piuquenes East targets. Figure 7-5 depicts the alteration in these targets.

- In the Piuquenes Central target, the alteration includes quartz-sericitic, potassic, and propylitic types. Potassic alteration is marked by biotite and magnetite, with increasing quartz vein intensity due to superimposed alteration events. The sericitic alteration is pervasive and linked to hydrothermal activity. The alteration sequence is as follows: QDP 1 (pre-mineral) shows weak sericitic alteration with some quartz-pyrite veins; QDP 2 (early mineral) shows moderate sericitic alteration; and a dioritic porphyry with strong potassic alteration, including biotite, magnetite, and early quartz veins. Suggesting deep exposure of the complex. Finally, a late-stage dioritic porphyry shows weak propylitic alteration, with chlorite and magnetite.
- In the Piuquenes East target, the alteration is primarily advanced argillic, evidenced by the
 presence of saccharoidal quartz with vuggy silica texture, fragments replaced by alunite,
 and sparse jarosite-filled vugs. This alteration event overprints the earlier porphyry



system. Additionally, quartz veins with sericite suggest a late-stage alteration. This indicates an epithermal event superimposed on the porphyry, with quartz, saccharoidal texture, and alunite and jarosite, showing preserved shallow levels in the target.

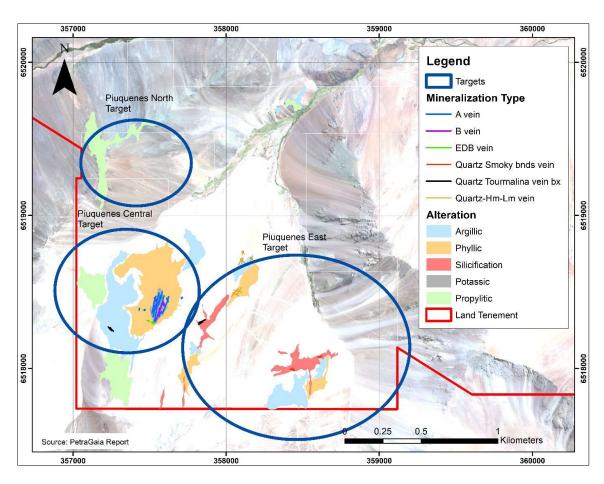


Figure 7-5: Alteration Map of Piuquenes Central and Piuquenes East (Source: PetraGaia-Tocall Consultants, 2025)

7.2.1.3 Mineralization

The mineralization at the Piuquenes Property is associated with several copper-gold (Cu-Au) porphyry pulses distributed over an area of approximately 2.0 x 1.5 km, concentrated in the southern part of the property (Piuquenes Central and Piuquenes East) and the adjacent Altar area.

In Piuquenes Central, observations from surface mapping and drill core sampling reveal that the mineralization comprises copper oxides located at the base of oxidation, typically at a vertical depth of 240-250 m. Below this oxidation level, extending down to approximately 520 m and the mineralization remains open at depth and along strike. Mineralization includes minor occurrences of secondary chalcocite, cuprite, and native copper. These are found in



association with chalcopyrite, the principal sulfide mineral. Traces of bornite and pyrite may also be present, accompanied by associated minerals such as specular hematite, local magnetite, tourmaline, gypsum, and calcite. The sulfide minerals and primary iron oxides predominantly occur within quartz veins. Less than 20% are found as disseminations in the surrounding groundmass. Notably, the concentration of gold shows a direct correlation with that of copper, and both metals increase in abundance alongside the intensity of quartz veining.

In the Piuquenes East, highly argillized volcanic breccia is prevalent, similar to that observed at Breccia Ridge. This zone is intersected by fresh, unaltered dykes of feldspar porphyry diorite, further contributing to the project's complex mineralization landscape.

7.2.1.4 Structures

As a result of structural evidence at the Piuquenes Project, an important NS-NNW trending fault system has been identified. This is closely linked to major fault structures oriented NW-WNW and NE-ENE. These fault systems have played a crucial role in controlling the geology, alteration, and mineralization of the Piuquenes Project. Understanding these structural features is fundamental for guiding ongoing exploration and will be key in the future property development.

Piuquenes Central Target: In this target, the inter-mineral body is observed to be aligned along a major northeast (NE) fault, interacting with a west-northwest (WNW) fault system. This structural setup indicates that the observed mineralization and alteration are strongly influenced by these fault structures. Playing a key role in shaping the spatial distribution and timing of mineralizing events.

Piuquenes East Target: The morphology of the phreatomagmatic and hydrothermal breccias, along with structural evidence, suggests a close relationship with major fault systems oriented ENE, NE, and WNW. These fault structures are likely responsible for controlling the location of mineralized bodies, significantly affecting the emplacement of breccia bodies and the alteration processes.



8 DEPOSIT TYPES

The Piuquenes Copper-Gold Porphyry Project represents a classic copper-gold porphyry system, defined by a complex interplay of hydrothermal and tectonic events. The deposit lies within a tertiary volcanic sequence, transitioning from basalts and andesites to rhyolites, intruded by porphyritic bodies. This sequence is largely covered by quaternary deposits. Several hydrothermal systems have been identified, most notably the Piuquenes Central and Piuquenes East targets, both including porphyry and high-sulfidation systems.

The mineralization is closely associated with several phases of porphyry intrusions. These include pre-mineral and early intra-mineral phases that have undergone significant potassic alteration, a key feature of porphyry systems. The potassic alteration in the central zone is rich in secondary biotite and potassic feldspar and flanked by quartz-sericitic and advanced argillic alteration zones. Again, typical of large porphyry systems.

Mineralization spans an area of about 2.0 x 1.5 km, with copper oxides near the surface transitioning to deeper sulfide zones dominated by chalcopyrite. Secondary minerals, such as chalcocite and native copper, appear below the oxidation level. Gold and copper concentrations increase in zones with intense quartz veining. Structural controls, including NNE and NS faults, significantly influence the distribution of mineralization, breccia bodies, and quartz stockworks. Highlighting the project's potential as a major copper-gold system.



9 EXPLORATION

9.1 Minera Aguilar S.A.

The first evidence of copper oxide mineralization at Piuquenes was documented in 1970 by Minera Aguilar S.A. (MA). Launching an initial exploration effort between 1973 and 1975. During this time, the company conducted geological reconnaissance and rock sampling. This led to the discovery of anomalous copper and gold concentrations, confirming the significance of the deposit.

9.2 Inmet Mining Corp.

A local subsidiary of Inmet Mining Corp. (IMC) (acquired by First Quantum in 2013), secured an option on the project in 1995. From then until 1997, IMC conducted extensive exploration activities. This included a 1:2,000 scale geological survey, geochemical analyses of rocks and talus fine samples, 23 linear kilometers of terrestrial magnetometry, and 5.8 kilometers of induced polarization (PD-IP) surveys conducted by Quantec Geofísica Argentina S.A.

9.2.1.1 Geological Mapping

Approximately ten days were dedicated to re-mapping the central area at a scale of 1:2,000. This process involved detailed field surveys to accurately capture lithological units and structural features. The mapping focused on identification of key geological formations, alteration zones, and mineralization patterns.

9.2.1.2 Geochemical Sampling

A total of 694 samples were collected at intervals of either 25 m or 50 m along 100 m spaced survey lines, 565 were talus fine samples while 129 were rock samples. Talus fine samples were more prevalent due to the limited availability of outcrops.

The elements analyzed include copper and gold. It should however be noted that no information is available regarding the sampling methods, the laboratory used, or the analysis sample codes.

The Figure 9-1 and Figure 9-2 illustrate the geochemical soil samples collected and the respective anomalies for copper and gold.



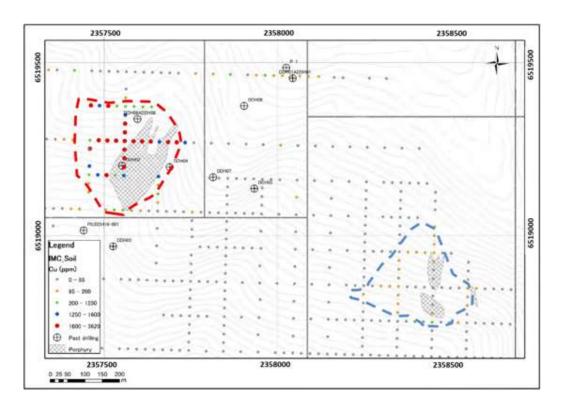


Figure 9-1: Geochemical Soil Samples at the Piuquenes Project, Showing Copper in ppm, Data Collected by IMC and Processed by Nittetsu (Source: Nittetsu, 2021)

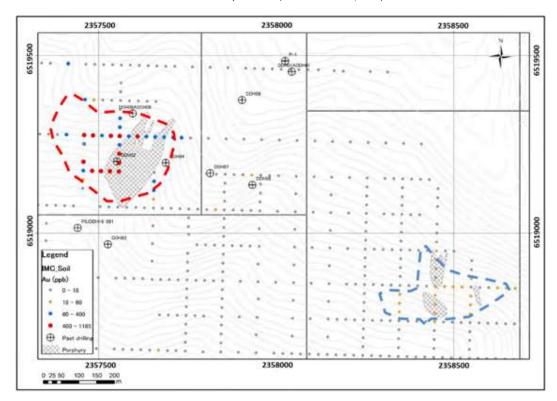


Figure 9-2: Geochemical Soil Samples at the Piuquenes Project, Showing Gold in ppb, Data Collected by IMC and Processed by Nittetsu (Source: Nittetsu, 2021)



9.2.1.3 Geophysics

The following work was carried out from October 18th to 22^{ndth}, 1996:

- Ground magnetic survey: A 23 km ground magnetic survey was conducted across the
 entire grid area. This covered both west and east zones, with readings taken every
 12.5 m along 100 m spaced east-west lines. The total field results were subject to a
 magnetic pole calculation reduction. A prominent positive magnetic anomaly was
 identified in the west zone, centered on the quebrada (Quebrada Seca). Nearby
 surface outcrops additionally displayed weak magnetism. Magnetite was found to be
 locally associated with quartz vein stockworks in the diorite intrusion breccia.
- Induced polarization (PD-IP) survey: A pole-dipole PD-IP survey was conducted with a dipole spacing of 50 m on four lines spaced 200 m in the northern half of the grid area (lines 8N, 10N, 12N, 14N). The survey detected a moderately intense, roughly semi-circular IP chargeability anomaly. This was open to the south, forming a 200 m wide aureole in andesite and felsic tuffs, peripheral to the diorite stock and magnetic anomaly.

9.3 Anglo American Argentina

Between 2015 and 2016 Anglo American Argentina (AAA) conducted an exploration program. This included detailed geology at a scale of 1:2,500, geochemical studies of talus and rocks, 17.8 km of induced polarization/resistivity and Natural Source Magnetotellurics (NSMT). The geophysical method explored the subsurface by measuring variations in natural electromagnetic fields. The technology assesses the electrical resistivity of rocks, providing valuable information on the presence of minerals and geological features.

