NI 43-101 Technical Report

Vicuña Project, Argentina and Chile

Prepared for:

Lundin Mining Corporation

Prepared by:

SLR Consulting (Canada) Ltd.

SLR Project No.: 233.065323.00001

Effective Date:

April 15, 2025

Signature Date:

June 16, 2025

Qualified Persons:
Qualified Persons:
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Paul Daigle, P.Geo.
Sean Horan, P.Geo.
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Bruno Borntraeger, P.Eng.

Making Sustainability Happen

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FORWARD-LOOKING INFORMATION

Certain of the statements made and information contained in this Technical Report are "forward-looking information" within the meaning of applicable Canadian securities laws. All statements other than statements of historical facts included in this document constitute forward-looking information, including but not limited to statements regarding the mineral resource estimation, and the parameters and assumptions related thereto; plans, prospects and business strategies; the operation of Vicuña Corp. and Lundin Mining Corporation; the development and future operation of the Vicuña Project; the timing and expectations for other future studies; the potential for resource expansion and exploration potential to identify additional porphyry-hosted and epithermal systems; and expectations for other economic, business, and/or competitive factors. Words such as "believe", "expect", "anticipate", "contemplate", "target", "plan", "goal", "aim", "intend", "continue", "budget", "estimate", "may", "will", "can", "could", "should", "schedule" and similar expressions identify forward-looking information.

Forward-looking information is necessarily based upon various estimates and assumptions including, without limitation, that the company can access financing, appropriate equipment and sufficient labour; assumed and future price of copper, gold and other metals; anticipated costs; currency exchange rates and interest rates; the ability to achieve goals and identify and realize opportunities; the realization of synergies and economies of scale in connection with the establishment of Vicuña Corp.; that the political, economic, permitting and legal environments in which the company operates will continue to support the development and operation of mining projects; timing and receipt of governmental, regulatory and third party approvals, consents, licenses and permits and their renewals; positive relations with local groups; the accuracy of estimates and related information, analyses and interpretations; and assumptions related to the factors set forth below. While these factors and assumptions are considered reasonable as at the date of this document, these statements are inherently subject to significant business, economic, political, regulatory and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking information and undue reliance should not be placed on such information. Such factors include, but are not limited to: global financial conditions, market volatility and inflation, including pricing and availability of key supplies and services; risks inherent in mining including but not limited to risks to the environment, industrial accidents, catastrophic equipment failures, unusual or unexpected geological formations or unstable ground conditions, and natural phenomena such as earthquakes, flooding or unusually severe weather; uninsurable risks; project financing risks, liquidity risks and limited financial resources; volatility and fluctuations in metal and commodity demand and prices; delays or the inability to obtain, retain or comply with permits; reputation risks related to negative publicity with respect to the company or the mining industry in general; health and safety risks; risks relating to the development of the Filo del Sol deposit and the Josemaria deposit; inability to attract and retain highly skilled employees; risks associated with climate change; compliance with environmental, health and safety laws and regulations; unavailable or inaccessible infrastructure, infrastructure failures, and risks related to ageing infrastructure; risks inherent in and/or associated with operating in foreign countries and emerging markets, including with respect to foreign exchange and capital controls; economic, political and social instability and mining regime changes in the company's operating jurisdictions, including but not limited to those related to permitting and approvals, nationalization or expropriation without fair compensation, environmental and tailings management, labour, trade relations, and transportation; risks relating to indebtedness; the inability to effectively compete in the industry; risks associated with acquisitions and related integration efforts, including the ability to achieve anticipated benefits, unanticipated difficulties or expenditures relating to integration and diversion of management time on integration;

changing taxation regimes; risks related to mine closure activities, reclamation obligations, environmental liabilities and closed and historical sites; reliance on key personnel and reporting and oversight systems, as well as third parties and consultants in foreign jurisdictions; information technology and cybersecurity risks; risks associated with the estimation of Mineral Resources and Mineral Reserves and the geology, grade and continuity of mineral deposits including but not limited to models relating thereto; uncertainties relating to inferred Mineral Resources being converted into Measured or Indicated Mineral Resources; actual ore mined and/or metal recoveries varying from Mineral Resource and Mineral Reserve estimates, estimates of grade, tonnage, dilution, mine plans and metallurgical and other characteristics; ore processing efficiency; community and stakeholder opposition; financial projections, including estimates of future expenditures and cash costs, and estimates of future production may not be reliable; enforcing legal rights in foreign jurisdictions; environmental and regulatory risks associated with the structural stability of waste rock dumps or tailings storage facilities; regulatory investigations, enforcement, sanctions and/or related or other litigation; counterparty and customer concentration risks; risks relating to joint ventures, joint arrangements and operations; relationships with employees and contractors, and the potential for and effects of labour disputes or other unanticipated difficulties with or shortages of labour or interruptions in production; conflicts of interest; exchange rate fluctuations; challenges or defects in title; compliance with foreign laws; potential for the allegation of fraud and corruption involving the company, its customers, suppliers or employees, or the allegation of improper or discriminatory employment practices, or human rights violations; the threat associated with outbreaks of viruses and infectious diseases; risks relating to minor elements contained in concentrate products; and other risks and uncertainties, including but not limited to those described elsewhere in this Technical Report and in the issuer's Annual Information Form for the year ended December 31, 2024.

All of the forward-looking information in this document are qualified by these cautionary statements. Although the issuer has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated, forecasted or intended and readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking information. Accordingly, there can be no assurance that forward-looking information will prove to be accurate and forward-looking information is not a guarantee of future performance. Readers are advised not to place undue reliance on forward-looking information. The forward-looking information contained herein speaks only as of the date of this document. The issuer disclaims any intention or obligation to update or revise forward-looking information or to explain any material difference between such and subsequent actual events, except as required by applicable law.

1.0 Summary

1.1 Executive Summary

SLR Consulting (Canada) Ltd. (SLR) was retained by Lundin Mining Corporation (Lundin Mining) to prepare an independent Technical Report (the Technical Report) on Vicuña Project (the Project), located on the border between Chile and Argentina. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

The Project is operated by Vicuña Corp. (Vicuña), which is a 50:50 joint venture between Lundin Mining Corporation (Lundin Mining) and BHP Investments Canada Inc. (BHP Canada). The Project was assembled from two previous ground-holdings, referred to as the Filo del Sol and Josemaría projects. The Filo del Sol project that included mineral tenures in Argentina and Chile, and contains the Filo del Sol deposit, was owned by Filo Corp., which was acquired by Lundin Mining and BHP Canada on January 15, 2025. A 50% interest in the Josemaría project that was formerly wholly-owned by Lundin Mining was acquired by BHP Canada at the same time. The Josemaría project included mineral tenures in Argentina, and hosts the Josemaría deposit. Together, the former Filo del Sol and Josemaría projects comprise the Vicuña Project and both the Filo del Sol and Josemaría deposits are now within the overall Vicuña Project area.

The purpose of this Technical Report is to support the disclosure of Mineral Resource estimates for the Filo del Sol and Josemaría deposits in the Lundin Mining news release dated May 4, 2025 and entitled “Lundin Mining Announces Initial Mineral Resource at Filo del Sol Demonstrating One of the World's Largest Copper, Gold, and Silver Resources”.

The classification for Mineral Resources in this Technical Report conforms to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions).

Mineral Resources and Mineral Reserve estimates reported for the Filo del Sol and Josemaría deposits prior to the assembly of the Vicuña Project are no longer considered current and the corresponding Mineral Reserve estimates (to the extent applicable) are declassified.

Mineral Resources reported in this Technical Report are on a 100% basis and are constrained by open pit resource shells.

1.1.1 Conclusions

1.1.1.1 Geology and Mineral Resources

- Mineralization in the Project area includes both porphyry copper–gold and high-sulphidation copper–gold–silver epithermal systems. The mineralized system in its entirety is a telescoped porphyry–epithermal system, with multiple intrusive and breccia centres, and so combines aspects of both deposit types.
- The Vicuña Project area encompasses the crest of the central Andes mountain range along the Chile–Argentina border and the area eastward into Argentina. It forms a significant part of the Vicuña metallogenic belt, defined by a trend of copper and gold (±silver) mineralization related to porphyry and epithermal systems developed during compressive stages of Andean arc development.
- To date, two significant deposits have been delineated through drilling, Filo del Sol and Josemaría.

- Given that porphyry deposits often occur in clusters, and that there are prospects identified in the vicinity of the Filo del Sol and Josemaría deposits, there is good exploration potential to identify additional porphyry-hosted copper-gold and copper–gold–silver epithermal systems.
- The Filo del Sol deposit remains open in almost all directions and the Josemaría deposit remains open to the south, beneath a thickening cover of post-mineral volcanic rocks, and also at depth. Both deposits warrant more drilling.

Filo del Sol

The SLR QP makes the following conclusions:

- Host rocks to the mineralization are Permo-Triassic felsic volcanic and monzogranitic basement units of the Choiyoi magmatic province, which are unconformably overlain by a sequence of terrigenous sedimentary and andesitic volcanic rocks, assumed to be Cretaceous in age.
- Several intermineral porphyry phases are distinguished in the Filo del Sol area and form a large subsurface swarm with over one kilometre (km) of vertical extension and at least 3 km of strike length, coincident with the more broadly defined north-to-northeast-trending Filo del Sol alignment.
- The Filo del Sol alignment is an approximately 8 km-long, north- to northeast-trending series of prospects consisting of porphyry copper–gold, porphyry copper, and related epithermal copper–gold–silver mineralization. Mineralized zones comprise a gold-only oxide zone, a zone of supergene copper enrichment at the top of an oxide zone, a high-grade silver zone, and a hypogene sulphide zone.
- The overall Filo del Sol deposit, which includes the Tamberías, Aurora, and Bonita zones is 6.5 km long (northeast–southwest) and 1.5 km in width (east–west) at its widest part in the Aurora zone. It has been drill tested to 1.8 km below surface. The deposit remains open to the north, south, east, west, and at depth.
- Mineral Resources are reported in situ, using the CIM (2014) definitions and have an effective date of April 15, 2025.
  - **Sulphides:**
    - Indicated Mineral Resources: 1,192 million tonnes (Mt) grading 0.54% Cu, 0.39 grams per tonne (g/t) Au, and 8.1 g/t Ag and containing 6,452 kt of copper, 14.8 million ounces (Moz) of gold, and 311 Moz of silver;
    - Inferred Mineral Resources: 6,080 Mt grading 0.37% Cu, 0.20 g/t Au, and 3.2 g/t Ag and containing 22,643 kt of copper, 38.9 Moz of gold, and 631 Moz of silver.
  - **Copper Oxide:**
    - Indicated Mineral Resources: 434 Mt grading 0.34% Cu, 0.28 g/t Au, and 2.5 g/t Ag and containing 1,483 kt of copper, 3.9 Moz of gold, and 35 Moz of silver;
    - Inferred Mineral Resources: 331 Mt grading 0.25% Cu, 0.21 g/t Au, and 2.1 g/t Ag and containing 838 kt of copper, 2.3 Moz of gold, and 22 Moz of silver.

- **Gold Oxide:**
  - Indicated Mineral Resources: 288 Mt grading 0.29 g/t Au and 3.1 g/t Ag and containing 2.7 Moz of gold, and 29 Moz of silver;
  - Inferred Mineral Resources: 673 Mt grading 0.21 g/t Au and 3.3 g/t Ag and containing 4.5 Moz of gold, and 72 Moz of silver.
- **Silver Oxide:**
  - Indicated Mineral Resources: 77 Mt grading 0.34% Cu, 0.37 g/t Au, and 90.7 g/t Ag and containing 259 kt of copper, 0.9 Moz of gold, and 225 Moz of silver;
  - Inferred Mineral Resources: 72 Mt grading 0.10% Cu, 0.17 g/t Au, and 26.1 g/t Ag and containing 71 kt of copper, 0.4 Moz of gold, and 60 Moz of silver.