9.3.1.1 Geological Mapping

A detailed 1:1,000 scale geological map was developed to precisely capture the geological characteristics and mineralization potential of the Piuquenes Project. The map highlights a significant color anomaly, extending over an area of 2.5 x 2 km. This anomaly, in conjunction with the adjacent Altar project to the south, forms part of a broader hydrothermal alteration zone spanning approximately 6 x 3 km. This extensive alteration zone emphasizes the area's high potential for mineralization.

9.3.1.2 Geochemical Sampling

A total of 372 samples were collected, 182 correspond to "chip" samples obtained from outcrops, 168 are samples collected from project trenches, and 22 are related to scree deposits. Figure 9-3 illustrates the distribution of the various types of geochemical samples.



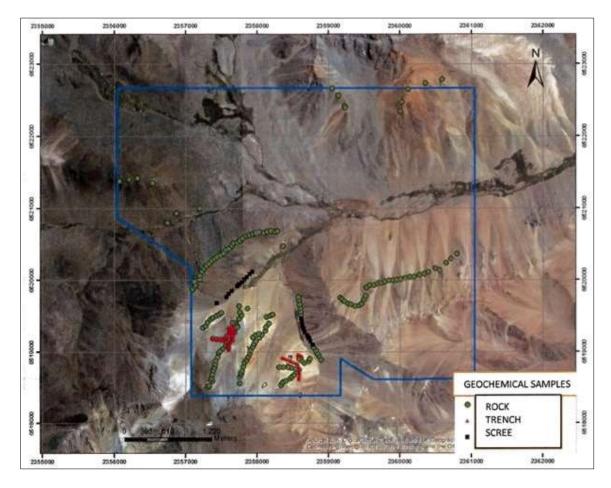


Figure 9-3: Distribution of Geochemical Sample Types in the Piuquenes Project (Source: Anglo America Argentina, 2016)

Rock samples were systematically collected from the edges and outcrops at 50 m intervals. In areas where no outcrops were present, samples were taken from scree deposits.

For trench sampling, samples were collected every 5 meters. A total of seven trenches were examined: four in the central area (including the Piuquenes Central) and three in the southeastern area (including the Piuquenes East target).

Sample preparation was conducted at the ALS Minerals Laboratory in Mendoza, Argentina. The samples were then sent to their laboratory in Lima, Peru for chemical analysis. The chemical analysis involved a multi-element procedure using Aqua Regia digestion, followed by Inductively Coupled Plasma (ICP) analysis for 41 elements. For gold, fire assay and atomic absorption methods were employed.

This analysis revealed significant copper and gold anomalies. Predominantly occurring in two key areas: the Piuquenes Central and East target. Both zones are characterized by quartz-diorite and quartz-monzonite porphyry outcrops with extensive stockworks of type-A veins,



along with mineralization of copper oxides and sulfides. This mineralization is closely associated with potassic alteration involving potassium feldspar and biotite. In the Piuquenes East, advanced argillic alteration is present, indicating a more evolved hydrothermal system.

Copper concentrations ranged from 2 to 8,310 ppm, with three samples from the Piuquenes Central displaying values greater than 5,000 ppm. In the northern of Piuquenes Central, copper anomalies are linked to andesitic rocks exhibiting propylitic alteration, appearing to be directly related to minor structural features.

Gold anomalies align closely with the distribution of copper, concentrating mainly in the Piuquenes Central and East target. Gold values exceed 0.3 ppm, corroborating the presence of the same porphyry systems and alteration types associated with copper mineralization. This spatial correlation suggests a potential for high-sulfidation (HS) mineralization in the Piuquenes East target.

9.3.1.3 Geophysics

Between 2015 and 2016 multiple geophysical exploration studies were conducted including:

- **3D Geophysical Survey**: A three-dimensional geophysical survey was conducted using Induced Polarization (PD-IP) and resistivity, complemented by Non-Stationary Magnetotelluric (NSMT) studies. This survey was carried out with a spacing of 200 m, aiming to identify mineralization zones at depth through an offset 3D PD-IP/Resis+NSMT gDAS approach.
- **3D Magnetic Inversion**: Based on RTZ-CRA data, this inversion allowed for the modeling of the magnetic properties of the subsurface. Correlation with potential mineralized bodies provided key information on the geological structure.
- **2D IP and Resistivity Inversion**: Utilizing Quantec data, a two-dimensional inversion was performed revealing geophysical anomalies associated with mineralization. These anomalies were primarily located in areas of moderate to high resistivity (500-1000 ohm-m) and moderate IP times (20-35 ms).

The geophysical studies have identified deep targets exhibiting conductive characteristics and high induced polarization (IP). Resistivities ranged from 100 to 300 ohm-m and IP times of 30-50 ms, located at depths of between 500 and 700 m. These characteristics suggest the presence of mineralized zones rich in sulfides.

Additionally, the detection of magnetite (1% and 3%) at depths of between indicates the potential for a porphyry in the studied area, with significant potential for copper mineralization in high-sulphuration (HS) areas.



9.4 Nittetsu Mining Co. Ltd.

Between 2020 and 2021, Nittetsu Mining Co. Ltd. (Nittetsu) conducted a comprehensive review of the existing geochemical data, geological surveys, and geophysical data. The data was from IMC and AAA, provided by Cía Minera Piuquenes S.A. (CMP). They carried out geological surveys in existing trenches and outcrops. They also performed geochemical analysis, X-ray diffraction, and microscopy. Aiming to corroborate previously detected anomalies and evaluate the feasibility of an option agreement with CMP.

9.4.1.1 Geological Mapping

To define lithological distribution, a geological mapping campaign was conducted, resulting in the development of a simplified geological map. The mapping identified a porphyry system in the central and southern parts of the property. Altered tuff units were distributed throughout the area and localized occurrences of hydrothermal breccia was documented.

9.4.1.2 Geochemical Sampling

Geochemical exploration using talus fine samples was conducted on a 100 x 100 m grid. Initially, 238 samples were planned for collection; however, challenging steep terrain at the northeastern end resulted in the collection of only 231 samples. These samples were subsequently sent for chemical analysis to ALS in Peru (via ALS in Mendoza). Out of the 231 samples, 153 were soil samples and 78 were rock samples, consisting of tuff and porphyry. A geochemical anomaly distribution map was created without distinguishing between tuff and porphyry. The host rock tuff undergoes alteration and mineralization in conjunction with the porphyry.

Results from the geochemical sampling indicate significant findings around the Piuquenes Central and East targets. High geochemical anomalies were detected for copper, with concentrations ranging from 200 to 1,240 ppm. Five samples from Piuquenes Central showed copper values between 2,000 and 3,550 ppm, while gold anomalies ranged from 0.1 to 0.72 ppm. Five samples reached 0.3 to 0.72 ppm. Silver and molybdenum anomalies were recorded at 0.90–1.30 ppm and 13–20 ppm, respectively. Lead concentrations ranged from 78 to 144 ppm along the margins of Piuquenes Central. Minimal zinc anomalies were prominent north of Piuquenes East, with values of 256–523 ppm. Arsenic anomalies were identified at 152–354 ppm near the southern margins of Piuquenes Central and Piuquenes East.

Figure 9-4 and Figure 9-5 illustrate the distribution of geochemical anomalies for copper and gold respectively, based on soils samples.



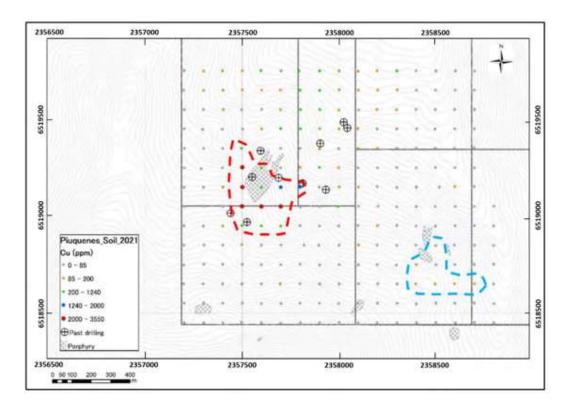


Figure 9-4: Field Distribution of Geochemical Anomaly for Copper in ppm (Source: Nittetsu,2021)

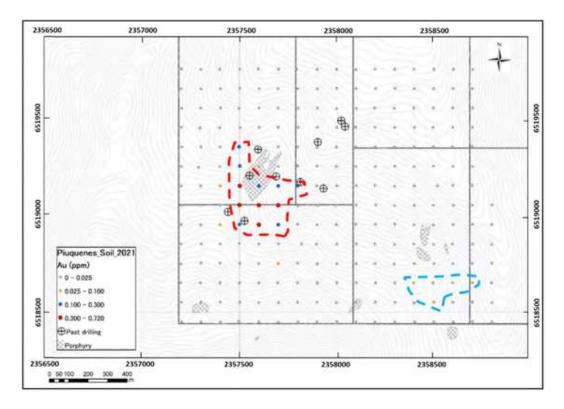


Figure 9-5: Field Distribution of Geochemical Anomaly for Gold in ppm (Source: Nittetsu,2021)



9.4.1.3 Geophysics

Nittetsu Mining Consultants (NMC) reanalyzed geophysical exploration data obtained by Anglo American in 2016 and integrated it into a 3D model alongside available drilling data. The analysis identified high copper mineralization potential adjacent to high resistivity regions (medium resistivity zones of 300 to 1,000 Ω m). This was interpreted as potential dikes or stocks. These medium resistivity zones are primarily located beneath the Piuquenes Central and Piuquenes East porphyries. Based on the 3D model, it is suggested that the mineralized body of the Piuquenes porphyry may extend from approximately 3,035 to 2,600 meters above sea level (masl).

Figure 9-6 illustrates the resistivity model alongside existing drilling data. The red dotted line indicates high potential for copper mineralization and the black points represent drilling data.

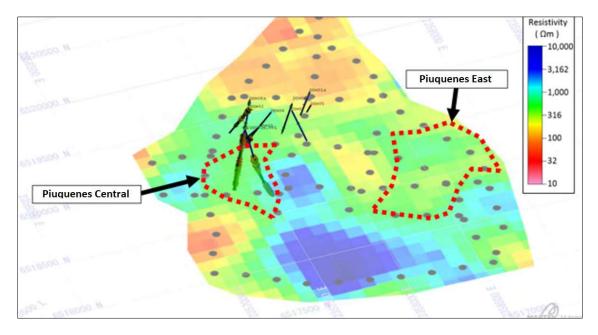


Figure 9-6: 3D Model Showing the Resistivity Model and the Existing Drilling Data (Source: Nittetsu, 2021)

9.4.1.4 X-Ray Diffraction Analysis

X-ray diffraction analysis (XRD) was performed on 22 samples to identify altered minerals within ore samples. The results of the analysis revealed the following alterations:

K-alteration: 8 samples

Sericite alteration: 11 samples

- Argillic alteration (Kaolin mineral): 5 samples

Distribution maps for potassium, illite, sericite, chlorite, dickite, and kaolin, show a consistent relationship with the distribution of the Piuquenes Central and East targets. The analysis



indicates that illite and sericite alterations develop after K-alteration. Argillic and chlorite alterations represent the most recent formation processes.

9.4.1.5 Microscopy

Microscopic observation of thin sections for 20 ore samples was conducted by Universidad Nacional del Sur in Argentina; 16 samples were collected from the surface, primarily consisting of oxidized (weathered) material. The remaining 4 samples were drilling core specimens obtained from Anglo American's 2016 drilling survey. These core samples were analyzed to assess mineralization characteristics unaffected by weathering, with permission from Minera Piuquenes S.A.

The porphyry and porphyritic andesite samples exhibit a diverse range of mineral characteristics. These include plagioclase, amphibole, and quartz, predominantly displaying potassic and sericitic alterations. Several samples were also found to contain copper mineralization in the form of cuprous oxide. Furthermore, the hydrothermal breccia samples revealed the presence of quartz and tourmaline. Indicating significant hydrothermal alterations.

9.5 Pampa Metals

Since optioning the Piuquenes Porphyry Copper-Gold Project in late 2023, Pampa Metals (PM) has conducted a comprehensive review of the project's technical database. This corroborated some of the results from previous operators and identified four exploration targets: Piuquenes Central, Piuquenes East, Piuquenes North and Piuquenes Northwest.

The Piuquenes Central area has more extensive drilling and geochemical data. This showed copper, gold, and other element anomalies. PM carried out additional drilling in this sector to validate historical data yielding encouraging outcomes. A 3D geological interpretation was also developed to guide future exploration efforts. The work conducted by PM included:

- Detailed review of surface geology and geochemistry (1:2500 scale, see Figure 9-7 and Figure 9-8).
- Review and interpretation of historical geophysical data from Deep 3D PDIP, NSMT (17.8 km gDAS24) and airborne magnetic/radiometric surveys.
- Review and re-logging of 2,800 meters of well-preserved historical drill core.
- 2,592 meters of diamond drilling in the Piuquenes Central in early 2024 (See Section 10).
- Interpretation of a 3D geological model using both historical and recent drilling data. Including surface geology, geochemistry, and geophysical information.



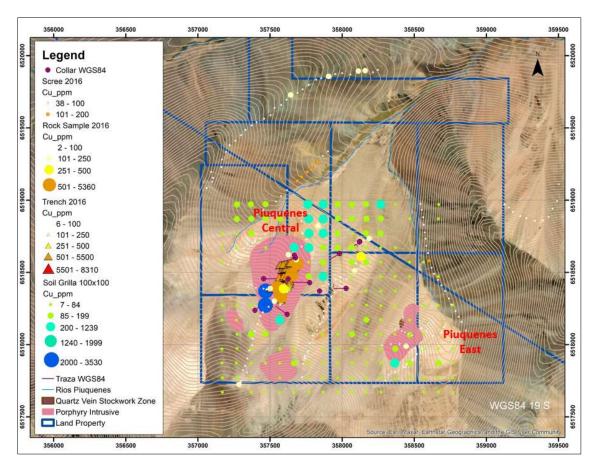


Figure 9-7: Integrated Geochemical Anomaly Map for Copper in ppm (Source: Pampa Metals, 2024)



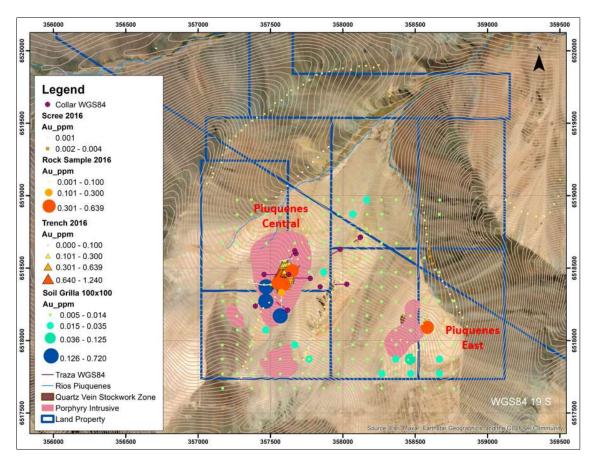


Figure 9-8: Integrated Geochemical Anomaly Map for Gold in ppm (Source: Pampa Metals, 2024)

Below is a summary of the integration and interpretation of historical data. Key highlights include:

- Data Sources: The key datasets used include a 2016 Offset Pole-Dipole Induced Polarization-Resistivity (IP) survey and a Natural Source Magneto-Telluric (gDAS24) survey (MT).
- 3D Inversion Models: These datasets have been evaluated through 3D inversion models, in conjunction with ongoing development of an early 3D geological interpretation of historical and recent drilling.
- Resistivity Data: The Piuquenes Central area is defined by a central high-resistivity feature, the Piuquenes East target exhibits a comparable anomaly (Figure 9-9).
- Chargeability Data: Chargeability data indicates a northeast-trending structure in the Piuquenes system (Figure 9-10 and Figure 9-11).
 - Piuquenes Central Anomaly: Piuquenes Central is characterized by a pronounced annular chargeability anomaly. The highest chargeability zones are located around the edges of the current defined mineralization (Figure



- 9-10). This potentially represents a peripheral pyritic zone linked to phyllic alteration.
- Mineralized Zone: The mineralized zone at Piuquenes Central corresponds to a moderate chargeability zone (Figure 9-10). Likely associated with a lowpyrite, high-chalcopyrite system core.
- Additional Targets: A similar, though buried, chargeability feature has been identified in 3D inversion models along the northeast trend of Piuquenes Central (Figure 9-11). This represents a separate highly prospective mineralized target.
- Magneto-Telluric Data: Deep-sensing Magneto-Telluric data highlights the Piuquenes Central porphyry as a pipe-like high-resistivity zone extending upward from a larger, deeper high-resistivity feature (Figure 9-12).
 - It is preliminarily interpreted that the deeper resistivity anomaly may represent a large-scale underlying intrusion. The pipe-like high-resistivity zone potentially indicates a mineralized porphyry complex extending upward from this deeper intrusion.
 - The currently defined mineralized zone at Piuquenes Central is located along the margin of this pipe-like resistivity feature. Other margins and several similar responses identified in the 3D inversion model remain untested.
- Exploration Potential: The clear delineation of the Piuquenes Central and Piuquenes East systems by IP, resistivity, and MT data suggests that electrical geophysical methods will be highly effective as first-pass targeting tools to identify additional porphyry centers. Notably, much of the tenement package outside the Piuquenes Central—Piuquenes East area has not yet been subjected to electrical geophysical surveys (Figure 9-9 and Figure 9-10).



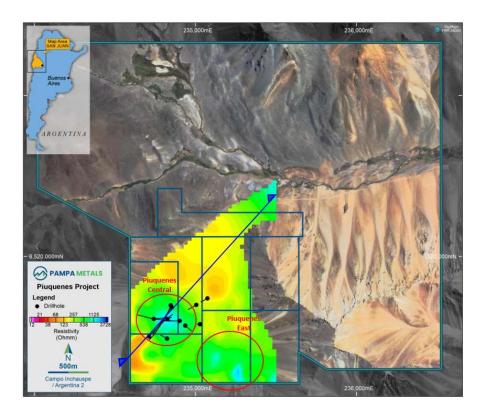


Figure 9-9: Central Resistivity High - Piuquenes Central and Piuquenes East target (Source: Pampa Metals, 2024)

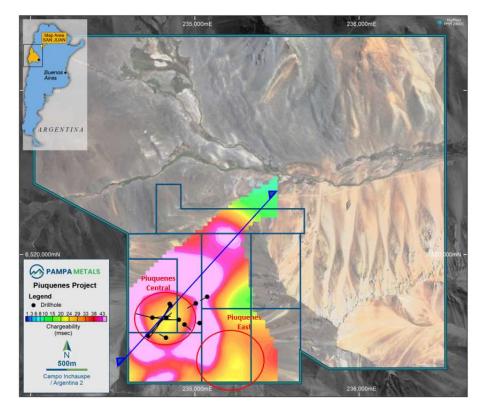


Figure 9-10: Prominent Annular Chargeability Anomaly, Highest Zones Peripheral to Currently Defined Mineralization (Source: Pampa Metals, 2024)



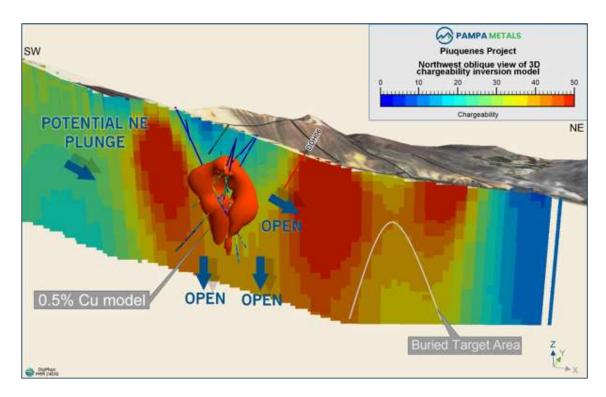


Figure 9-11: 3D View of Chargeability Inversion Model - Potential NE Plunge & Buried Target Area (Source: Pampa Metals, 2024)

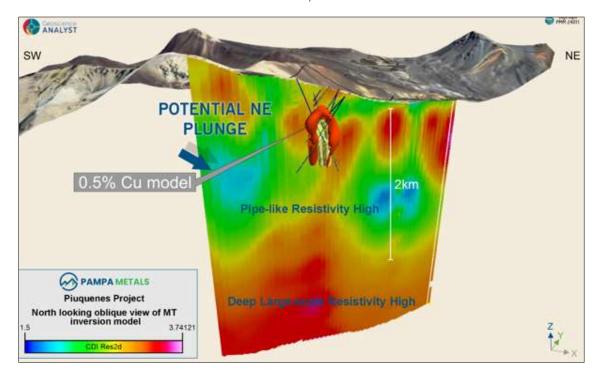


Figure 9-12: 3D View of MT Inversion Model - Potential NE Plunge & Large, Pipe-Like High-Resistivity Feature (Source: Pampa Metals, 2024)



10 DRILLING

Diamond drilling at the Piuquenes Project was carried out in three phases from 1996 to 2024 under the direction of various companies. Inmet Mining Corporation (IMC) conducted the first drilling program from late 1996 to February 1997. This was notable for its deepest hole, DDH08A, which reached a length of 580.5 m and was oriented from northeast to southwest.

Subsequently, Anglo American Argentina (AAA) drilled a hole measuring 920.2 m, oriented from southwest to northeast, between March and April 2016.

Finally, Pampa Metals (PM) completed the most recent drilling campaign between January 19 and April 23, 2024. Drill lengths ranged from 855 to 870 m, for a total of 2,592.1 m. In late 2024, PM resumed drilling as part of its 2025 drill campaign, focusing on areas previously tested to further delineate the mineralized body. As of the effective date of this report (January 31, 2025), a total of 2,900 m had been drilled, corresponding to two completed drill holes, with a third hole in progress. Assay results for these holes were pending as of the effective date, and the full results of the 2025 drill campaign will be included in future updates. As such, the 2025 campaign has not been detailed in the drilling or sampling sections of this report, given that only partial data was available at the time of writing.