Josemaría

The QPs from AGP Mining Consultants Inc. (AGP) and Resource Modeling Solutions Ltd. (Resource Modeling Solutions) make the following conclusions:

- The host rock units in the Josemaría area are assigned to the Permian–Triassic Choiyoi Group.
- The Josemaría Late Oligocene (~25 Ma) porphyry intrusions include a series of feldspar–quartz–hornblende–biotite-phyric dacitic intrusions that have been divided into three main phases based on their compositions, as well as timing based on the presence of vein fragments and relative vein density and intensity of mineralization.
- There are two main types of hypogene mineralization that occur in proximity to one another due to a high degree of telescoping of high-sulphidation alteration and mineralization over deeper mineralization related to potassic alteration. Late supergene enrichment within the northern part of the deposit has upgraded copper values over part of the system.
- The Mineral Resource estimate is hosted in an area that is approximately one kilometre east–west, 1.5 km north–south, extending to 600 m to 700 m vertical depth. The deposit remains open to the south.
- Mineral Resources are reported in situ, using the CIM (2014) definitions and have an effective date of June 30, 2024.
  - **Sulphides:**
    - Measured Mineral Resources: 654 Mt grading 0.33% Cu, 0.25 g/t Au and 1.2 g/t Ag and containing 2,148 kt of copper, 5.2 Moz of gold, and 25 Moz of silver;
    - Indicated Mineral Resources: 992 Mt grading 0.25% Cu, 0.14 g/t Au and 1.1 g/t Ag and containing 2,475 kt of copper, 4.6 Moz of gold, and 34 Moz of silver;
    - Combined Measured and Indicated Mineral Resources: 1,646 Mt grading 0.28% Cu, 0.19 g/t Au and 1.1 g/t Ag and containing 4,623 kt of copper, 9.8 Moz of gold, and 59 Moz of silver;
    - Inferred Mineral Resources: 736 Mt grading 0.22% Cu, 0.11 g/t Au and 1.0 g/t Ag and containing 1,587 kt of copper, 2.6 Moz of gold, and 23 Moz of silver.

Vicuña Project

- The combined Mineral Resource estimates for Filo del Sol and Josemaria are:
  - Measured Mineral Resources: 654 Mt grading 0.33% Cu, 0.25 g/t Au, and 1.2 g/t Ag and containing 2,148 kt of copper, 5.2 Moz of gold, and 25 Moz of silver;
  - Indicated Mineral Resources: 2,984 Mt grading 0.36% Cu, 0.28 g/t Au, and 6.6 g/t Ag and containing 10,669 kt of copper, 27.0 Moz of gold, and 634 Moz of silver;
  - Combined Measured and Indicated Mineral Resources: 3,638 Mt grading 0.35% Cu, 0.27 g/t Au, and 5.6 g/t Ag and containing 12,817 kt of copper, 32.2 Moz of gold, and 659 Moz of silver;
  - Inferred Mineral Resources: 7,895 Mt grading 0.32% Cu, 0.19 g/t Au, and 3.2 g/t Ag and containing 25,139 kt of copper, 48.7 Moz of gold, and 808 Moz of silver.

1.1.1.2 Mineral Processing and Metallurgical Testing

- Four test work phases were completed at Filo del Sol, and seven phases at Josemaría.
- Test work results were used to determine appropriate process routes:
  - Oxide mineralization at Filo del Sol was considered amenable to heap leach operations to produce copper cathode and gold and silver in doré;
  - Oxide and hypogene mineralization at Josemaría and hypogene mineralization at Filo del Sol were considered amenable to conventional milling and flotation to produce copper concentrates;
  - Gold and silver were expected to reach payable levels in the copper concentrate.

1.1.2 Recommendations

Filo del Sol

The QP makes the following recommendations:

1 Begin engineering studies for the Vicuña Project.

2 Carry out geotechnical studies to help refine pit slope criteria.

3 Carry out additional metallurgical test work.

4 Continue to drill the Filo del Sol deposit to help refine the mineralization extents and convert Inferred Mineral Resources to Indicated.

5 Update the Filo del Sol trend analysis, variography, and resource block model as new data become available.

6 Incorporate a structural model and define local higher-grade trends.

7 Consider using dynamic anisotropy (DA) to interpolate block grades once the local grade trends are better understood.

8 Investigate adding key northwest striking cross faults that may offset mineralization.

9 Send pulps for external check assays.

10 Conduct additional copper concentrate marketing and arsenic treatment studies.

11 Continue to study the relevant water function of any geoforms located near the resource constraining pit shells.

Josemaría

The QPs make the following recommendations:

1 Advance the previous results of the Josemaría feasibility study in light of the Vicuña Project.

2 Estimate new Mineral Reserves for Josemaría.

3 Conduct additional pit geotechnical drilling.

4 Conduct additional condemnation drilling to the south of the pit limits.

1.2 Technical Summary

1.2.1 Ownership

In mid-2024, Lundin and BHP Canada entered into a definitive agreement with Filo Corp. to acquire the company, which was completed in January 2025. Concurrently with the completion of the Filo Corp. acquisition, Lundin Mining and BHP formed a 50:50 ownership joint venture entity, Vicuña Corp., and Lundin Minning contributed the Josemaria project to the joint venture entity. Vicuña Corp. serves as the operating entity for the former Filo del Sol project and Lundin Mining's former Josemaría project.

There are a number of in-country subsidiaries that are wholly-owned by Vicuña Corp.:

- Desarrollo de Prospectos Mineros S.A. (Deprominsa): holds the mineral concessions in Argentina associated with the former Josemaría project;
- Las Pailas S.R.L.: holds the mineral tenures in the Argentinean province of La Rioja, referred to as the Las Pailas project;
- Filo del Sol Exploración S.A.: holds the mineral concessions in Argentina associated with the former Filo del Sol project;
- Vicuña Chile SpA (Vicuña Chile) [formerly known as Frontera Chile Limitada (Frontera Chile)]: holds the mineral concessions in Chile associated with the former Filo del Sol project Tamberias property.

1.2.2 Property Description and Location

The Vicuña Project straddles the border between Argentina and Chile. The Chilean mineral tenures are located 140 km southeast of the city of Copiapó in Region III. The Argentinean mineral tenures are situated approximately 350 km northwest of the City of San Juan in the Iglesia Department, San Juan Province.

The Project centroid, based on the centre of the northern mineral concession holdings, is at 469,600E and 6,870,600N (WGS 1984 UTM Zone 19S).

Centroids for the deposits with Mineral Resource estimates are:

- Filo del Sol: 435,400E and 6,848,300N (WGS 1984 UTM Zone 19S)
- Josemaría: 446,300E and 6,854,400N (WGS 1984 UTM Zone 19S)

The Vicuña Project can be accessed from either Copiapó, Chile or the City of San Juan, Argentina. Vehicle access with a suitable four-wheel drive vehicle is possible to most of the property.

San Juan has a domestic airport with daily scheduled flights to Buenos Aires, Argentina. Mendoza, 170 km south of the City of San Juan, has an international airport with limited flights to Santiago in Chile and elsewhere internationally and within Argentina. Copiapó has a modern airport and several daily flights to Santiago. A site within the Project area was identified that could be used for an airstrip for future personnel movements.

Through Lundin Mining's 80% ownership of the Candelaria Copper Mining Complex, Lundin Mining operates, and is the sole user of, the Punta Padrones concentrate export terminal in Chile, which is located near the entrance to Bahia de Caldera, approximately 300 km from the Project area. The terminal, which was constructed in 1995, has been in operation for almost 30 years. It covers an approximately 55 hectare (ha) area, of which 35 ha is undeveloped. A seawater desalination plant was built in 2014. There is potential for any future mining operations to use this facility for cathode export and supply transshipment.

A second option may be the use of facilities at the Port of Caldera, located approximately 77 km from Copiapó. The port has several suitable existing terminals for the export of product and import of consumables.

The climate in the Project area is dry to arid, frequently cold and windy, typical of the high Andes. Precipitation is unevenly distributed throughout the year, with the majority of the precipitation, in the form of rain and snow, occurring in the winter months from May to August. It is expected that any future mining operation will be able to be conducted on a year-round basis.

Exploration fieldwork is generally possible from mid-October to early May. During winter, it is common to encounter severe operating conditions and continuous operation requires the presence of snow removal equipment to manage sudden snowfalls.

1.2.3 Mineral Title

1.2.3.1 Argentina

Mineral tenure in Argentina is held in the names of Filo del Sol Exploración S.A., Deprominsa, and Las Pailas S.R.L. Deprominsa tenures in the Province of San Juan consist of 13 exploitation concessions (minas) and 10 exploration permits (cateos), covering a combined area of 93,041 ha. Las Pailas S.R.L., is the holder of mineral tenures in the Las Pailas project, in the Province of La Rioja. This holding consists of three exploitation concessions (minas) covering a combined area of 5,129.91 ha. Filo del Sol Exploración S.A. tenures consist of eight exploitation concessions (minas), covering a combined area of 9,226.19 ha.

The mineral tenures held by Filo del Sol Exploración S.A. and a portion of the mineral tenures held by Deprominsa are located in the "Cerro el Potro" area, which falls within the multiple use area of the San Guillermo Provincial Reserve, where mining activities are fully authorized. The landownership of this area has not yet been determined because of the lack of clear titles. Part of the northern access road that was proposed as part of the superseded feasibility study on the Josemaría deposit falls within a buffer zone that has been designated by the San Guillermo Provincial Reserve. Activities within the buffer zone require environmental supervision and may also require prior approval by the Secretary of Environment and Sustainable Development.

The right to claim for compensation for the establishment of a mining easement lies with the surface owner holding valid and enforceable title. Notwithstanding this, the establishment of an easement may proceed if backed by a legal sufficient bond. At present, no such opposition nor any qualifying title meeting these requirements has been filed by the alleged landowners for the land overlapped by the mining property. However, four claimants, collectively the Lancaster Group, filed an opposition to all mining dockets, held at the time by Filo Mining Corp. (a predecessor to Filo Corp.), allegedly based on their capacity as owners of the "Los Tres Mogotes" ranch. Oppositions have been rejected by the company due the lack of registered title for ownership, except for "Vicuña 7" in which there has been no response to Lancaster presentation yet. As of 2025, the Lancaster Group oppositions remain undecided by the Authority, which is a situation that is not preventing mining activity from being carried out. A mediation hearing was held for certain of the dockets but ended without a settlement.

Deprominsa has requested before the Provincial Mining Authority certain occupancy easements for different activities related to the placement of infrastructure, the creation of roads, and the use of water. Within these easements, certain authorizations have been granted, while others remain in process. Deprominsa has been granted three occupancy easements. One occupancy easement was granted for the proposed mine infrastructure contemplated in the historical feasibility study on the Josemaría deposit which included the Batidero camp and the road right-of-way that provides access to the Josemaría area. Another occupation easement was granted for the freshwater wellfield areas (CPA and CPB) and ancillary facilities that might be needed for logistic support. An additional occupation easement was granted for the construction of a camp, water intake, and ancillary service and logistical support facilities. Five additional easements are in the process of being granted.

Filo del Sol Exploración S.A. has been provisionally granted an occupation easement that encompasses all its mining tenures. Also, Filo del Sol Exploración S.A. is under the process of being granted a road easement and two occupation easements before the Mining Authority of the Province of San Juan.

For the mineral tenures in San Juan Province, water rights are owned by the Province. Temporal water permits are used for exploration activities. It is likely that a similar approach will be used during any future construction activities. An understanding of the volume of water needed for processing is a prerequisite for any environmental approval of a water concession application. Once the environmental approval is granted, the sectorial water concession permit can be applied for.

The following royalties are applicable to the Argentinean mineral tenures.

- Lirio royalty: Deprominsa holds a 100% interest in the Lirio property, subject to a 0.5% net profit interest (NPI) royalty (for a period of 10 years), and an additional $2 million payment within six months of the completion of the second full year of mine operations. The Lirio property agreement covers most of the Mineral Resource estimate for Josemaría.
- Batidero royalty: Deprominsa holds a 100% participating interest in the Batidero property, subject to a 7% NPI royalty. A small portion of the currently estimated Mineral Resources for the Josemaría deposit would be subject to the Batidero royalty;
- Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa: Deprominsa committed to pay these owners a one-time payment of US$1.1 million if any of the mining rights included in the agreement enters into production. The portion of the Filo del Sol deposit that falls within the Vicuña 1 and Vicuña 2 concessions would be affected by this royalty.