During IMC's campaign, holes DDH01 and DDH08 were abandoned before reaching the planned drilling depth due to technical difficulties. As a result, the holes DDH01A and DDH08A were drilled as replacements.

Regarding the distribution of drilling, IMC's initial campaign was dispersed, with several holes in the northeast, subsequently migrating southwest. The last two campaigns focused on this sector of Piuquenes Central, shown to contain the highest copper and gold values. The drilling grid is irregular and does not follow a uniform pattern; however, the average distance between holes is approximately 200 m. The orientation of the mineralization has not been clearly defined at this stage. However, based on the mineralization style it is inferred to be steeply dipping, though there is no clear azimuthal alignment. Further exploration and detailed geological modeling will be necessary to accurately determine the true orientation and extent of the mineralized zones.

Table 10-1 summarizes drilling activities, while Table 10-2 highlights significant drill intercepts. Figure 10-1 illustrates the locations of the drill holes, colour coded according to drilling campaign. Figure 10-2 and Figure 10-3 present drill hole cross-sections, including an early-stage grade shell for reference purposes.



Table 10-1: Piuquenes Drilling Summary

Company	Year	Drillhole	Depth (m)	Highlights	
IMC		DDH01	96	Abandoned	
	1996-1997	DDH01A	167	-	
		DDH02	220	-	
		DDH03	DDH03 141		
		DDH04	275	-	
		DDH05	58	-	
		DDH06	236	-	
		DDH07	241	-	
		DDH08	144	Abandoned	
		DDH08A	581	-	
AAA	2015-2016	PIU16DDH001 920		-	
		PIU01-2024DDH	867	-	
Pampa Metals	2024	PIU02-2024DDH	870	-	
		PIU03-2024DDH	855	-	
Subtotal	Subtotal IMC		2,157		
Subtotal AAA		1	920	-	
Subtotal Pampa Metals		3	2,592		
Total		14	5,669	-	



Table 10-2: Best Drill Intercepts

Company	Holes	East WGS84 (m)	North WGS84 (m)	Elevation WGS 84 (m)	Azimuth°	Dip°	From	То	*Length (m)	Cu %	Au g/t	Ag g/t
IMC	DDH02	357,626	6,518,455	3,803	240	-49	27	41	14	0.59	0.15	3.66
	DDH04	357,775	6,518,429	3,734	270	-50	215	271	56	0.69	0.54	3.72
	including	-	=	-	-	-	227	251	24	0.79	0.55	4.38
	DDH08A	357,677	6,518,600	3,744	215	-48	217	551	334	0.52	0.58	3.47
	including	-	-	-	-	-	225	285	60	0.86	0.72	5.00
	including	-	-	-	-	-	407	479	72	0.63	0.63	4.25
AAA	PIU16DDH001	357,396	6,518,238	3,905	45	-65	362	522	160	0.75	0.61	3.93
	including	-	-	-	-	-	388	416	28	1.09	0.64	4.49
PM	PIU01-2024DDH	357,669	6,518,620	3,745	212	-45	198	620	422	0.48	0.61	2.90
	including	-	-	-	-	-	220	352	132	0.71	0.85	4.30
	including	-	-	-	-	-	468	548	80	0.6	0.77	3.20
	PIU02-2024DDH	357,775	6,518,429	3,734	278	-52	214	662	448	0.42	0.46	2.44
	including	-	-	-	-	-	450	638	188	0.59	0.63	3.49
	including	-	-	-	-	-	450	576	126	0.66	0.74	3.94
	PIU03-2024DDH	357,456	6,518,456	3,815	92	-71	54	855	801	0.4	0.51	2.87
	including	-	-	-	-	-	192	710	518	0.53	0.73	3.45
	including	-	-	-	-	-	192	368	176	0.71	0.74	4.86
	including	-	-	-	-	-	554	618	64	0.75	1.20	4.60
	including	-	-	-	-	-	642	674	32	0.64	0.71	4.54

^{*} Intervals reported in the above table are not true thicknesses



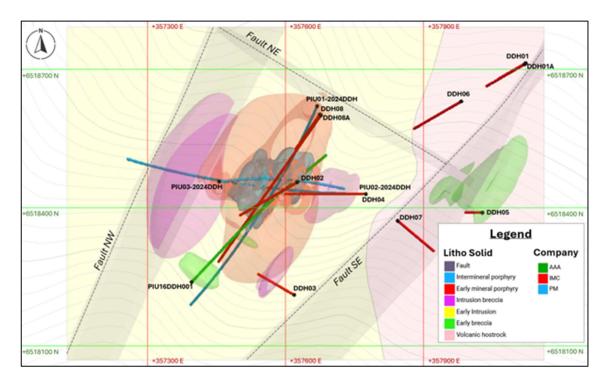


Figure 10-1: Drill Hole Locations Plan at the Piuquenes Central Target (Source: Mining Plus, 2024)

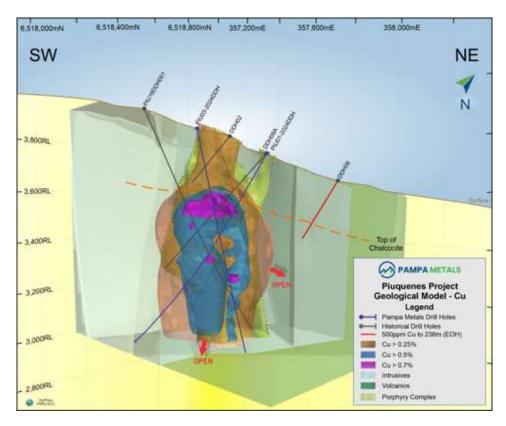


Figure 10-2: Piuquenes Central Target – SW/NE Cross Section – Copper Shell (Source: Pampa Metals, 2024)



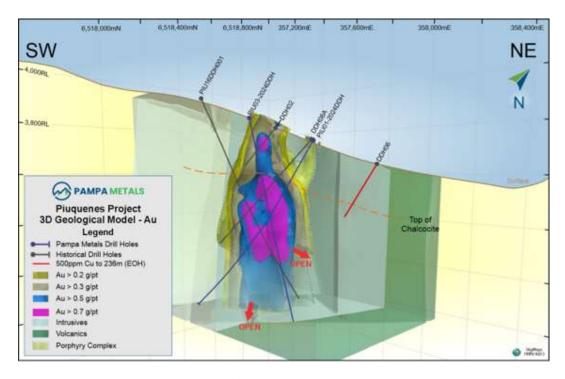


Figure 10-3: Piuguenes Central – SW/NE Cross Section – Gold Shell (Source: Pampa Metals, 2024)

10.1 Drilling Methods

IMC commenced its first drilling program with three drill holes, conducted between March 22 and April 9, 1996. In this initial phase, an NQ diameter (47.6 mm) was used, followed by an HQ diameter (63.5 mm) to improve the rate of advance and optimize recovery at a more efficient cost.

Continuing with its second program, IMC carried out an additional eight drill holes from October 19, 1996, to February 8, 1997. During the execution of the last drill hole in this second campaign, operational limitations arose with the drilling machines, requiring a change in bit size to the NQ diameter (47.6 mm) to 300 m and subsequently to BQ (36.5 mm) at 450 m.

AAA initiated its drilling program with the following sequence of diameters: 12.0 m of overburden, followed by 359.2 m with PQ diameter (85.0 mm), and concluding with 549.0 m using HQ diameter (63.5 mm).

Meanwhile, PM conducted drilling using PQ diameter (63.5 mm) up to 201 m, then switched to HQ diameter (63.5 mm) up to 583 m, before subsequently reducing to NQ diameter.



10.2 Drillhole Collar and Downhole Surveys

The Piuquenes Project has historically used the Campo Inchauspe datum. Recent drilling was conducted using the WGS84 (World Geodetic System 1984) in Zone 19S. Additionally, all drill hole collars were surveyed using a handheld Global Positioning System (GPS) and recorded in the database with UTM WGS84 Zone 19S coordinates.

IMC used the acid tube survey method to measure deviation in the drillholes conducted between 1996 and 1997. This method was notable for its simplicity and effectiveness at the time, allowing for real-time inclination data collection, which ranged from -50° to 65°.

In the AAA campaign, deviation measurements were carried out by Bornav Argentina, a subsidiary of Comprobe Ltda. in Chile. This work utilized a north indicator instrument, allowing for immediate identification of coordinates, azimuth and inclination without the need for topographic support. The obtained orientation data indicated that the drilling had slight changes in course and inclination.

No magnetic declination corrections have been applied to the data collected by IMC and AAA. Therefore, all azimuth measurements and related directional data are reported relative to magnetic north. This could introduce slight orientation and mapping inaccuracies if not accounted for during subsequent data processing or interpretation.

In 2024, PM conducted drilling deviation measurements for its drillholes, performed by a contractor every 50 m using a True North MW Gyro. The results showed a slight inclination and clockwise deviation.

10.3 Drilling Sampling and Recovery Factors

The drilling, sampling and recovery practices varied across the different companies. In the IMC campaign, the recovery rate reached approximately 90%. In contrast, there is no recovery information available for the AAA campaign. For the PM campaign, a recovery database indicates that the recovery rate in the first 30 meters was 88%, affected by surface weathering. However, at greater depths this improved, exceeding 95% in the mineralized zone.

The procedure implemented by PM outlines the processes of logging, core photography, sampling and cutting (Pampa Metals, 2024). Logging recorded lithology, alteration, the presence of primary zone, leach capping, mineralization and geotechnical data. This logging process is conducted digitally, stored in an Access database and integrated with other tables. The sample length is 2.00 m; however, was adjusted to align with geological contacts.



There are no available details regarding the drilling procedures used by IMC and AAA. As part of the validation of historical data, PM conducted re-logging of historical drill holes, ensuring consistency with their own logging procedures.

10.4 Qualified Person Opinion

PM's work is well-documented. There are however gaps in historical data, particularly regarding recovery information from IMC and AAA. The drill hole deviation measurement methods, such as the acid tube method, are additionally less precise than modern standards. Likewise, none of the drill holes from IMC and AAA have magnetic corrections, while PM, conducted measurements using the True North MW Gyro for more accurate readings.

The mineralization's orientation is not fully defined, with indications of steep dips but no clear azimuth. Confirming the orientation of mineralized zones will be essential to plan future drilling. This will ensure an optimal drill pattern aligned with the mineralization's geometry.

The project remains at an early exploration stage, all uncertainties should be addressed as exploration moves forward.



11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Rock, soil, and sediment samples collected by Inmet Mining Corporation and Anglo America Argentina are considered referential information, primarily for exploration target identification and geological interpretation. The information from these samples is limited to location records, sample types, and analytical results. These are detailed in Section 9. Consequently, this section focuses exclusively on sampling data derived from the diamond drilling conducted.

The data described in this section corresponds to historical drill holes conducted by Inmet Mining Corporation (IMC) and Anglo America Argentina (AAA), as well as the most recent drilling carried out in 2024 by Pampa Metals (PM).

11.1 Core Sampling

The core sampling process is similar across different campaigns, showing only some differences. Once geological logging is completed, the core is marked for cutting. Historical drilling used a shear splitter for sample cutting, while PM used a diamond-blade core saw every 2 m. One half of the core is placed in plastic sample bag with corresponding tag for shipment to the laboratory. The other half is returned to the core box for preservation.

11.2 Sample Shipment and Security

During the IMC campaign, samples were transported by truck to Mendoza for onward shipment to the SGS laboratory in Santiago, Chile. Core boxes were transported by pickup to the operations center in Barreal for logging and sampling. Samples were then bagged, labeled, and weighed, before being dispatched to the ALS laboratory in Mendoza. No details are available regarding AAA.

Core samples are sent by PM to ALS Laboratory in Mendoza for preparation and analysis. The samples are transported from the site in a secure system to ensure they arrive in good condition at Barreal for logging and sampling. Once prepared, the samples are packaged, and a list of samples for analysis is sent to ALS. ALS provides a report via email confirming receipt of the samples and notes any damage, allowing PM to review and confirm as needed.

11.3 Laboratory Sample Preparation and Analytical Method

IMC's samples were assayed for copper, gold, silver, and lead. All samples were sent to the SGS laboratory in Santiago for analysis. For drill holes DDH02, DDH03, and DDH04, every third sample was sent to the SGS laboratory in Toronto for a 31-element ICP analysis. This included mercury by the cold vapor method (detection limit: 5 ppb). However, the ICP analysis results are not included in the database. Furthermore, no details are available regarding sample preparation at the laboratory.



Assay Procedures:

- Gold (MIBK): 20-gram aliquots of sample pulp were roasted at 400-600°C, digested with aqua regia, extracted with Methyl Isobutyl Ketone (MIBK), and analyzed using atomic absorption spectrometry. Two detection limits were used: 5 ppb and 0.02 ppm.
- Copper, Silver, Lead (AA50CH method): Aqua regia digestion followed by atomic absorption (AA) determination. Detection limits: 1 ppm Cu, 10 ppm Pb, 1 ppm Ag.

In Anglo American's isolated drillhole program, samples were sent for preparation and analysis to the Alex Stewart Laboratory in Mendoza, Argentina. Gold was assayed using fire assay (Au4-50), and multiple elements were analyzed through Aqua Regia digestion (ICP-AR-39).

For Pampa Metals' due diligence in October 2023, a 526 m interval of drill hole PIU16-DDH001 was submitted to ALS Mendoza for testing (from 362 to 888 m). The samples were analyzed for gold using fire assay (Au-AA23-30), multiple elements with four-acid digestion (ME-MS61), and copper over-limit using four-acid digestion (Cu-OG62).

Pampa Metals' current procedure is to send core samples to ALS Mendoza for preparation (PREP-31) and subsequent analysis. The preparation process involves crushing to ensure 70% of the material passes through a 2 mm sieve, followed by a 250 g split obtained by riffle splitter, and pulverization to achieve 85% pass through of a 75-micron screen. Gold content is determined by fire assay on a 30 g sample, analyzed with atomic absorption spectrometry (AA-Au23) with a detection limit of 5 ppb. Multi-element analysis is carried out using four-acid digestion (ME-MS61), and copper over-limit values are determined by four-acid digestion with inductively coupled plasma atomic emission spectrometry (ICP-AES) (Cu-OG62), with a detection limit of 1 ppm.

Samples analyzed at the SGS laboratories in Santiago and Toronto in 1997 were processed by globally recognized facilities. Although specific certification details from 1997 are unavailable, SGS laboratories today typically adhere to ISO/IEC 17025 standards. Both the Alex Stewart Laboratory in Mendoza used by AAA, and the ALS Laboratory in Mendoza used by PM in 2023, are ISO/IEC 17025 certified. This ensures compliance with international quality standards for sample preparation and analysis.

SGS, Alex Stewart, and the ALS Laboratories are globally recognized, independently certified laboratories. There is no relationship between these laboratories or owners involved in the Project. All procedures and analytical assays were conducted independently, ensuring objectivity and reliability of results.



11.4 Quality Assurance and Quality Control Procedure (QA/QC)

Quality Assurance (QA) is the process used to evaluate and guarantee the quality of assay results. Quality Control (QC) refers to the performance of control samples included with the primary samples. This system helps to ensure exploration data is valid, accurate, and reliable.

Throughout the three drilling campaigns, QA/QC procedures have been variables (Table 11-1). Only the second campaign, conducted in 2017, maintained a consistent insertion ratio of approximately 12.6%. No QA/QC information is available for the drill holes conducted by IMC between 1996 and 1997, except for a limited detail report on inter-laboratory check samples. QA/QC data from Anglo American Argentina (AAA) is primarily found in reports, and the database remains incomplete. The 2024 drill holes completed by PM are supported by comprehensive reports and databases, ensuring full traceability of data and procedures. Detailed QA/QC information within Pampa Metals' due diligence database is, however, limited.

Blank Standard **Duplicate** Total % QC/QC Check Original Year QA/QC Quarter Samples Samples Insertion N° Pulp Coarse Coarse Samples Core * * 1996-1997 17.27% 24 21 16 17 17 95 455 2017 263 17.30% 2023** 2024 47 47 46 140 1,291 9.78% Subtotal 71 68 16 17 63 0 290 2.009 12.61% 0.7% 3.1% 3.0% 0.7% 2.7% 0.0% 12.6% 87.4% % Subtotal

Table 11-1: Quality Control Sample Insertion Rates for the Piuquenes Project

Note:

During the AAA campaign (2017), there were issues with demobilization. Chemical analysis and QA/QC results were postponed and 11 months later Minera Piuquenes recovered the samples for analysis in line with the AAA sampling procedure. A total of 455 samples from drill hole PIU16DDH001 were collected, including 95 control samples (17.3% of total samples), 17 quarter core, 17 coarse duplicates, 16 fine duplicates, 24 quartz blanks, 11 "Oreas-153b" standards, and 10 "STD-21" standards (Orrego, 2023).

In 2023, during due diligence by PM, samples from drill hole PIU16DDH001 (section: 362 – 888 m) were re-sent for reanalysis including 263 primary samples and 55 controls.

During the PM drilling campaign, 140 controls were inserted in total. This represented around 10% of total samples, with 47 blanks, 47 duplicates and 46 standards.

^{*} Quantity of control type is not available

^{**} Campaign of due diligence



11.4.1.1 Standards

Certified reference material (CRM) samples, also known as standards, were included in the sample stream to verify assay result accuracy.

1.4.1.3 Pampa Metals Reanalysis on Anglo American Campaign

During re-sampling conducted by PM on AAA drill core, three standard controls were included: Oreas 263 (certified for gold fire assay), Oreas 264 (certified for Au fire assay and Cu 4-acid digestion), and CDN-CGS-29 (certified for Au at 0.228 ± 0.030 g/t and Cu at $0.585 \pm 0.034\%$). Copper and gold results for Oreas 264 and CDN-CGS-29 fall within one to two standard deviations, meeting quality control standards (Figure 11-1 and Figure 11-2).

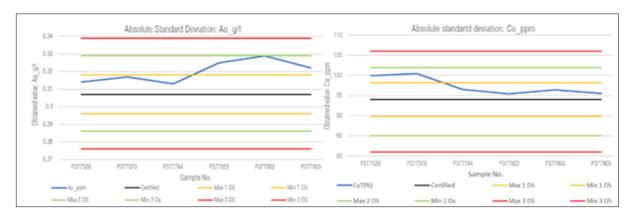


Figure 11-1: Results for Gold (g/t) and Copper (ppm) in Ores 264 Standard Control Samples (Source: Pampa Metals, 2024)

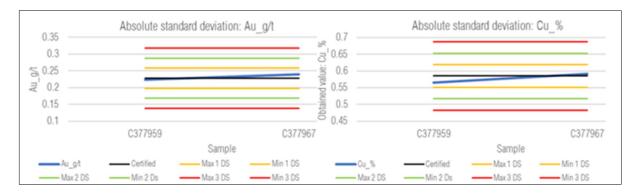


Figure 11-2: Results for Gold (g/t) and Copper (%) in CDN-CGS-29 Standard Control Samples (Source: Pampa Metals, 2024)



1.4.1.4 Pampa Metals Campaign

The campaign used the CDN-CGS-29 standard, certified by CDN Resource Laboratories Ltd., with a gold value of 0.228 ± 0.030 g/t (30-gram fire assay) and a copper value of $0.585 \pm 0.034\%$ (four-acid digestion). The gold and copper results do not exhibit a systematic bias and fall within two standard deviations, indicating that they are within acceptable ranges (Figure 11-3).



Figure 11-3:Results for Gold (ppm) and Copper (ppm) in CDN-CGS-29 Standard Control Samples (Source: Pampa Metals, 2024)

11.4.1.2 Blanks

1.4.1.5 Pampa Metals reanalysis on Anglo American Campaign

Quartz blanks (uncertified), including coarse rejects and pulps, were used to monitor contamination during sample preparation. A threshold was set at five times the detection limit. Gold results remained within acceptable limits (Figure 11-4). Copper averaged 30.89 ppm, showing minor contamination but staying below a 50 ppm threshold. Given the quartz blanks' Cu content of 10 ppm, contamination likely originated from preceding high-copper samples. A scatter plot (Figure 11-5) indicates a positive correlation between elevated copper in previous samples and the blanks. Contamination, averaging 0.5%, was effectively controlled through regular circuit cleaning, confirming compliance with quality control standards.





Figure 11-4: Distribution in Order of Analysis of Gold and Copper Contents in Quartz Blank samples (Source: Pampa Metals, 2024)

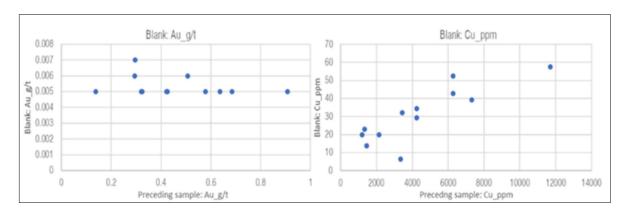


Figure 11-5: Scatter Plot Between the Gold and Copper Values in the Blank and Content of the Preceding Samples (Source: Pampa Metals, 2024)

1.4.1.6 Pampa Metals Campaign

Blank samples sourced from the Gladys mine in northern Chile (Calama), consisted of uncertified silica fragments (1 inch or less). These were inserted at the beginning of most sample lots. Since the start of the program, these blanks have consistently returned gold values below the detection limit (AA-Au23) and copper levels under 5 ppm (4-acid MS-ME61).

A contamination threshold of five times the detection limit was applied. For gold, the detection limit is 0.005 ppm (AA-Au23), and for copper 15 ppm. This combines a 10 ppm detection limit for mineralized samples, with 5 ppm from the blank's inherent copper content, based on 200 prior analyses. If contamination is suspected, the percentage is calculated by subtracting the detection limit from the result and dividing by the value of the preceding sample.