A number of other royalty agreements are in place for other concessions in Argentina, however, these do not affect the Mineral Resource estimates for Josemaría or Filo del Sol.

1.2.3.2 Chile

Mineral tenure in Chile is held in the name of Vicuña Chile. The tenures consist of 47 mining concessions, all of which have been granted, comprising:

- 21 granted mining exploitation concessions and one mining exploitation concession under the registration process, collectively covering an area of 3,329 ha;
- 25 mining exploration concessions covering an area of 6,390 ha.

Vicuña Chile has entered into two agreements to secure access to the Tamberías property. Vicuña Chile entered into an easement agreement with a local community, Comunidad Civil Ex-Estancia Pulido. Vicuña Chile entered into an easement agreement with Carmen del Rosario Olivares, the surface rights owner of the land that connects public roads with the Ex-Estancia Pulido estate, which authorizes Vicuña Chile to access and transit such land with the Project's vehicles, equipment, and personnel. Vicuña Chile has an agreement with both landowners to provide access to the Project for a period of four years, beginning on November 30, 2021. The company is engaged in current negotiations to extend these agreements for a period of another four years, prior to the expiration of the existing agreements.

Compensation was timely paid in full by Vicuña Chile for both easements. Both agreements are transitory agreements, which have been replaced by new agreements on several occasions. Both agreements are legally effective since they were executed with the issuance of the public deed and both agreements are binding for the parties.

For the mineral tenures in Chile, water rights are privately held.

Vicuña Chile must pay a net smelter return (NSR) royalty of 1.5% to Compañía Minera Tamberías SCM, as defined in the option agreement between NGEx Resources Inc. (NGEx) and Compañía Minera Tamberías SCM for the Tamberías property (now part of Filo del Sol) in 2011, from the sale or transfer of the minerals, metals, or other mineral products, refined or not, from the mining concessions which are the subject matter of the option agreement. The royalty is paid each half year in US dollars, once Vicuña Chile has recovered the investments, including payment of third-party credits, costs, and expenses incurred in exploration, development and/or construction to convert the mineral tenures into a mine or mines capable of being commercially exploited.

Vicuña Chile has the pre-emptive right to prepay the royalty at any time at the price of US$20 million (half of which Vicuña Chile can choose to pay in Filo Corp. shares). If a third party makes an offer for the royalty, then Vicuña Chile has the right of first refusal to acquire the royalty by matching the price, terms and conditions set out in the third-party's offer.

1.2.4 Existing Infrastructure and Local Resources

The Project is remote, and little infrastructure is currently available other than road access, field offices, medical facilities, and contractor lay-down and storage facilities.

Field staff are based out of the Batidero camp, owned and operated by Vicuña. The 1,068-person Batidero camp is located in Argentina at an altitude of approximately 4,000 m and is approximately 32 km by road from the Filo del Sol deposit and 10 km southeast of the Josemaría deposit. The geology/exploration buildings, as well as the on-site logging and sampling facilities, are located approximately 400 m southeast of the main accommodations at the Batidero camp.

The city of San Juan is the nearest major commercial centre to the Project in Argentina, with a population of approximately 818,000. Copiapó, in Chile, which has a population of approximately 175,000, is a regional mining hub.

Personnel to support exploration activities are mainly sourced from the San Juan Province, with some personnel coming from other parts of Argentina as well as Chile. Personnel for any future mining activities would be sourced from the San Juan Province and Argentina where possible, but could also be sourced in Chile, which has a robust mining industry and experienced mining staff.

Power could be sourced from either or both of the Argentinean and Chilean national grids. In Argentina, the closest likely interconnection point would be near the town of Rodeo. This alternative would require a new sub-station to be built at Rodeo, a new 500 kilovolt (kV) transmission line that would extend 167 km north to a new substation at Chaparro, and a new 220 kV double-circuit transmission line that would extend 93 km northwest from Chaparro to the Josemaría deposit. In Chile, power could be sourced using a 127 km long, 110 kV, single circuit power transmission line that could be connected from the Filo del Sol deposit area to the Los Loros substation in Chile.

Water supply is likely to be provided from aquifer sources in Argentina. Any such groundwater well fields would require permitting.

Previous mining studies identified potential locations for facilities assuming a heap leach operation associated with the Filo del Sol deposit and a sulphide plant process operation exploiting the Josemaría deposit:

- Filo del Sol deposit area: heap leach pad, waste rock storage facilities, pregnant leach solution, raffinate and water management ponds, solvent extraction and electrowinning facility, workshops, truckshop and administrative buildings, and electricity/power facilities.
- Josemaría deposit area: stockpiles, waste rock storage facilities, process facility, truckshop and mine support facilities, tailings storage facility, administrative buildings, gatehouse, water and waste management facilities, fuel storage, and electricity/power facilities.

It is likely that any future mining studies would evaluate the location selections in these previous studies as a starting point. The previous mining studies confirm that there is sufficient area for the layout of infrastructure to support future mining operations.

1.2.5 History

The Project area was assembled from two previous project areas, the former Filo del Sol project and the former Josemaría project, each with an independent ownership history and internal property subdivisions within the project areas due to acquisitions or provincial and international boundaries.

Prior to Lundin Mining's Project interest, the following companies had completed exploration activities in the Project area: Solitario Resources Ltd., Cyprus-Amax Minerals Company, Toscana Resources Ltd, Tenke Mining Corp., NGEx, Suramina Resources Inc., Filo Mining Corp., and Josemaría Resources. Work completed by these companies included geological mapping, geochemical sampling (talus, rock chip), geophysical surveys, reverse circulation (RC) and core drilling, metallurgical test work, mineral resource and mineral reserve estimation, mining studies, environmental baseline data collection, stakeholder consultation, and permit-related activities.

Lundin Mining acquired its Project interest in the former Josemaría project area in 2022, and in the Filo del Sol project area in early 2025. Work completed included geological mapping, RC and core drilling, metallurgical test work, Mineral Resource and Mineral Reserve estimation, and additional studies in support of project permitting.

Mineral Resource and Mineral Reserve estimates reported for the Filo del Sol and Josemaría deposits prior to the assembly of the Vicuña Project, and the results of the studies supporting those estimates, are no longer considered current and the corresponding Mineral Reserve estimates (to the extent applicable) are declassified. However, data collected during those studies are used in support of Mineral Resource estimates in this Technical Report.

1.2.6 Geological Setting and Mineralization

Mineralization in the Project area includes both porphyry copper-gold and high-sulphidation copper-gold-silver epithermal systems. The mineralized system in its entirety is a telescoped porphyry epithermal system, with multiple intrusive and breccia centres, and so combines aspects of both deposit types.

The Vicuña Project area encompasses the crest of the central Andes mountain range along the Chile–Argentina border and the area eastward into Argentina. It forms a significant part of the Vicuña metallogenic belt, defined by a trend of copper and gold (±silver) mineralization related to porphyry and epithermal systems developed during compressive stages of Andean arc development.

The tenures in the western portion of the Project area include the porphyry–epithermal copper-gold–silver Filo del Sol and porphyry copper-gold Josemaría deposits. In this area, the host rock lithologies are typical of the Vicuña belt, including Permian-Triassic basement granite and rhyolite assigned to the Choiyoi Group that are intruded by Triassic diorite-tonalite intrusive complexes. These are unconformably overlain by terrigenous sediments, the lowermost of which are red-bed conglomerates, and andesitic volcaniclastic rocks. This clastic sequence is tentatively assigned a Late Cretaceous age, assumed from correlations with Late Cretaceous rocks outside the area.

Andesitic to dacitic volcanic rocks overlie the Josemaría deposit area and have been dated to be Late Oligocene in age, correlative with the Dona Aña Group rocks in the El Indio belt. Similar, although undated, mafic volcaniclastic rocks occur to the west in the Filo del Sol area. Other dacitic to andesitic volcaniclastic rocks overlie the crest of the range in the Filo del Sol area; these are in part inferred to be younger, Miocene to modern age volcanic rocks that overlie all earlier units.

The deposits and prospects are located along, or at intersections of major structures. Mid-Miocene mineralization at Filo del Sol lies along a 25 km-long structural-magmatic corridor that leads northeastward from Filo del Sol, up to the epithermal copper-gold-silver deposit at Lunahuasi and the Los Helados porphyry copper-gold deposit, both owned by NGEx. The mid-Miocene structural–magmatic corridor within the district is defined by a one to two kilometre wide domain of faults and fault zones that coincide with occurrences of contemporaneous mineralization. This structural domain lies along the northern segment of the Los Helados fault and steps westwards as it moves south, along intersections with northeast-trending faults. The Filo del Sol deposit lies along the corridor, along a trend parallel to the Los Helados fault but stepped to the west. Structural features within the deposit mimic the larger trends observed at the district scale. The Late Oligocene deposit at Josemaría, and associated prosects, are located along a distinct north-south trend that is controlled by a fault that separates Permian-Triassic rhyolite and granodiorite. This is an inherited basement feature that later guided emplacement of porphyry intrusions in the Late Oligocene.

Alteration is consistent with alteration zoning patterns around porphyry and epithermal systems. Deeper potassic alteration of porphyry intrusions and associated host rocks transitions upward to sericite-clay (±chlorite) assemblages, and into advanced argillic quartz-alunite (± clay) alteration within the epithermal lithocap domain. Due to the rapid uplift and erosion indicated during both the Late Oligocene and mid-Miocene, a high degree of telescoping is apparent in both the Josemaría and Filo del Sol systems.

Mineralization includes both porphyry and epithermal styles. Disseminated copper mineralization occurs as chalcopyrite and bornite associated with potassic alteration in both major centres discovered to date. With the nature of the telescoped epithermal systems, in both deposits on the property the porphyry-related copper mineralization has been largely reconstituted and upgraded to high-sulphidation assemblages to varying degrees. Epithermal styles of mineralization are better preserved along the mid-Miocene (Filo del Sol) trend on the property. All parts of the epithermal system are preserved, including a vuggy residual silica core and surrounding rock hosting disseminated and vein style high-sulphidation mineralization. Supergene remobilization of copper occurs in both deposits.

The overall Filo del Sol deposit, including the Tamberías, Aurora, and Bonita zones, is 6.5 km long (northeast-southwest) and 1.5 km in width (east-west) at its widest part in the Aurora zone. It has been drill tested to 1.8 km below surface. The deposit remains open to the north, south, east, west and at depth, although mineralization appears to be weakening in the deepest holes drilled in the Aurora zone to date.

The Josemaría deposit is partly exposed at surface and has dimensions of approximately 1.0 km east-west, 1.5 km north-south, extending to 600 m to 700 m vertical depth. The deposit remains open to the south, beneath a thickening cover of post-mineral volcanic rocks, and also at depth.

1.2.7 Exploration

Geological mapping was carried out in several phases, with each phase building on and refining information from the previous phases. Results were incorporated into the Project and deposit maps.

Geochemical samples included collection of talus fine, rock chip (grab and channel) and trench samples. Three broad geochemical anomalies (Cu, Au, Ag, As, Bi, Mo, and Sb) were outlined over the Filo del Sol, Tamberías and Maranceles areas, with several other, less distinct areas of anomalism also identified. The anomaly forming the Filo del Sol alignment is much larger than the area of current drilling. The Josemaría deposit was delineated by coincident talus and rock chip gold, copper and molybdenum geochemical anomalies within a central feature, approximately 2.5 km in diameter.

Magnetic and induced polarization (IP) geophysical surveys delineated anomalies corresponding closely to the mineralized porphyry intrusive rocks and the structural features. Magnetic data confirmed the north–northeasterly trend of structures and porphyries at Filo del Sol and highlighted the porphyry intrusions in the vicinity of Cerro Vicuña. A high-conductivity IP anomaly was identified associated with the Filo del Sol silver zone. IP chargeability anomalies showed a partial pyrite “halo” anomaly around the western and northern parts of the main Josemaría deposit.

Given that porphyry deposits often occur in clusters, and that there are prospects identified in the vicinity of the Filo del Sol and Josemaría deposits, there is good potential to identify additional porphyry-hosted and epithermal copper-gold systems. Several high-potential target areas exist in the vicinity of the Filo del Sol deposit for the discovery of new mineralized centres, could potentially be separate deposits themselves, or different parts of one very large deposit contiguous with what has already been delineated.

Prior to the discovery of the Josemaría, deposit, several prospects were being advanced in parallel, ultimately resulting in the initial drill program. These prospects included Portones, Batidero, Cumbre Verde, and others. Once the Josemaría deposit was discovered, exploration activities shifted to deposit definition drilling, and exploration on the other prospects was suspended.

One of these additional prospects includes a second major geochemical anomaly just west of the Josemaria deposit, the Portones prospect, which shows similarities to the original anomaly over the Josemaría deposit and with alteration features consistent with porphyry-style mineralization.

The prospective Cumbre Verde area is located to the west of the Josemaria deposit and to the northeast of the Filo del Sol deposit. This area is considered prospective in part because the mineralized trend that hosts the nearby Lunahuasi prospect, owned by NGEx, appears to trend southward into the Vicuña Project area in the Cumbre Verde area.

1.2.8 Drilling

A total of 968 drill holes (336,871.59 m) had been completed in the Project area as at April 27, 2025. Drilling is ongoing at Filo del Sol.

The Filo del Sol Mineral Resource estimate is supported by 204 core drill holes (152,995.2 m) and 196 RC drill holes (47,491 m). The drill hole cut-off date is April 9, 2025. Drilling used to support the estimation of Josemaría Mineral Resources consists of 195 core (89,966.2 m) and 48 RC (17,538.0 m) drill holes. The drilling database used in support of the current Mineral Resource estimate for the Josemaría deposit was closed as of December 31, 2022.

Since the database close-out date of April 9, 2025, an additional nine drill holes were completed, or were in progress at the Filo del Sol deposit to April 27, 2025. Although a few of the post-resource drill holes may contribute to localized changes in resource grade estimation, the drill holes that are situated within the existing model should, in the SLR QP's view, have no material effect on the overall tonnages and average grade of the current Mineral Resource estimate.

Since the database close-out date of December 31, 2022, there has been no additional drilling at the Josemaría deposit.

RC drill holes were typically drilled at 10.2 cm (4 inch) diameter. Core sizes included PQ (83.5 mm core diameter), HQ (63.5 mm), HQ3 (61.1 mm), and NQ (47.6 mm) drill core.

RC chips were logged on paper logs and were then copied digitally into spreadsheets. Representative chip samples were retained as a geological witness record of the RC drill hole. Standardized logging procedures and software are used to record geological and geotechnical information from drill core, including lithology, alteration, structures, description of mineralization and percentage sulphide content, mineralogy, spectrometry (ASD), X-ray fluorescence (XRF), susceptibility and conductivity, core photography, rock quality designation (RQD), recovery, and specific gravity. Core was photographed wet.

The overall average core recovery for the core holes at Filo del Sol was 95%. Sample recovery varies according to the oxidation level from 91% in oxide and 95% in sulphide. Data analysis showed no correlation between recovery and copper or gold grade. Silver grades show a correlation with sample recovery.

Drill core from the Josemaría deposit is generally very competent. Core recoveries varied slightly between drill programs, averaging from 94% to 95%.

Drill collars in the Filo del Sol and Josemaría deposit areas were surveyed by company personnel using differential global positioning system (GPS) instruments. Drill holes completed in prospects away from the main deposit areas were generally surveyed by company personnel using hand-held GPS instruments.

At Filo del Sol, downhole surveys were not completed on drill holes prior to the 2013–2014 drill campaign. Prior to 2009, RC and core holes in the Josemaría deposit area were not surveyed for downhole deflection. Downhole survey instrumentation has varied over time, and includes Reflex multi-shot, Surface Recording Gyro (SRG) gyroscope, and Champ Navigator instruments. The majority of the surveys were recorded using the SRG-gyroscope. Survey depth intervals also varied by program. Reflex multi-shot surveys were typically at 50 m intervals down hole. Champ Navigator survey measurements were collected at 10 m intervals. At Filo del Sol, the SRG-gyroscope surveys were taken at 10 m intervals from 2018 onward; prior to that date, surveys were on 25 m intervals. SRG-gyroscope survey intervals at Josemaría were typically 30 m.

The Filo del Sol deposit consists of several different zones, typically with different origins and different geometries. Copper tends to occur either disseminated throughout or in flat-lying higher-grade zones likely due to supergene enrichment. Silver occurs primarily as a shallow-dipping zone of high-grade mineralization. Drilled widths for both of these metals are essentially true widths, as the steep to vertical drill holes pierce the zones at close to perpendicular. The distribution of gold is more complex, and includes disseminated, sub-horizontal zones and suspected steep structurally controlled zones. The drilled width of the disseminated and sub-horizontal zones are essentially true widths, as with copper and silver. The drilled width of the structurally controlled zones is likely to be greater than the true width. More work is required before the geometry of these structures is understood and the relationship between their drilled and true widths can be established. Josemaría is a porphyry deposit that contains disseminated mineralization. Reported and described interval thicknesses are considered to be true thicknesses.

1.2.9 Sampling, Analysis, and Security

During the RC programs at Filo del Sol, a one-metre 30 kg to 40 kg sample was collected at the drill rig. The sample was spilt and two consecutive metres were combined into one approximately 5 kg sample to be submitted for geochemical analysis. A two-metre 40 kg sample was collected at the drill rig during the Josemaría drill campaigns. The sample was spilt and an approximately 5 kg sample was submitted for geochemical analysis.

Sampling methods for drill core varied over time at Filo del Sol. Core was initially halved; however, from 2019 onward, core was quarter split to allow ¾ of the core to be available for metallurgical test work. Initially splitting was completed using a circular, water-cooled rock saw. From 2013 to 2017, core was split using a manual core splitter under dry conditions as to minimize the soluble sulphate dissolution. From 2017 onward, core from only the oxide copper-gold (CuAuOx) and M zones was split using this method, while all other zones with no soluble copper were cut with a rock saw to better preserve the core. Typically, core was sampled continuously on two-metre intervals from the beginning of recovery to the end of the hole.

The core intervals sampled at the Josemaría deposit were halved using a core saw with one half submitted for assay. For the 2021 program, core was quartered for analysis, with the remaining core retained for metallurgical test work purposes. Samples were taken on one-metre intervals (pre-2009) or two-metre intervals (2009–Technical Report effective date), and did not respect geological changes.

Sample preparation and analytical laboratories used varied over time. All laboratories were independent. Laboratories included ALS Chemex in Mendoza, Argentina (ALS Mendoza), ALS Chemex in La Serena, Chile (ALS La Serena), ACME in Copiapó (ACME Copiapó), ACME in Mendoza (ACME Mendoza), ACME in Santiago, Chile (ACME Chile), ALS Global in Lima, Peru (ALS Lima), ALS Global in Santiago, Chile (ALS Santiago), SGS in the City of San Juan (SGS San Juan), and SGS in Callao, Peru (SGS Peru). Where recorded, accreditations included ISO 9001, ISO 9002, or ISO 17025.

Sample preparation methods have included drying, crushing to >70% passing -2 mm mesh or better than 85% passing 10 mesh; and pulverizing to >85% passing -75 µm screen, 95% passing 200 mesh, and 85% passing 200 mesh. Analytical methods included:

- Copper: analyzed by sequential leach for inductively coupled plasma (ICP) when copper assays exceeded 500 ppm; acid-soluble (CuAS), cyanide-soluble (CuCN), and water-soluble copper using a sequential copper analysis;
- Copper and silver: determined individually by four acid digestion and finished with atomic absorption spectroscopy (AAS);
- Gold: fire assay with an atomic absorption (AA) or AAS finish;
- Mercury: aqua regia digestion and cold vapour AA/AAS finish;
- Multi-element: 27-element four-acid digestion with ICP atomic emission spectroscopy (AES); 35-element four-acid digestion with ICP–AES finish; 36-element four-acid digestion with ICP–AES finish; 37-element four-acid digestion with ICP–AES finish; 48 element four-acid digestion with ICP–AES finish;
- Zinc: four-acid digestion and finished with AAS.

The Filo del Sol database is maintained within an acQuire cloud-based database and is managed by a database manager under supervision of the Exploration Manager. Data stored for each drill hole includes collar information, downhole surveys, codes and comments for lithology, alteration and mineralization, assays, specific gravity, magnetic susceptibility, recovery, RQD, and metallurgical sample information. Interval data from GeologicAI core scanning is also stored in the drill hole database. Data are subject to regular backups including off-site storage of backed-up data.

Drill hole data from the work completed on the Josemaría area are stored in a Seequent Leapfrog Edge/Central database. In 2021, all drill hole and assay data were migrated to Seequent MX Deposit drill logging and database system. Data stored for each drill hole includes collar information, downhole surveys, codes and comments for lithology, alteration and mineralization, assays, specific gravity, magnetic susceptibility, recovery, RQD, and metallurgical sample information. Interval data from CoreScan are also stored in the drill hole database.

The sampling and logging facilities have security measures in place, with only authorized personnel access. Samples were under the control of employees of the project operator at the time, from the time the samples were dispatched until the arrival at the sample preparation facility.

The on-site logging facilities are used to quick-log drill core, take basic geotechnical measurements, and complete core scanning. There are two main core logging, sampling, and storage facilities. The core shacks used for the Josemaría drill programs are located in Chimbas, San Juan Province, approximately 400 km southeast of the Batidero camp. The Filo del Sol core logging facility and exploration office is located in Guañizuil, San Juan Province, approximately 365 km southeast of the Batidero camp.

A portion of the core has been completely consumed in metallurgical test work. The remaining core is well organized and stored in racks. Laboratories return the pulps and coarse rejects for each sample sent for analysis. The Filo del Sol pulps and coarse rejects are stored at a secure building in San Juan.

1.2.10 Quality Assurance and Quality Control

The quality assurance and quality control (QA/QC) programs varied over time and by deposit area.

Blanks could include:

- Material sourced from a barren andesite outcrop (AND1) a few kilometres from the Josemaría deposit;
- Coarse-ground quartz material (BLN or BLK) sourced from a variety of providers.

Standards, either standard reference materials or certified reference materials, were created from site materials and subsequently assayed, or commercially purchased from ORE Research and Exploration Pty Ltd (OREAS), based in Perth, Australia.

Standards used for the Filo del Sol deposit area could include:

- Low-grade standard: copper values around the expected cut-off grade for the Filo del Sol deposit;
- Medium-grade standard: copper values around the average grade for the Filo del Sol deposit;
- High-grade standard: copper values higher than the expected cut-off grade for the Filo del Sol deposit.

Standards used for the Josemaría deposit area could include:

- Standard purchased from SGS San Juan;
- Site-specific standard created from coarse rejects from drilling of the nearby Los Helados (not part of the Project);
- Standards purchased from OREAS. The standards were chosen to represent different copper and gold grade ranges:
  - Low-grade standard: copper values approximately equating to the cut-off grade used in estimation;
  - Medium-grade standard: copper values around the average grade for the Josemaría deposit;

- High-grade standard: copper values approximately equal to the 90th percentile copper grades.

Duplicates could include the following:

- Field duplicate (¼ of the second half core or half of the ¼ core);
- Preparation duplicate (second pulp);
- Assay duplicate (second assay).

The QPs note the following:

- Sample collection, preparation, analysis and security for RC and core drill programs are in line with industry-standard methods for porphyry deposits;
- Specific gravity data are collected using industry-standard methods. There are sufficient estimates to support tonnage estimates for the various lithologies;
- Drill programs included insertion of blank, duplicate and standard reference material samples;
- QA/QC program results do not indicate any problems with the analytical programs;
- The quality of the copper, gold, and silver analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories.