Figure 11-6 shows gold and copper levels in quartz blank samples from drill hole DDH 2024. The average values are 0.006 g/t Au and 41.4 ppm Cu. Most gold blanks remain within three times the detection limit. 4% exceed this threshold and 2% surpass five times this limit,



suggesting potential lab contamination. For copper, 11% of samples exceed five times the detection limit, and 8% exceed three times the limit. Indicating potential but non-systematic contamination, likely from the mechanical preparation process.

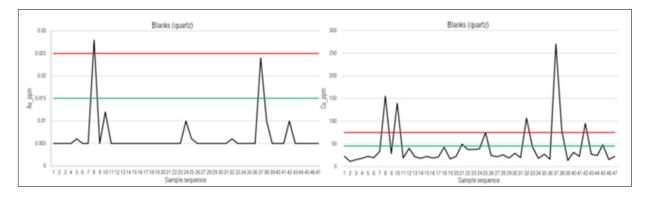


Figure 11-6: Gold (Left) and copper (Right) Content in Quartz Blank Samples DDH 2024 drillings Piuquenes Project (Source: Pampa Metals, 2024)

11.4.1.3 Duplicates

1.4.1.7 Pampa Metals Reanalysis on Anglo American Campaign

The precision of chemical analyses is evaluated using duplicates and a hyperbolic curve to account for lower accuracy near detection limits. The relative error is calculated between the original and duplicate values. While other factors like bias or external lab comparisons can be considered, only x=y and hyperbolic curves were considered.

Figure 11-7 shows the distribution of duplicates for reanalyzed samples from drill hole PIU16-DDH01. This used coarse duplicate parameters, since the samples were coarse rejects. The distribution of copper and gold is closely aligned with the x=y curve, all within acceptable limits. Gold however shows slightly more variability, likely due to its coarse nature.

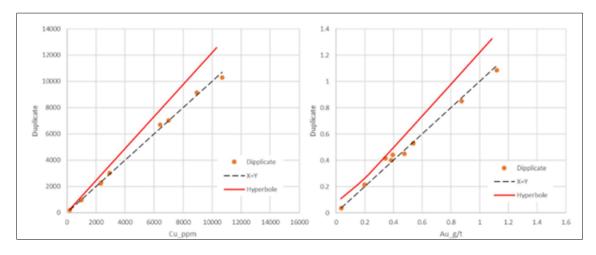


Figure 11-7: Distribution of Coarse-Grained Duplicates for Reanalysed Samples from PUI16-DDH01 Drill hole (Source: Pampa Metals, 2024)



1.4.1.8 Pampa Metals Campaign

Sample preparation and chemical analysis precision was evaluated through duplicates using a hyperbolic curve. Adjusting for lower accuracy near the detection limit. The Relative Error (RE) is calculated as the difference between original and duplicate values. Each sample pair is plotted with the smaller value on the x-axis and the larger on the y-axis. The slope of the curve varies: 1.35 for field duplicates (30% RE), 1.22 for coarse duplicates (20% RE), and 1.11 for pulp duplicates (10% RE). Intercepts are based on the detection limits for gold, copper, and silver.

Field duplicates were collected from quartered drill core. As shown in Figure 11-8, most gold and copper values align with the x=y line. Only 2% of samples exceed the hyperbolic limits. The variability observed in gold is likely due to its coarse grain size. Overall, the duplicates show acceptable differences in accordance with industry best practice.

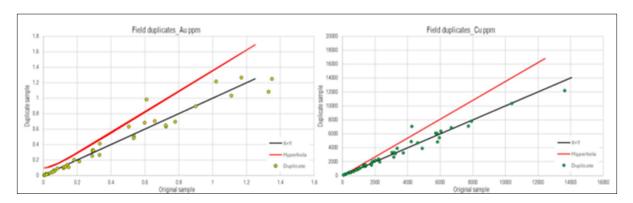


Figure 11-8: Distribution of Field Duplicates for Analysed Samples from the Piuquenes Diamond Drillholes (Source: Pampa Metals, 2024)

11.4.1.4 IMC Check Samples

Check assays were conducted at Acme Laboratory in Santiago on pulp samples from holes P-2, P-4, and P-8A. Gold was tested using fire assay with a gravimetric finish, and alternate samples were re-assayed for copper. Results showed no significant difference between the two labs for copper (Figure 11-9 y Figure 11-10). However, gold results from SGS were on average 17% higher than Acme's. Particularly in samples over 80 ppb Au, where SGS results were 0.2-0.3 g/t higher than Acme's fire assays. Selected drill core samples from holes P-2 and P-4 were also analyzed for 31 elements using ICP, plus mercury by cold vapor extraction. Anomalous levels of Ag, As, Sb, Pb, Zn, Mo, and Hg were detected locally.



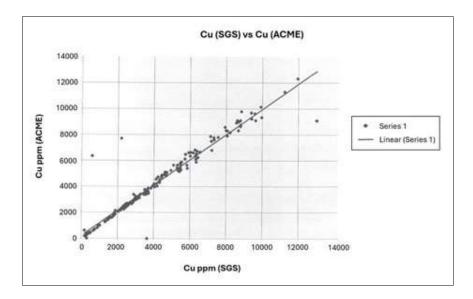


Figure 11-9: Distribution of Copper Check Assays from IMC Campaign (Source: IMC, 1997)

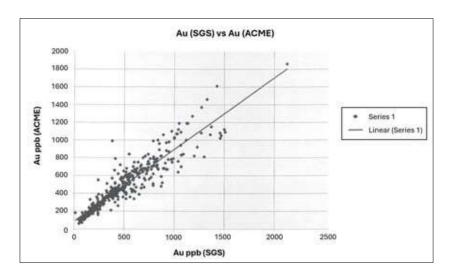


Figure 11-10: Distribution of Gold Check Assays from IMC Campaign (Source: IMC, 1997)

11.5 Bulk Density Measurements

Density measurements have not yet been conducted at Piuquenes Project.

11.6 QP Opinion

It is clear that 2024 drilling program done by PM, demonstrate strong adherence to industry standards, there are areas for improvement. The use of provided reference materials (CRMs), coarse blanks, and quarter-core duplicates ensures a reasonable level of confidence in the quality of the data for the early exploration drilling. The results indicate no significant issues with sample quality, and the single applied CRM is representative of the mineralized zone. As



the project progresses, opportunities for improvement should be considered. This would include the incorporation of additional controls like fine blanks, pulp and reject duplicates, or check samples analyzed by secondary laboratories to enhance control over the entire sampling and analysis process. Additionally, three ranges of standards (low-grade, medium-grade, and high-grade) should be included for more comprehensive quality control. Likewise, sequential copper analysis has not been performed, which is crucial for understanding the various mineralogical species within the mineralized zones and their potential impact on metallurgical recoveries, especially in the context of copper porphyry-type deposits.

Historical data from earlier campaigns (1996-1997 by IMC and 2017 by AAA) present additional challenges, as the QA/QC data is either incomplete or is limited. While useful for exploration purposes, without further validation this historical data may not meet necessary standards for inclusion in any resource estimate.

Additionally, the choice of analytical methods of Aqua Regia and MIBK extraction used in early exploration may have underestimated metal content. Particularly for gold, copper, and silver. Future programs should prioritize the use of more complete methods, such as multi-acid digestion and fire assay. This will ensure greater confidence in reported metal content.

In conclusion, while the procedures used provide a solid foundation, future drilling campaigns should implement a more exhaustive QA/QC program and employ more comprehensive analytical methods. This will enhance data reliability and support potential mineral resource estimation.



12 DATA VERIFICATION

12.1 Site Visit

Ms. Maria Muñoz, a full-time employee of Mining Plus Perú S.A.C. and an independent Qualified Person (QP), conducted a site visit to the Piuquenes Property from November 4 to 7, 2024. The Piuquenes Property is currently being explored by Pampa Metals (PM) as part of a joint venture with Compañía Minera Piuquenes S.A. (CMP). The objectives of this visit included:

- Assessing the geological and geographical context of the Piuquenes Property.
- Verifying the scope and progress of all exploration activities completed at the property.
- Conducting field verification of selected drill collar coordinates.
- Inspecting mineralized outcrops on the property, primarily in the Piuquenes Central Target.
- Verifying mineralized and non-mineralized core intercepts, both historical and recent.
- Reviewing Standard Operating Procedures (SOPs) for:
 - Drilling, sampling, and assaying processes throughout the sample preparation and analysis chain.
 - Core logging, re-logging, sampling methodologies, QA/QC protocols, and chain of custody procedures.
- Visiting facilities for the storage of core, reject, and pulp samples.
- Reviewing the processes for database management.
- Collecting independent verification samples from core and pulp for analysis.

During the site visit, Ms. Muñoz discussed the geological and mineralization controls with the technical team. This included Gladis Castro and Oscar Nuñez, who have either recently become involved or have participated in past drilling campaigns. Mining Plus confirmed that these controls are well understood and correctly applied to drilling and geological interpretation. However, the orientation of the mineralization and the shape of the mineralized body are unclear. This results in drilling that lacks a consistent orientation or regular spacing, which could complicate future mineral resource estimation procedures. It is recommended to identify the primary orientation and conduct drilling perpendicular to it to establish a more regular drill pattern.

A review of Pampa Metals's Standard Operating Procedures (SOPs) related to drilling, data management, and sampling showed consistency. No drilling activities were however observed during the visit. Ms. Muñoz concluded that the drilling, logging, sampling, and analytical processes of PM meet international standards implemented for the Piuquenes Project and provide a basis for ongoing exploration and future resource evaluation.



12.1.1.1 Data Capture, Validation, and Management Processes

The database is managed in Excel software as tables, which include validations to prevent errors. There is still information from work done prior to PM that is undergoing compilation, validation, and coordinate standardization. The drill hole information is reviewed and compiled by a database geologist before being transferred to an Access database.

12.1.1.2 Collar Verification

The Piuquenes Project historically used the Campo Inchauspe datum, while recent drilling employed the WGS84 Zone 19S system. Drill hole collars were surveyed with handheld GPS devices and recorded in UTM WGS84 Zone 19S. A planned transformation to the POSGAR 94 system, Argentina's legal reference for mining properties, is underway. Ms. Muñoz verified five drill hole collars using GPS. Upon comparing the collar locations recorded in the drill hole database and accounting for the GPS accuracy of +/-5 m, no discrepancies were identified in the drill hole locations (Table 12-1). Drill collars are preserved with a concrete base and plastic tube, featuring a metal plate with relevant drill hole details. Historical collars retain only the metal tube (Figure 12-1).