1.2.11 Data Verification

Site visits were completed by Luke Evans, Paul Daigle, and Bruno Borntraeger.

The QPs individually reviewed the information in their areas of expertise, and concluded that the information supported, and could be used in, Mineral Resource estimation.

1.2.12 Mineral Processing and Metallurgical Testing

Test work was completed in support of a number of mining studies. Laboratories involved in this test work included Novatech S.A. of Santiago, Chile (Novatech), SGS Minerals in Lakefield, Ontario (SGS Lakefield), Dundee Sustainable Technologies, Montreal, Quebec (Dundee Sustainable), SGS Chile; ALS Metallurgy, Kamloops, BC (ALS Kamloops); FLS Laboratories, Salt Lake City, Utah (FLS); and Terra Mineralogical Services Inc., Ontario (Terra).

Test work comprised:

- Chemical characterization;
- Mineralogical analysis;
- Comminution testing (SMC, Bond ball mill work index (BWI) Bond rod mill work index (RWI), abrasion index (Ai), and semi autogenous grinding (SAG) power index (SPI));
- Gold recovery by gravity;
- Copper and gold leaching from the oxide domains;
- Conventional flotation for recovery of copper, gold, and silver;
- Effect of regrinding intensity on concentrate upgrading and recovery;

- Gold leaching reporting to the rougher and cleaner tails;
- Concentrate characterization (assay, mineralogy, settling, filtration, rheology, transportable moisture limit);
- Tailings characterization (assay, mineralogy, settling, rheology, environmental characterization, geotechnical characterization).

Four test work phases were completed at Filo del Sol, and seven phases at Josemaría.

Test work results were used to determine appropriate process routes. Oxide mineralization at Filo del Sol was considered amenable to heap leach operations to produce copper cathode and gold and silver in doré. Oxide and hypogene mineralization at Josemaría and hypogene mineralization at Filo del Sol were considered amenable to conventional milling and flotation to produce copper concentrates. Gold and silver were expected to reach payable levels in the copper concentrate.

Samples selected for metallurgical testing were representative of the various types and styles of mineralization within the earlier phases of the mine plan. Samples were selected from a range of locations within the deposit zones and were sufficient to perform required tests. Variability test work was completed as part of mining studies that are no longer considered current. The test work focused on mineralization that would be processed early in the mine plans that supported the studies.

Arsenic content reporting to the Filo del Sol and Josemaría copper concentrate is considered as a potential penalty element at times. Some of the smelter penalties may be mitigated through mineralization and/or concentrate blending strategies.

1.2.13 Mineral Resource Estimates

1.2.13.1 Mineral Resource Estimation, Filo del Sol

For the Filo del Sol Mineral Resource estimate, the constraining wireframes were created by SLR using Leapfrog software with input and assistance from Filo Corp. and (now) Vicuña Corp. geology personnel. The estimation of the variables was completed by Mr. Matt Batty, P.Geo., of Understood Mineral Resources Ltd. with regular meetings with Vicuña Corp. and SLR resource geologists. The SLR QP completed a detailed review of the resource block model.

The block model for the Filo del Sol deposit was set up with a block matrix of 25 m long by 25 m wide by 15 m high and was built in Maptek's Vulcan software.

A total of 10 lithological units, five alteration units, seven mineralization units, and four high-grade silver units were modelled using Leapfrog Geo software. The final estimation domains for copper, gold, silver, and arsenic were based on the various models together with assay grade distribution analysis, contact analysis, and relative proportions of CuAS, CuCN, and residual copper (CuRes) values.

Assay statistics and contact plots for copper, gold, silver, arsenic, iron, and sulphur assay data were examined within each geological model and estimation domain. Capping was applied to selected domains. In addition to capping, a high yield limit function was used during interpolation to restrict the influence of samples above various grade threshold or specific samples in areas of sparse drilling.

Assays were composited to a constant length of 8.0 m, top to bottom, from the collar to the end of the drill hole. Density was assigned by estimation domain. Spatial continuity of composite data was analyzed using Maptek Vulcan resource software. Variogram models were fitted for each metal in each group of estimation domains.

A whole block approach was used for block coding whereby a block was assigned a numerical code based if the block centroid was located within the domain. The estimation domain code was used to control all interpolation passes and the implementation of hard or soft boundaries. Nearest neighbour (NN) interpolation was also run for validation purposes.

All grades, including copper, gold, silver, arsenic, iron, and sulphur, were estimated by ordinary kriging (OK) in either two or three passes. A high-yield restriction was applied to control extreme values and outliers.

Model validation included comparison of global statistics on a domain-by-domain basis, visual comparison of estimated grades for all elements by comparing composite to block values in plan view and on cross-sections, and construction of swath plots. No material biases were noted with the estimates.

Mineral Resources were classified as Indicated and Inferred, based on a three-hole rule using a maximum drill hole spacing (DHS) of approximately 150 m for Indicated Mineral Resources and a maximum 300 m DHS for Inferred Mineral Resources. No Measured Mineral Resources were estimated.

Mineral Resources were reported within an open pit constraining shell which was generated using Deswik software and NSR cut-off values for each process destination.

1.2.13.2 Mineral Resource Estimation, Josemaría

The Josemaría Mineral Resource estimate was completed using Resource Modeling Solutions' commercially distributed software package Resource Modeling Solutions Platform (RMSP). A stochastic simulation approach was adopted with the general workflow summarized as follows:

- Rock types and alteration were simulated using hierarchical truncated pluri-Gaussian simulation (HTPG);
- Copper total, CuAS, CuCN, gold, silver, arsenic, iron, sulphur, and density were simulated using turning bands, applying a projection pursuit multivariate transformation (PPMT) to reproduce multivariate relations;
- A total of 100 equiprobable realizations results from the above steps, where each realization contains a unique rock type, alteration, grade, and density that reproduce representative properties at the point (composite) scale variability;
- The simulation was performed on nodes spaced 5 m in each direction. The realizations are then scaled to the selective mining unit (SMU) scale support through averaging their composite scale variability within blocks measuring 25 m x 25 m x 15 m. NSR calculations and cut-off grades are then applied to each block realization.

The Resource Modeling Solutions QP performed exploratory data analysis using box plots and an examination of mineralization, lithology and alteration statistics, based on the cleaned/smoothed logging codes, prior to HTPG domaining.

HTPG is a sophisticated geostatistical method used to model complex geological structures. The method is considered appropriate to use in estimation for the Josemaría deposit as it explicitly captures the geological uncertainty related to the current drill spacing for the deposit, while producing a reasonable reproduction of the geological interpretation.

CoreScan and copper speciation data (i.e., the total copper, CuAS, and CuCN) were used to improve the consistency of the mineralogy logging for downstream modelling purposes. The lithology and alteration logging codes were smoothed using RMSP's categorical smoothing functionality.

For geological/domain simulation, sample intervals were composited to 2.0 m, corresponding to the predominant assay length of 2.0 m. As a 5.0 m node size was used for grade simulation, samples were composited to 4.0 m for this step.

Variograms were calculated during multiple steps during the geology/domain simulation and grade simulation workflow.

Geology/domain simulation and grade simulation was performed at a point scale of 5 m in x (easting), y (northing) and z (elevation). The realizations were re-blocked to the SMU block model measuring 25 x 25 x 15 m. During re-blocking to SMU scale, numeric variables were averaged, weighted by simulated density while the majority category, weighted by the density, was selected for categorical variables.

The simulation grid and SMU blocks were limited by topography and to 300 m from the closest drill hole, and above a smooth bottom surface near the bottom of the deepest drill holes. Blocks were assigned default values in unpopulated areas beyond the footprint of the potential Mineral Resource open pit reporting shell for pit optimization purposes.

HTPG was used for domaining mineralogy, lithology, and alteration. In total, 100 realizations for each feature were completed. Mineralogy, lithology, and alteration models completed by Lundin Mining staff using Leapfrog Geo software were used a guide, and, in many instances, constraints to the HTPG simulations.

The variables copper, CuAS, CuCN, CuRes, sulphur, gold, silver, arsenic, iron, and density were simulated over 100 realizations, constrained by the corresponding mineralogy domain.

The simulated domains generated using HTPG were validated using the following approaches:

- Comparison between target and resulting proportions for the mineralogy, alteration, and lithology simulations. The target proportions were derived during trend modelling;
- Visual inspection of domains and comparison with Lundin Mining's Leapfrog-derived interpretations.

The validation showed that the HTPG methodology appropriately represents the geological interpretation and honours the underlying input logged codes. The copper, CuAS, CuCN, CuRes, sulphur, gold, silver, arsenic, iron, and density estimates were validated using standard validation techniques along with additional validation steps specific to the stochastic simulation approach. Conventional global mean comparisons were performed as well as cumulative distribution frequency reproduction checks. Variograms of the simulated realizations, back-transformed to normal-score units were compared to the variograms of the composites in normal-scored units. Swath plots for all variables and all mineralogy domains were plotted along eastings, northings, and elevations. No material biases were noted.

The classification categories are based primarily on drill hole spacing criteria, determined by calculating the probability of achieving the predicted grade, tonnes, and metal within volumes that approximate monthly tonnages. Drill hole spacing was calculated based on the average distance from each SMU block to the nearest three drill holes.

Mineral Resources were reported within optimized open pit constraining shells generated for each realization of the stochastic simulation using RMSP's mining module. The pit optimization was based on a cut-off applied to a calculated NSR value incorporating variable metallurgical recoveries, smelter terms, refining costs, and Lundin Mining's long-term metal price forecasts.

1.2.13.3 Mineral Resource Statement, Vicuña Project

The total Mineral Resources for the Vicuña Project are reported in situ, using the CIM (2014) definitions.

The Qualified Person for the Filo del Sol estimate is Mr. Luke Evans, M.Sc., P.Eng., an SLR employee. The Qualified Person for the Josemaría estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions employee.

The Filo del Sol estimate has an effective date of April 15, 2025, and the Josemaría estimate has an effective date of June 30, 2024.

The total Mineral Resource estimate for the Vicuña Project is provided in Table 1-1.

Table 1-1: Mineral Resource Statement, Vicuña Project

Deposit	Zone	Category	Tonnes (Mt)	Grades			Contained Metal		
				Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (Moz)	Ag (Moz)
Filo del Sol	Gold Oxide	Measured							
		Indicated	288		0.29	3.1		2.7	29
		Total Measured and Indicated	288		0.29	3.1		2.7	29
		Inferred	673		0.21	3.3		4.5	72
	Copper Oxide	Measured							
		Indicated	434	0.34	0.28	2.5	1,483	3.9	35
		Total Measured and Indicated	434	0.34	0.28	2.5	1,483	3.9	35
		Inferred	331	0.25	0.21	2.1	838	2.3	22
	Silver Oxide	Measured							
		Indicated	77	0.34	0.37	90.7	259	0.9	225
		Total Measured and Indicated	77	0.34	0.37	90.7	259	0.9	225
		Inferred	72	0.10	0.17	26.1	71	0.4	60
	Sulphide	Measured							
		Indicated	1,192	0.54	0.39	8.1	6,452	14.8	311
		Total Measured and Indicated	1,192	0.54	0.39	8.1	6,452	14.8	311
		Inferred	6,080	0.37	0.20	3.2	22,643	38.9	631
Josemaría	Sulphide	Measured	654	0.33	0.25	1.2	2,148	5.2	25
		Indicated	992	0.25	0.14	1.1	2,475	4.6	34
		Total Measured and Indicated	1,646	0.28	0.19	1.1	4,623	9.8	59
		Inferred	736	0.22	0.11	1.0	1,587	2.6	23
Vicuña Project Total		Measured	654	0.33	0.25	1.2	2,148	5.2	25
		Indicated	2,984	0.36	0.28	6.6	10,669	27.0	634
		Total Measured and Indicated	3,638	0.35	0.27	5.6	12,817	32.2	659
		Inferred	7,895	0.32	0.19	3.2	25,139	48.7	808

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are reported in situ. The Filo del Sol estimates have an effective date of April 15, 2025 and the Josemaría estimates have an effective date of June 30, 2024.
3. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
4. The Qualified Person for the Filo del Sol estimates is Mr. Luke Evans, M.Sc., P.Eng., an SLR Consulting (Canada) Ltd. employee. The Qualified Person for the Josemaría estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions Ltd. employee.

5. Mineral Resource estimates for Filo del Sol were constrained within a pit shell with 40º pit slope angles. Metal prices used were US$4.43/lb copper, US$2,185/oz gold, and US$28.80/oz silver. Net smelter return (NSR) cut-off values and metallurgical recoveries varied by zone, and included:
   - Gold Oxide: 73% gold; 63% silver recoveries with an NSR cut-off value of $10.23/t;
   - Copper and Silver Oxide: 67% copper, 63% gold, and 78% silver recoveries with an NSR cut-off value of $15.59/t;
   - Sulphide: 78% copper, 62% gold, and 62% silver recoveries with an NSR cut-off value of $10.39/t.
6. Mineral Resource estimates for Josemaría were constrained within a pit shell with pit slope angles of up to 45º. Metal prices used were US$4.43/lb copper, US$2,185/oz gold, US$28.80/oz silver and a NSR cut-off value of US$7.30/t. Other inputs included average metallurgical recoveries of 82%, 60% and 56% for Cu, Au and Ag respectively; base mining cost of US$2.083/t; processing and general and administrative costs of US$7.30/t; treatment costs of US$65/dmt; logistics costs of US$95.51/wmt; variable refining costs including US$0.065/lb Cu, US$5/oz Au, and US$0.46/oz Ag.
7. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
8. Estimates have been rounded. Totals may not sum or multiply accurately due to rounding.

The QPs are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

1.2.13.4 Factors that May Affect the Mineral Resource Estimates

Mineral Resource estimates may be affected by the following factors: metal price and exchange rate assumptions; changes to the assumptions used to generate the gold NSR cut-off value; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and mineralization shapes, and geological and grade continuity assumptions; density and domain assignments; changes to geotechnical, mining, and metallurgical recovery assumptions; changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates; assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social licence to operate.

1.2.14 Environmental, Permitting and Social Considerations

1.2.14.1 Environmental Considerations

A number of environmental studies were completed in support of historical mining studies. These included: meteorology, noise and vibration, glaciology, hydrology, soils, ecosystems, flora, fauna, water quality and aquatic biota, archaeology, and geochemical testing.

The environmental baseline and supporting studies characterized the physical, chemical, and biological aspects of the Project area, including water quality and quantity, geochemistry, and climate. Flora and fauna studies have identified species and their habitat that will require mitigation. Specific studies, relating to meteorology, noise, vibration, water flowrate, and water quality are ongoing.

Vicuña Corp. developed a Biodiversity Management Plan that includes several monitoring programs to determine the status of the plant communities, fauna, and limnology. The bioaccumulation of metals in aquatic biota is also monitored. A relocation program for both fauna (mainly low mobility rodents) and vegas (wetlands) is being implemented.

Vicuña Corp. created an Archaeological Management Plan for the archaeological sites in Argentina. That plan was submitted and approved by the Secretariat of Culture of the Province of San Juan and is currently being implemented. Sites were physically marked with signage to prevent any restricted activity from taking place.

An Environmental Management Program (EMP) that documents the processes, systems, and actions used to manage key environmental priorities and risks was completed.

Lundin Mining has a Responsible Mining Development Policy in place, which obligates the company to follow good international industry practices and recognized sustainability standards.

Existing environmental liabilities are limited to those associated with exploration activities, and would involve removal of the exploration camps and rehabilitation of drill sites and drill site access roads.

1.2.14.2 Permitting Considerations

All permits required to support exploration level activities were applied for and granted. A number of permits will be required to support any future Project activities such as construction or development of a mining operation.

1.2.14.3 Social Considerations

No indigenous people have been identified in the Argentine mineral tenure areas in San Juan Province. The government of San Juan Province confirmed that there are no registered indigenous groups in the likely Project area of influence. The Federal Instituto Nacional de Asuntos Indígenas provided confirmation in July 2021 that there are no indigenous communities in the Project area of influence in San Juan Province.

Guandacol, a community in La Rioja Province, has an indigenous community, known as the Coingua, which belongs to the Diaguita group and has registered its legal status with the Instituto Nacional de Asuntos Indígenas. However, that group is based in an urban community and does not have any registered traditional lands that fall within the Project mineral tenure. Lundin Mining, via Vicuña, engages with the community regularly.

There are identified communities and indigenous people of the Colla ethnic group in the Community of Tierra Amarilla in Chile. As part of the environmental permits for the Project exploration, an anthropological study was conducted in 2012 to ensure that impacts to the Colla del Torín Indigenous Community were minimized. Updated studies would be completed concomitant with future detailed mining studies.

Should any other indigenous group(s) be identified and registered, Lundin Mining and Vicuña will work with the relevant government entities to accommodate existing access to culture and livelihood in accordance with Convention 169 of the International Labour Organization.

The Lundin Foundation (a registered Canadian non-profit organization that works with corporate partners, including Vicuña Corp., and stakeholders to improve the operations for the benefit of communities) developed a Community Relations Plan. The plan uses dialogue and communication using diverse formats (meetings, field visits, local media, and website information). It is based on a platform of community participation and joint decision-making processes.

A formal grievance mechanism/feedback process will be implemented. The mechanism will assign procedures and responsibilities to individuals to ensure the proper depth of response is provided.

Increased interaction with the communities and implementation of formalized engagement is planned to be concomitant with future detailed mining studies.

2.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Lundin Mining Corporation (Lundin Mining) to prepare a Technical Report (the Report) on the Vicuña Project (the Project), located on the border between Chile and Argentina. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

The Project is operated by Vicuña Corp. (Vicuña), which is a 50:50 joint venture between Lundin Mining and BHP Investments Canada Inc. (BHP Canada). The Project was assembled from two previous ground-holdings, referred to as the Filo del Sol and Josemaría projects. The Filo del Sol project that included mineral tenures in Argentina and Chile, and contains the Filo del Sol deposit, was owned by Filo Corp., which was acquired by Lundin Mining and BHP Canada on January 15, 2025. A 50% interest in the Josemaría project that was formerly wholly-owned by Lundin Mining was acquired by BHP Canada. The Josemaría project included mineral tenures in Argentina, and hosts the Josemaría deposit. Together, the former Filo del Sol and Josemaría projects comprise the Vicuña Project and both the Filo del Sol and Josemaría deposits are now within the overall Vicuña Project area.

The purpose of this Technical Report is to support the disclosure of Mineral Resource estimates for the Filo del Sol and Josemaría deposits in the Lundin Mining news release dated May 4, 2025 and entitled "Lundin Mining Announces Initial Mineral Resource at Filo del Sol Demonstrating One of the World's Largest Copper, Gold, and Silver Resources".

Mineral Resources are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions).

Mineral Resource and Mineral Reserve estimates reported for the Filo del Sol and Josemaría deposits prior to the assembly of the Vicuña Project, and the results of the studies supporting those estimates, are no longer considered current and the corresponding Mineral Reserve estimates (to the extent applicable) are declassified.

Mineral Resources reported in this Technical Report are on a 100% basis.

2.1 Qualified Persons

The qualified persons (QPs) and their responsibilities for this Technical Report are listed in Table 2-1.

Table 2-1: QPs and Responsibilities

Qualified Person	Title, Company	Responsibilities
Mr. Luke Evans, P.Eng.	Global Technical Director, Geology Group Leader, SLR Consulting (Canada) Ltd.	Overall preparation of the Technical Report, in particular Sections 2, 3, 4.1 to 4.10 (except 4.2.4 and 4.3.4), 5, 6, 7.1, 7.2, 7.3.1, 8, 9, 12.1.1, 14.1, 23, 24, Filo del Sol parts of Sections 10, 11, and 14.3, and related disclosure in Sections 1, and 25 to 27
Mr. Paul Daigle, P.Geo.	Principal Resource Geologist, AGP Mining Consultants Inc.	Section 7.3.2, 12.1.2, Josemaría parts of Sections 10 and 11, and related disclosure in Sections 1, and 25 to 27

Qualified Person	Title, Company	Responsibilities
Mr. Sean Horan, P.Geo.	Principal Resource Geologist, Resource Modeling Solutions Ltd.	Sections 12.1.3, 14.2, Josemaría parts of Section 14.3, and related disclosure in Sections 1, and 25 to 27
Mr. Jeffery Austin, P.Eng.	President, International and Environmental Inc.	Section 12,1.4, 13 and related disclosure in Sections 1, and 25 to 27
Mr. Bruno Borntraeger, P.Eng.	Specialist Geotechnical Engineer, Knight Piésold Ltd.	Sections 4.2.4, 4.3.4, 4.11 to 4.14, 12.1.5, and related disclosure in Sections 1, and 25 to 27

2.2 Site Visit and Scope of Personal Inspection

2.2.1 Mr. Luke Evans

Mr. Evans visited the Filo del Sol property and drilling camp on September 20, 2023.

SLR was given full access to data relevant to the Filo del Sol resource estimate and conducted interviews with Vicuña (and previously Filo Corp.) personnel to obtain information on exploration work and to understand the procedures used to collect, record, store, and analyze historical and current exploration data.

All aspects that could materially impact the integrity of the data informing the Filo del Sol Mineral Resource estimate for the Project were reviewed by SLR, including core logging, sampling methods and security, analytical and quality assurance/quality control (QA/QC) procedures, and database management.

Under Mr. Evans' supervision, Mr. Benjamin Sanfurgo visited the core logging facility and the exploration office in Guañizuil, San Juan, Argentina, on May 26 to May 28, 2024. He held discussions with site personnel, and he also visited the Filo del Sol pulp and reject sample storage facility in San Juan Capital on May 29, 2024.

Mr. Sanfurgo reviewed the core, examined the core sampling equipment, the water immersion density apparatus, and the core photography setup. The drilling, surveying, core logging, core photographing, core density measurements, core sampling, analytical, QA/QC, and security procedures were reviewed with the geology team during the site visit.

2.2.2 Mr. Paul Daigle

Mr. Paul Daigle visited the Josemaría project site from May 3 to 8, 2023 for five days. He was accompanied on the site visit by:

- Mr. Cole Mooney, Director, Resource Geology, Lundin Mining (San Juan);
- Mr. Juan Arrieta, Project Manager, Geology, Deprominsa (San Juan, Chimbas site);
- Mr. Pablo Rascón Soechting, Exploration Geologist, Deprominsa (Josemaría site).

The site visit included an inspection of core logging and sampling facilities, core storage facilities at the San Juan (Chimbas) exploration offices. This inspection consisted of reviewing the facilities and a review of drill core logs against selected drill core. Additionally, this site inspection included the Josemaría deposit area and Batidero Camp that consisted in verifying drill hole collar coordinates and on-site logging facilities.

2.2.3 Mr. Sean Horan

Mr. Horan is responsible for the Josemaría Mineral Resource estimate. He did not visit the Josemaría site.

2.2.4 Mr. Jeffrey Austin

Mr. Austin performed reviews of the available metallurgical test work data, and the amenability of the mineralization tested to the assumed process route for the purposes of assessing reasonable prospects of eventual economic extraction and oversaw some of the sulphide metallurgical test programs on Josemaría and Filo del Sol. Mr. Austin did not visit the Filo del Sol and Josemaría sites.

2.2.5 Mr. Bruno Borntraeger

Mr. Borntraeger visited the Filo del Sol and Josemaría deposit areas on March 22, 2018, a duration of one day and reviewed design layouts and site conditions.

2.3 Effective Dates

The overall effective date of this Technical Report is based on the Mineral Resource estimate for Filo del Sol, and is April 15, 2025. Other relevant dates in this Technical Report are:

- Date of the last drill information included in the report: April 27, 2025
- Date of the database close-out date for drilling supporting Mineral Resource estimation at Filo del Sol: April 9, 2025
- Date of the database close-out date for drilling supporting Mineral Resource estimation at Josemaría: December 31, 2022
- Date of the Mineral Resource estimate for Filo del Sol: April 15, 2025
- Date of the Mineral Resource estimate for Josemaría: June 30, 2024

2.4 Sources of Information

The documentation reviewed, and other sources of information, are listed at the end of this Technical Report in Section 27 References.