Table 12-1: Comparison of Drill Collar Coordinates - Database vs GPS

	Handh	eld GPS	Data	abase	Difference (m)		
Hole	East (m)	North (m)	East (m)	North (m)	East (m)	North (m)	
DDH02	357,623	6,518,456	357,626	6,518,455	-3	1	
DDH8A	357,674	6,518,600	357,677	6,518,600	-3	0	
PIU01-2024DDH	357,665	6,518,618	357,669	6,518,620	-4	-2	
PIU02-2024DDH	357,772	6,518,434	357,775	6,518,429	-3	5	
PIU03-2024DDH	357,454	6,518,458	357,456	6,518,456	-2	2	

Source: Mining Plus 2024





Figure 12-1: Surface Drilling Collar (Source: Mining Plus 2024)

12.1.1.3 Drill Core and Outcrop Inspection

Ms. Muñoz reviewed four drill holes, identifying copper mineralization associated with oxides, chalcocite, chalcopyrite, and bornite. Oxide mineralization in the reviewed drill holes occurs between 200 and 400 m, transitioning into a mixed zone (extending over 200 to 300 m) and subsequently into a primary sulphide zone containing chalcopyrite and bornite. Mineralization is concentrated in veined and disseminated areas within granodioritic host rock. Finer sulphide mineralization is often visually undetectable. Logging and analytical data confirm clear distinctions between mineralized and barren zones. Limited outcrops at Piuquenes Central reveal copper oxides and veined rocks, though much of the area is covered by overburden.

12.1.1.4 Independent Check Sample

Mining Plus conducted an independent reanalysis of four core samples (1/4 core), 1 rock sample and four pulps. These samples were sent to the Certimin laboratory (NOV0241.R24 certificate) in Lima, Peru. The variation in the CuAS (acid-soluble copper), CuCN (cyanide-soluble copper), and CuR (residual copper) components in the sequential copper sample analyses suggests the need for further metallurgical testing to assess potential recovery methods. Especially considering the differing copper speciation with depth.



Table 12-2 and Table 12-3 provides a summary of the independent check sample results. The reanalysis assay results were generally consistent with the original grades. Differences in core samples may stem from their representation of only a quarter of the core, leading to increased imprecision. Gold discrepancies are likely due to its erratic nature. Overall, the results are within acceptable ranges for the sample type and commodity. The variation in the CuAS, CuCN, and CuR components in the sequential copper analyses across the samples suggests the need for further metallurgical testing to assess potential recovery methods, especially considering the differing copper speciation with depth.

Table 12-2 Comparison of Original and Independent Check Sampling

Original Samples						Independent Check Samples			Relative Difference%	
Hole	Sample	From	То	Cu %	Au g/t	Cu %	Au g/t	Туре	Cu	Au
PIU03-2024DDH	C150474	296	288	1.19	1.37	1.23	1.37	1/4 core	3%	0%
PIU03-2024DDH	C160979	666	668	0.89	0.81	0.88	0.85	1/4 core	-1%	5%
PIU01-2024DDH	C161637	334	336	1.23	2.38	1.26	2.01	1/4 core	2%	-16%
PIU01-2024DDH	C161751	540	542	0.68	0.78	0.59	0.57	1/4 core	-12%	-27%
PIU03-2024DDH	C160923	564	566	0.94	0.82	0.93	-	Pulp	-1%	-
PIU01-2024DDH	C161602	272	274	1.23	1.02	1.25	1.17	Pulp	2%	14%
PIU01-2024DDH	C161785	602	604	0.73	0.2	0.74	0.19	Pulp	1%	-5%
PIU03-2024DDH	C214950	252	254	1.28	0.97	1.32	0.92	Pulp	3%	-5%
	OUTCROP			-	-	0.66	0.69	Rock		

Source: Mining Plus 2024

Table 12-3 Sequential Copper Analysis of Independent Check Sampling

Hole	Sample	From	То	Cu %	CuAS %	CuCN %	CuR %	Туре
PIU03-2024DDH	C150474	296	288	1.23	0.03	0.62	0.53	1/4 core
PIU03-2024DDH	C160979	666	668	0.88	0.02	0.19	0.62	1/4 core
PIU01-2024DDH	C161637	334	336	1.26	0.03	0.91	0.26	1/4 core
PIU01-2024DDH	C161751	540	542	0.59	0.03	0.44	0.11	1/4 core
PIU03-2024DDH	C160923	564	566	0.93	0.02	0.64	0.23	Pulp
PIU01-2024DDH	C161602	272	274	1.25	0.07	0.52	0.61	Pulp
PIU01-2024DDH	C161785	602	604	0.74	0.01	0.30	0.40	Pulp
PIU03-2024DDH	C214950	252	254	1.32	0.10	0.85	0.32	Pulp
OUTCROP			0.66	0.59	0.01	0.04	Rock	

Source: Mining Plus 2024

12.2 Geology Data Base Reviews

Ms. Muñoz, with the support of the Mining Plus team, conducted a review of the drill hole database. The primary objective of the review se was to identify and rectify potential errors in:

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- Database structure.
- Spatial collar location.
- Downhole survey measurement.
- Geochemical analysis.
- QA/QC program results.

Mining Plus conducted a review of the information, focusing on the database files detailed in Table 12-4. The database tables were provided in an Access file format, and the outcome of this review is summarized in Table 12-5.

Table 12-4: Summary of Files Delivered to Mining Plus

FILE	NAME	Format		
	Collar	*accdb		
	Drilling Deviation (survey)	*accdb		
	Geochemical Data (assay)	*accdb		
Piuquenes Projec.accdb	Lithology	*accdb		
	Mineralization	*accdb		
	Mineralization Zone	*accdb		
	Veins	*accdb		
DOD Condains DDH 2024 vlsv	Recovery	*xlsx		
RQD Sondajes DDH 2024.xlsx	RQD	*xlsx		
ASSAY CERTIFICATES		file		
QA/QC Database and reports		file		
Topography	Topo_SRTM30m_wgs84UTMzone19S	*tiff		



Table 12-5: Summary of Database Review Findings by Mining Plus

	Revision	Comments						
Database Structure		The database is managed in Access, with related tables and a well-structured format for efficient management.						
Collar	0% review of certificates (pdf) of diamond drillings, exploratory drills and channels	There are no certificates for any of the drilling as everything was conducted using a handheld GPS.						
Location	XYZ Field Verification	No significant inconsistencies were identified.						
	Verification with the DTM	• A review of drill collars against topography (WGS84 Piuquenes.shp) revealed discrepancies of over 10 m in 13 of 14 drill holes. Differences were up to 54 m. These appear to result from differences in east and north coordinates compared to the previous 30 m resolution topography.						
	54% review of survey records (excel or pdf)	 Survey certificates are only available for drill hole PIU16DDH001. Cross-validation with the respective certificate for PIU16DDH001 shows no differences. 						
Drilling path deviation measurement	Deviation control (Kink check)	MP performed a kink check to assess dip and azimuth deviations using a 4° per 10 m tolerance. No drill holes exceeded this deviation threshold.						
measurement	DDH drilling without measurement	IMC drill holes do not have trajectory deviation measurements. For PM and AAA drill holes, trajectory measurements were taken.						
Sample recovery		 There is no sample recovery information available for IMC and AAA. PM's sample recoveries show over 90% recovery, with some minor inconsistencies. 						
Chemical	73% review of assay records (excel)	 Certificates for the PM and AAA campaigns were available in document form. For IMC, the information was found in the report file "01_Piuquenes_Minera IMC SA_Ago1997_Vol-2.pdf," but with limited certificate details. The certificates for 8 drill holes, covering 2,277 records for Cu and Au analysis, were reviewed from certificates and report files. No certificates were available for 367 records. The primary element, Cu, shows no issues. However, for Au, one record displayed a difference of > 0.5 ppm, and drill hole DDH2 contained assay values recorded in ppb rather than ppm, resulting in artificially high grades. This issue affects approximately 5% of the total records. 						
tests	SampleID reapeated	There are no repeated SampleIDs						
	Bias due to sampling type and company name	• Sampling bias by company was assessed using 10 m radius halos around the drill holes, intersected with assay data and validated statistically in Supervisor. Pampa Metals (PM) shows higher copper grades compared to IMC and AA, with IMC grading higher than AA. For gold, the bias is less significant, especially between PM and IMC. The difference is attributed to the analytical method used by IMC, which involved Aqua Regia and MIBK (Methyl Isobutyl Ketone), providing partial analytical results.						
Density	Density 0% certificate review • According to Pampa Metals comments, no density was done in any of the campaigns.							



Revision	Comments
QA/QC	 QAQC verification was only conducted for the Pampa Metals campaign, as information from other campaigns is incomplete or unavailable. The results are summarized below: Contamination assessment was based on coarse blanks. No significant issues were found for Au, but for Cu, 100% of the blanks fail when using five times the lab's lower detection limit (0.2 ppm). However, when applying the 2024 drilling report's detection limit (15 ppm), only 13% of samples fail, with 3 samples showing contamination from high Cu grades. It is important to understand the reasons behind this difference from standard practice to identify potential improvements in the sampling and analysis process. Precision assessment was based on field duplicates from DDH data. Only one sample failed (2.13% failure rate) for Cu and Au, indicating no major issues. Accuracy evaluation for the CDN-CGS-29 standard showed no anomalous Cu or Au values outside the mean ± 3SD, though a slight positive bias was detected for Au. External checks were conducted during the IMC campaign, but the database is not available. The report shows consistent mineralization in both high and low-grade zones, though some minor biases are present. The cause of the discrepancy is unclear but is likely attributed to the analytical methods used.



12.3 QP opinion

In conclusion, Mining Plus is of the opinion that the geology and mineralization controls are well understood and appropriately applied during drilling development and geological interpretation. Current practices and procedures are aligned with international standards. However, there are opportunities for improvement. Mining Plus recommends the following:

Drilling patterns:

- Clarify the orientation and shape of the mineralized body, as the current drilling lacks consistent orientation and regular spacing.
- Establish a primary orientation and conduct drilling perpendicular to achieve a more regular drill pattern for future resource estimation.
- Core shed and sample storage facilities:
 - Conduct regular inspection of drill boxes, labels, rejects, and pulps to ensure they are kept in good condition.
 - Expand the storage area due to the limited space currently available.
 - Perform an inventory of available pulp samples, reject samples, and cores as additional drilling is completed.
- Drilling, sampling, and QA/QC procedures:
 - It has been noted that historical samples were not taken halfway through the core due to the use of a shearing or hydraulic cutter. This data may have lower precision, so it is recommended as reference data only.
 - The current QA/QC program includes a duplicate control using 1/4 core. Although this is not a true duplicate, results have shown acceptable precision for copper and gold. However, ongoing monitoring is recommended to ensure that 1/4 core is sufficient to evaluate precision.
 - Current contamination controls are limited to coarse quartz blanks, with control standard monitoring only a single grade interval. Other checks, like fine blanks and duplicates, are part of the lab's internal QA/QC. Mining Plus recommends establishing independent QA/QC controls, including coarse and fine duplicates, fine blanks, and standards for low, medium, and high grades. This will ensure sample reliability for future resource estimation.
 - Continue with training and supervision of the technicians involved in sampling and QA/QC. Emphasize equipment cleaning, taking care when sampling fractional zones, and prevent samples from falling into other core boxes.

Analysis Method:

Mining Plus understands that sequential copper analysis for identifying mineralized zones may not appear highly relevant at this stage. Particularly given that the enrichment zone is not as pronounced as in similar deposits like in Peru. Mining Plus however believes that sequential copper analysis is still valuable in the presence of chalcocite. This analysis helps distinguish between



soluble and sulphide copper. Essential for optimizing metallurgical recovery processes. It additionally supports process adjustments and helps anticipate resource variability. With limited metallurgical recovery samples, this analysis can provide supplemental information, especially in the oxide and mixed zone.

- If sequential copper sampling is conducted at any point, it should be performed on core samples. Analysis on rejects or pulps may be affected by climatic conditions, potentially leading to altered results.
- Database management:
 - It is recommended to conduct periodic internal audits of the database to ensure reliability.



13 MINERAL PROCESSING AND METALLURGICAL TESTING



14 MINERAL RESOURCE ESTIMATES

There is no current mineral resource estimated for the Piuquenes Property.



15 MINERAL RESERVE ESTIMATES

There are no current mineral reserves estimated for the Piuquenes Property.



16 MINING METHODS



17 RECOVERY METHODS



18 PROJECT INFRASTRUCTURE



19 MARKET STUDIES AND CONTRACTS



20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT



21 CAPITAL AND OPERATING COSTS



22 ECONOMIC ANALYSIS



23 ADJACENT PROPERTIES

This section provides information regarding properties adjacent to the subject property. The details of these properties have been publicly disclosed by the respective owners or operators. Mining Plus has neither visited these properties nor verified the accuracy or precision of the publicly available information. Additionally, this information may not accurately reflect the mineralization on the property discussed in this technical report.

The Piuquenes property is located within the Andean Cordillera, in the same geological belt that hosts significant porphyry deposits, these include El Altar, Los Pelambres (Chile), and El Pachón (Argentina). This region is part of the flat-slab segment of the central Andes, a key area for large porphyry copper-gold-molybdenum systems. The region's importance stems from its tectonic activity, where subduction processes contribute to the formation of rich mineral deposits. This makes Piuquenes and its neighboring projects significant from an exploration perspective.

The nearest project is El Altar (operated by Aldebaran Resources Inc.) which is an advanced exploration project located less than 5 km south. The mineralization at El Altar is characterized by porphyry-style copper-gold-silver deposits, with both supergene and hypogene enrichment zones. The combined supergene and hypogene resources total 2.40 billion tonnes grading 0.42% copper, 0.07 g/t gold, 1.22 g/t silver and 42 ppm molybdenum (Measured + Indicated) and 1.22 billion tonnes grading 0.37% copper, 0.04 g/t gold, 1.25 g/t silver and 45 ppm molybdenum (Inferred Resources). This considers a cut-off grade of 0.24% Cu (Aldebaran Resources, Inc., 2024).

Los Pelambres is an open pit mine located about 30 km to the south in Chile, 60% ownership is held by Antofagasta PLC. It was discovered in 1920 and produces copper concentrates containing gold and silver as well as a separate molybdenum concentrate. The mineralization at Los Pelambres is typical of porphyry copper systems, characterized by disseminated and vein-hosted copper, molybdenum, and gold. Resources (Measured + Indicated) are stated at 3,425 million tonnes with grades of 0.51% Cu, 0.017% Mo, and 0.05 g/t Au. This considers a cut-off grade of 0.3% Cu. (Antofagasta PLC, 2023).

El Pachón is an open-pit copper and molybdenum project currently in the feasibility study stage. Discovered in 1964 by Compañía Minera Aguilar S.A., its progress was delayed due to socioeconomic factors. In 2006, Xstrata Copper took over and conducted extensive drilling. Following studies in 2012 increased resources by 20% to 3.3 billion tonnes. Glencore acquired the project in 2013, continuing exploration and environmental monitoring. The deposit is typical of porphyry copper systems, with disseminated and vein-controlled coppermolybdenum mineralization, formed through hydrothermal processes. As of 2023, the project has 2,060 million tonnes of resources with 0.51% Cu, 2.0 g/t Ag, and 0.01% Mo (Measured + Indicated) (Glencore, 2023).

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Los Azules is an advanced stage copper porphyry exploration project. Designed as an open pit, it is located 45 km northeast of Piuquenes. The project's updated Preliminary Economic Assessment (PEA) in 2023 projected an average annual production of 322 million pounds of copper cathode over a 27-year mine life. Indicated resources are quoted at 1,253 million tonnes, with a grade of 0.4 % Cu. (Samuel Engineering, Knight Piésold Consulting, Stantec, & McEwen Mining, 2023). This project is notable for its large tonnage and long-term production potential. This is typical of copper porphyry systems, which are key contributor to global copper supply.

La Figure 23-1 provides an overview of the projects or operations near the Piuquenes Property, either in the San Juan province or on the Chilean side of the limits of the San Juan province.



Figure 23-1: Location Map of Adjacent Projects (Source: Pampa Metals, 2024)



24 OTHER RELEVANT DATA AND INFORMATION



25 INTERPRETATION AND CONCLUSIONS

Based on the site visit and subsequent evaluation of the data available, Ms. Muñoz offers the following interpretation and conclusions:

- The project is at an early exploration stage, with four exploration targets identified: Piuquenes Central, Piuquenes East, North and Piuquenes Northwest, with Piuquenes Central being the most advanced.
- The 2024 PM drilling campaign at Piuquenes Central confirmed porphyry-style copper and gold mineralization. Notable copper and gold grades make it a highly promising target for further exploration and potential development.
- Geophysical data highlight significant exploration potential at Piuquenes Central and East, with deep anomalies suggesting possible new mineralized zones. Additional lateral extensions along the northeast trend, identified through chargeability data, represent highly prospective targets.
- Drilling at Piuquenes Central indicates that copper and gold are closely associated with chalcopyrite as the primary copper mineral. Mineralization is the most intense in zones with abundant quartz veins.
- PM drilling, QA/QC and monitoring procedures are well documented and comply with industry standards. The QA/QC program includes one certified reference material, coarse blanks, and quarter-core duplicates. Results demonstrate no issues with precision, accuracy, or contamination, providing confidence in the reliability of the data for this stage of exploration.
- Historical data (IMC and AAA) presents limited information on procedures or information support.
- Historical methods for downhole surveys, such as the use of acid tubes, are less accurate than current standards, including the lack of correction for magnetic declination.
- Sequential copper analysis has not been conducted due to focus being on primary sulfide mineralization. However, this analysis could provide value by distinguishing soluble and sulphide copper, optimizing recovery, and guiding process adjustments, especially in the presence of secondary sulphides.
- Early analytical methods (IMC), such as Aqua Regia and MIBK, may have underestimated the metal content, particularly gold, copper and silver.

The potential uncertainties and risks identified at this stage of the Project are considered low, given the exploration status and the current scope of activities. These risks and uncertainties should be addressed in future stages as the Project advances.

• Due to the current exploration stage, the data is limited and has not yet defined the extent and continuity of the mineralization in sufficient detail to determine a Mineral



Resource. Therefore, additional drilling, surface mapping, supporting geophysical and metallurgical studies are required to improve confidence in future interpretations.

- A title overlap with a third-party claim (Santa Rita) is currently under review by the Mining Registry. The affected area represents approximately 66 hectares within Piuquen 14, 16, 18, and 19. It includes part of the Piuquenes East exploration target but does not impact current exploration activities. The matter is expected to be resolved in the coming months through consultation with the San Juan Cadastre Office, as the Piuquenes claims predate Santa Rita.
- Seasonal access limitations due to high altitude and severe weather conditions restrict the exploration window and other field activities.
- Access and infrastructure requirements remain undefined due to the current stage of the Project. Although the site is accessible by road, it lacks electrical power and other essential services, requiring significant investment for future mining operations.

In the opinion of Ms. Muñoz, the exploration work completed to date meets industry best practices and provides a reasonable foundation for continued exploration. The risks and uncertainties identified are consistent with those typically encountered at this stage of a project and do not significantly affect the overall reliability of the exploration data. Nonetheless, additional work is required to strengthen confidence in the geological model and to address infrastructure and permitting aspects that could influence future development decisions.



26 RECOMMENDATIONS

Ms. Muñoz (QP) makes the following recommendations:

- As the project advances and depending on the complexity of the mineralization, it is recommended to enhance the QA/QC program by incorporating additional controls. This should include fine blanks, coarse blanks, coarse and pulp duplicates, and low, medium, and high-grade certified reference materials. These measures will improve sample reliability, ensure precision during the subsampling process, mitigate contamination during chemical analysis, and increase confidence.
- Continue using comprehensive analytical methods, such as multi-acid digestion and fire assay.
- Historical data should serve as a guide for exploration. For use in advanced project stages, such as Resource estimation, a thorough review and reanalysis of a representative data portion will be needed to ensure reliability and confidence.
- Continue drilling, especially in the Piuquenes Central and East target, focusing on both
 infill and step-out drilling to delineate the lateral and vertical extent of mineralization.
 Additionally, prioritize deeper drill holes targeting geophysical anomalies at depths
 exceeding 800 meters, with the objective of refining the geometry of the mineralized
 system.
- Expand geophysical studies, including IP, resistivity, and magnetotelluric and magnetic surveys. Focusing on unexplored areas of the property to identify new exploration targets.
- Based on drilling results completed in 2024, a review of historical drill holes, and recent geological mapping by PetraGaia-Tocall Consultants in January 2025, a twophase exploration program is recommended to further assess the Piuquenes Project.
 - Phase I includes approximately 6,000m of drilling (3 holes at Piuquenes East and 3 at Piuquenes Central) with an estimated budget of USD 2.5 – 3.0 million, covering drilling, logistics, assays, and other operational work required to complete the drilling program.
 - As of the effective date of this report (January 31, 2025), a total of 2,900m has been drilled under Phase I, corresponding to two completed drill holes, with a third hole in progress. Assay results for these drill holes were pending as of the effective date.
 - The remaining budget for this phase is estimated to be approximately USD 1.3 to 1.5 million, which will cover the completion of the current hole, two additional planned holes, pending assays.
 - Phase II, which will be based on the results of Phase I, preliminarily includes property-wide geophysical surveys, additional mapping and sampling, and approximately 10,000m of follow-up drilling to test extensions and new



targets. The estimated budget for Phase II is USD 4.5 - 5.5 million, depending on the complexity of the targets and logistical requirements.

- Develop a more detailed structural model to enhance understanding of mineralization controls to optimize drilling orientation and exploration strategies.
- Focus on understanding the deposit's geometry by combining detailed structural
 mapping with oriented core drilling. This approach will help ensure that future drill
 holes are better aligned with the natural orientation of the mineralization. Ultimately
 providing clearer and more accurate results for potential future Resource estimates.
- The Piuquenes East target, which shows advanced argillic alteration, should be explored in greater detail. Current geophysical data indicates high potential for high-sulfidation Cu-Au systems and possible additional gold mineralization zones.



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