SLR would like to acknowledge the excellent co-operation in discussions and transmittal of technical material by the Filo Corp. geology team and Terra Mineralogical Services Inc. (Terra). SLR would also like to thank specifically Fionnuala Devine, M.Sc., P.Geo., for assistance in assembling the Filo del Sol geology and history sections of this Technical Report.

Discussions were held with the following personnel:

- Mr. Bob Carmichael, P.Geo., Vice President Exploration, Filo Corp.
- Mr. Richard Flynn, P.Geo., Principal Resource Geologist, Filo Corp.
- Mr. Cole Mooney, P.Geo., Director of Resource Geology, Lundin Mining Corporation
- Mr. Dustin Smiley, P. Eng., Area Director – Phase II, Vicuña Corp.
- Mr. Mathew Batty, P. Geo., Owner, Understood Mineral Resources Inc.
- Mr. Julian Forestier, Exploration Manager, Vicuña Corp.

- Mr. Guido Merino, Project Geologist, Lundin Mining Corporation
- Mr. Giovanni Di-Prisco, Consulting Geologist-Mineralogist
- Mr. Lucas Cataldi, Geologist, Vicuña Corp
- Erica Knee, Senior Exploration Geologist, Lundin Mining Corporation

2.5 Previous Technical Reports

Neither Lundin Mining, nor Vicuña Corp. as the joint venture entity, has previously prepared a technical report on the Project.

A number of technical reports have been filed by predecessor companies (Chapman and Harrop 2004; Harrop 2005; Nilsson and Rossi 2006; Nilsson and Rossi 2007; Charchaflié and LeCouteur 2012; Zandonai et al. 2012, Zandonai et al. 2013; Zandonai 2013; Zandonai and Frost 2013; Charchaflié and Gray 2014; Ovalle et al. 2016; Devine et al. 2015, Devine et al. 2016, Devine, Charchaflié et al. 2017; Devine, Defilippi et al. 2017; Devine et al. 2018, Devine et al. 2019; McCarthy et al. 2020; and Elfen et al. 2023), as listed in Section 27 of this Technical Report.

The prior technical reports for the Filo del Sol deposit and the Josemaría deposit, including the Mineral Resource and Mineral Reserve estimates reported therein, are no longer current, and the Mineral Reserve estimates reported therein (to the extent applicable) are declassified.

2.6 List of Abbreviations

Units of measurement used in this Technical Report conform to the metric system. All currency in this Technical Report is US dollars (US$) unless otherwise noted. The currency in Argentina is the Argentine peso (ARS). The currency in Chile is the Chilean peso (CLP).

Abbreviations used in the report are provided in Table 2-2.

Table 2-2: Table of Abbreviations

Abbreviation	Definition	Abbreviation	Definition
μm	micrometre	kWh/t	kilowatt-hour per tonne
ARS	Argentine peso	L	litre
a	annum	lb	pound
°C	degree Celsius	m	metre
C$	Canadian dollars	M	mega (million); molar
CLP	Chilean peso	Ma	million years
cm	centimetre	MASL	metres above sea level
d	day	min	minute
dia	diameter	mm	millimetre
dmt	dry metric tonne	Mt	million tonnes
g	gram	oz	Troy ounce (31.1035g)
G	giga (billion)	ppm	part per million
g/L	gram per litre	psi	pound per square inch
g/t	gram per tonne	RL	relative elevation
ha	hectare	t	metric tonne
in.	inch	t/m^3	tonnes per cubic metre
k	kilo (thousand)	tpa	metric tonne per year
kg	kilogram	tpd	metric tonne per day
km	kilometre	US$	United States dollar
km^2	square kilometre	V	volt
kPa	kilopascal	W	watt
kV	kilovolt	wmt	wet metric tonne

3.0 Reliance on Other Experts

This Technical Report has been prepared by SLR for Lundin Mining. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this Technical Report.
- Assumptions, conditions, and qualifications as set forth in this Technical Report.

For the purpose of this Technical Report, SLR has relied on ownership information provided by Lundin Mining and Vicuña. SLR has relied on the following legal title opinions for Filo del Sol and Josemaría:

1 Bofill Mir Abogados title opinion letter dated March 20, 2025 regarding the Tamberias Project in Chile related to Filo del Sol in Chile.

2 Bruchou & Funes de Rioja draft title opinion dated April 2025 regarding title and status of mining rights and environmental permits of Filo del Sol in Argentina.

3 Bruchou & Funes de Rioja title opinion dated January 15, 2025 regarding title and status of mining rights and environmental permits of Josemaría in Argentina.

These opinions are relied on in Section 4 and the Summary of this Technical Report. SLR has not researched property title or mineral rights for Filo dol Sol and Josemaría and expresses no opinion as to the ownership status of the property.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.

4.0 Property Description and Location

4.1 Location

The Vicuña Project straddles the border between Argentina and Chile. The Chilean mineral tenures are located 140 km southeast of the city of Copiapó in Region III. The Argentinean mineral tenures are situated approximately 350 km northwest of the City of San Juan in the Iglesia Department, San Juan Province.

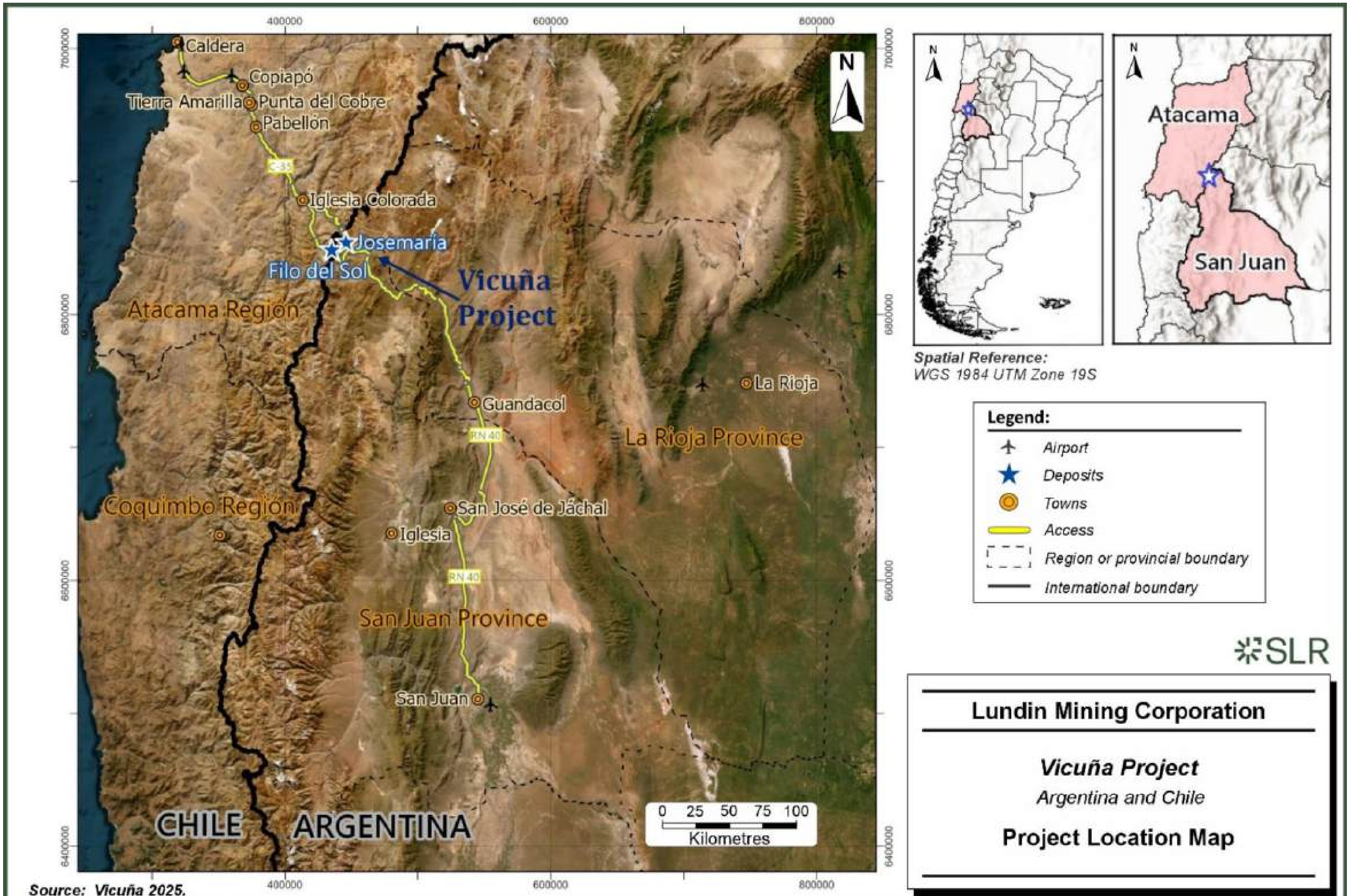
The Project centroid, based on the centre of the northern mineral concession holdings, is at 469,600E and 6,870,600N (WGS 1984 UTM Zone 19S).

Centroids for the deposits with Mineral Resource estimates are:

- Filo del Sol: 435,400E and 6,848,300N (WGS 1984 UTM Zone 19S)
- Josemaría: 446,300E and 6,854,400N (WGS 1984 UTM Zone 19S)

The Project location is shown in Figure 4-1.

Figure 4-1: Project Location Plan



Source: Vicuña 2025.

4.2 Mineral Title and Environmental Considerations in Argentina

4.2.1 Mineral Rights

In Argentina, mineral rights are acquired by application to the provincial government under a legal system regulated by Federal and Provincial legislation. Under the Argentine Federal Mining Code (FMC), two types of mining rights can be granted: exploration permits (cateos) and exploitation concessions (concesiones de explotación or minas). According to Argentine Federal Constitution, the provinces' legislatures cannot pass provincial legislation contrary to the Argentine FMC. In this sense, each Province Procedural Mining Code, and mining provincial legal requirements, must comply with the Argentine FMC. The mineral rights are summarized in Table 4-1.

Table 4-1: Mineral Title Types, Argentina

Permit Type	Area	Duration	Comment
Cateo	Awarded in units of 500 ha (the measurement unit). Holders may acquire a maximum of 20 measurement units (10,000 ha) per permit, but may not hold, in aggregate, more than 20 exploration permits or 400 measurement units (200,000 ha) in one province.	Grants the holder the right to explore and prospect within the measurement unit boundary for a 150-day period for the first measurement unit. The term is extended by 50 days for each additional measurement unit that has been granted, with the longest possible term being 1,100 days.	Applicant must pay a one-time fee for each measurement unit requested, provide a work plan and commit to starting that work program 30 days after permit grant. Compensation must be paid to landowners impacted by any exploration activities. An activities report must be provided to the appropriate regulatory authorities within 90 days after expiry of the cateo.
Mina	The measurement unit area for such claims (the pertenencia), will vary depending on the mineralization to be exploited. Claims over gold, silver, and copper, and, generally, hard rock minerals deposits (e.g., vein-style and discrete deposits) are typically 6 ha in extent; however, disseminated mineralization style deposits may see claim sizes reach a maximum of 100 ha. Exploitation concessions can consist of one or more pertenencias.	Assuming mining is active, and all other requirements are met, exploitation concessions have an indefinite grant period. They are only limited by the life of mine; once the mineral deposit is exhausted, the exploitation concession expires. Exploitation concessions can be transferred and mortgaged by the concession holder. Exploitation concessions may also be terminated under certain circumstances contemplated in the Federal Mining Code, including but not limited to, failure to pay the established annual fee (canon), a lack of investment, non-compliance with the annual investment plan submitted to the authorities or inactivity for more than four years, with no plans to reactivate mining within a five-year period.	Approval and registration of the legal survey request by the relevant Provincial mining authority constitutes formal title to the exploitation concession. After three years from the date the discovery claim was registered, the annual fee (canon) becomes payable. The amount of the annual canon depends on the type of mineral and the pertenencia, and is updated annually. Exploitation concession holders must also invest a minimum of 300 times the value of the annual canon in fixed assets on the exploitation concession over a five-year period. Twenty percent of the required investment must be made each year for the first two years of the designated investment period, while the remaining 60% can be invested at the holder's discretion over the final three years. The exploitation concession can be cancelled if the minimum expenditures are not met in the manner stipulated.

4.2.2 Surface Rights

The Argentina Federal Mining Code (FMC) sets out rules under which surface rights and easements can be granted for a mining operation and grants a mining concessionaire the right to establish an easement over the surface lands underlying the mining property, and the surrounding lands.

Easements are legal encumbrances imposed for reasons of public interest and for the mining concessionaire, to facilitate the development of the mining activities.

Easements are an effective way to establish the infrastructure of a mining project, and covers aspects including land occupation, rights of way, access routes, transport routes, and any other infrastructure needed for operations.

Compensation has to be paid to the affected landowner in proportion to the amount of damage or inconvenience incurred by an easement, and the land value. As it is not always possible to determine the amount of compensation payable, the FMC authorizes a bond or surety to be in place to support immediate formalization of the easement.

In instances where no agreement can be reached with the landowner, the FMC provides the mining right holder with the right to purchase the required property. However, this can only be done once an exploitation concession has been surveyed and demarcated.

4.2.3 Royalties

Under Argentinean Law No. 24.196 (titled “Mining Investment Law”), the provinces where the mining projects are located that adhered to this law will not be able to receive mining royalties that exceed 3% of the “pithead” value of the mineral extracted. Article 22 of the Federal Law 24.196, was later extended by Federal Law 27.743, which added an additional paragraph that established that, as an exception exclusively with respect to mining projects that have not begun construction, the provinces may receive as royalties a percentage that does not exceed 5%.

This law considers the “pithead” value as the mineral extracted, transported, and/or accumulated prior to any treatment. The “pithead” value of the minerals and/or metals declared by the mining producer is defined as the value obtained in the first stage of mineral commercialization, minus the direct and/or operating costs necessary to take the mineral from the point of extraction to such stage, with the exception of the expenses and/or direct or indirect costs inherent to the extraction process.

The Argentinean mineral tenures of the Vicuña Project are primarily situated in the Province of San Juan. The Province of San Juan has adhered to Law No. 24.196 through the enactment of Provincial Law 459. Up to May 2025, the mining royalties in the Province of San Juan are still 3%.

4.2.4 Environmental Regulations and Permitting

4.2.4.1 Environmental Impact Assessment

The legal framework for mine permitting in Argentina is derived mainly from the Argentine FMC and its supporting Federal Law No. 24.585, along with the General Environment Law 25.675. The institutional framework for the environmental permitting process is governed by Federal Law No. 24.585, with the Mining Authority of the Province of San Juan being in charge of the environmental aspects concerning the mining activities carried out in the Province of San Juan in accordance with the Argentine FMC.

The Law dictates that an “Informe de Impacto Ambiental”, or Environmental Impact Assessment (EIA), must be submitted and approved prior to commencement of any mining activities and operations. Upon successful review and approval of the EIA, the Mining Authority of the Province of San Juan issues a “Declaración de Impacto Ambiental” (DIA), which serves as the overarching environmental license.

Provincial Decree 007-2024, unifies, in a single regulatory framework, the procedures and contents for the presentation and evaluation of the EIA covering stages of Prospecting, Exploration and Exploitation, with biannual updates. The minimum contents of an EIA must include:

- Description of the environment (physical, biological, and socio-economic);
- Project description;
- Description of environmental impacts;
- Environmental Management Plan (which includes measures and actions to prevent and mitigate environmental impact);
- Plan of Action on Environmental Contingencies;
- Methodology used.

It also rules a public participation stage as part of the revision process. An EIA and its subsequent DIA are required for the exploration and exploitation phases of mineral development.

4.2.4.2 Permits Other than Environmental

In addition to the DIA, a number of sectorial permits, licences, and authorizations are required to proceed with any mine construction and operation.

Primary permits include:

- Registration as a consumer of liquid fuels;
- Certificate of Non-Existence of Archaeological and Paleontology Remains;
- Registration as an explosives user;
- Registration as a water rights user (through a permit - for temporary use - or a concession);
- Environmental Insurance;
- Sectorial permits: (Office of Urban Planning and Development [DPDU] Licence of Use);
- Temporary water/water concession;
- Hazardous waste certificate;
- Fire department permit;
- Effluents discharge permit (hydraulics department);
- Authorization for a camp dining facility;
- Drilling permits;
- Authorization for infirmary/pharmacy establishment.

4.2.4.3 Glaciers

Federal Law 26.639 (Federal Glacier Protection Law), enacted on October 28, 2010, established the minimum basis for the protection of the glaciers and periglacial environment, with the aim of protecting them as strategic water reserves.

The Federal Glacier Protection Law requires that a Federal Inventory of Glaciers be created and periodically updated by The Argentine Institute of Nivology, Glaciology and Environmental Sciences (IANIGLA) within the Federal Ministry of Environment (currently the Secretaría de Turismo, Ambiente y Deportes hereinafter referred to as the Federal Environmental Authority), all based on criteria proposed by IANIGLA and timely approved by the latter.

The first inventory was made public in May 2018 and was performed based on a level 1 study involving satellite imaging only. IANIGLA proposed, and Federal Environmental Authority approved, the rules, criteria and procedures for the creation and updates of the Federal Inventory of Glaciers, which according to Federal Resolution 477/2023, must only identify, characterize, and monitor glaciers and cryoforms that act as strategic water reserves, taking into consideration the IANIGLA 2019 Update Plan, and Federal Resolution No. 1141/2014. The inventory was updated in 2024 through Federal Resolution No. 142/2024, dated November 26, 2024.

The San Juan Provincial Glacier Protection Law No. 1076-L, was enacted on July 14, 2010. The Provincial Glacier Protection Law establishes a clear and focused framework for the protection of glaciers, distinguishing itself from the Federal Glacier Protection Law. Specifically, the Provincial Glacier Protection Law targets only covered and uncovered glaciers (within the glacier environment) and active rock glaciers (within the periglacial environment), as detailed in Section 2 of the Provincial Glacier Protection Law.

The Provincial Glacier Protection Law does not prohibit new activities, nor does it exclude them from environmental impact evaluation; it simply requires that they undergo a special environmental evaluation. Under the Provincial Glacier Protection Law, the environmental impact evaluation determines if those activities affect the protected geoforms. In this sense, Section 7 of the Provincial Glacier Protection Law states the following: “All activities intended to be performed on any glacier included in the Provincial Glacier Inventory shall be subject, prior to approval and performance, to the procedure of Environmental Impact Assessment pursuant to applicable rules and regulations”. With regard to the “Activities in Progress” as defined in the Federal Glacier Protection Law, the Provincial Glacier Protection Law does not provide for an environmental re-evaluation of these type of activities.

Pursuant to the Federal Glacier Protection Law and Provincial Decree No. 1246/2012 (supplementary to the Provincial Glacier Protection Law) Provincial authorities are in charge of the re-evaluation process provided in Section 15 of the Federal Glacier Protection Law. The Special Environmental Audit Unit, under the Provincial Glacier Protection Coordination Council, was designated as the responsible of conducting these audits (i.e., the re-evaluation audits set by section 15 of the Federal Glacier Protection Law).

The existing glaciers in the territory of the Province constitute Public Domain Assets of the Province, as the original owner of the resources (Section 124 of the Federal Constitution).

Federal Constitution, Section 41,stipulates that provincial environmental regulations cannot set an environmental protection standard that are lower than those set by a minimum environmental protection law enacted by Federal Congress. Accordingly, the Provincial Glacier Protection Law must comply with and cannot set a standard below the standard set forth in the Federal Glacier Protection Law.

Within the Vicuna Property there are certain geoforms that have been registered in the provincial and federal glacier inventory. Vicuna is studying these geoforms to evaluate whether those have an effective and relevant water function to determine whether such geoforms would fall or not under the scope of protection of the National Glacier Law and also to help increase the environmental knowledge in the area which is relevant for the competent provincial authority in the context of future environmental evaluation in connection with future potential projected activities. Despite the fact that such geoforms are currently included in the national and provincial glacier inventory it is worth noting that such inclusion is made preventively and only based on satellite imaging that do not predict nor guarantee that the geoforms included actually have effective and relevant water functions. This by no means affects the already approved and ongoing activities.

4.2.4.4 Flora and Fauna

Law 22.421 of Protection and Conservation of Wildlife classifies fauna species of concern together with Resolution 1030/04, Resolution 348/2010, Resolution 1055/2013, Resolution 795/2017, and Resolution 316/2021.

Argentina is signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

4.2.4.5 Closure

No financial bonding for mine closure is required by law.

4.3 Mineral Title and Environmental Considerations in Chile

4.3.1 Mineral Rights

Chile's mining policy is based on legal provisions that were enacted as a consequence of the regulations included in the 1980 constitution, including the Constitutional Organic Law (enacted in 1982) and the Chilean Mining Code (enacted in 1983). According to the law, the Chilean State has absolute, exclusive, inalienable, and imprescriptible property over all mines and mineral substances located within the national territory, notwithstanding the ownership of natural or legal persons over the superficial land in the interior of which they are located. Private individuals may develop mining exploration and exploitation works on the basis of mining concessions granted by judicial resolutions issued by Chilean courts, which is ruled in a non-contentious judicial proceeding.

In accordance with Chilean mining legislation, there are two types of mining concessions: exploration and exploitation concessions. The concessions have both rights and obligations as defined by the Mining Code and the Constitutional Organic Law. Mining concessions can be mortgaged or transferred, and the holder has full ownership rights and is entitled to obtain the rights of way for exploration (through a request known as "*pedimento*") and exploitation (through a request known as "men*sura*"). In addition, the concession holder has the right to defend ownership of the concession against the state and third parties. The mining concession includes all grantable substances that may exist within its area. Mining rights in Chile are summarized in Table 4-2.

Table 4-2: Mineral Title Types, Chile

Title Type	Description	Size	Term	Comment
Exploration mining concession request (Pedimento)	An initial exploration claim whose position is well defined by UTM coordinates, which define north-south and east-west boundaries	Minimum size of a pedimento is 100 ha and the maximum is 5,000 ha with a maximum length-to-width ratio of 15:1.	Maximum period of four years; however, before the end of this period, and provided that no overlying claim has been staked, the holder may request a one-time extension for up to four additional years. This request must be made within the first six months of the concession's final year and must be accompanied by either: (1) a geological report demonstrating that exploration work was carried out, (2) documentation showing that the project obtained an Environmental Qualification Resolution, or (3) evidence that the project was submitted for assessment under the Environmental Impact Evaluation System. From the filing of the claim until one year after the expiration of the exploration concession, regardless of the cause of its termination, the former holder cannot acquire, directly or through an intermediary, a new exploration concession that covers, in whole or in part, the area previously covered by the expired concession. During the validity of the exploration concession, its holder may request the conversion of the exploration concession into an exploitation mining concession.	If the yearly claim taxes are not paid on a pedimento, the concession will be scheduled for auction. However, the concession's good standing can be preserved by paying the outstanding fee before the auction list is published. Once the auction list has been issued, good standing can still be restored by paying double the fee, as long as the payment is made before the auction takes place. New pedimentos are allowed to overlap with pre-existing ones; however, the underlying (previously staked) claim always takes precedent, providing the claim holder avoids letting the claim lapse due to a lack of required payments, and converts the pedimento to a manifestacion within the initial four-year period. Additionally, the underlying claim holder has the right to request the nullity of the overlapping mining exploration concession.

Title Type	Description	Size	Term	Comment
Exploitation mining concession request (Manifestación)	An initial exploitation claim whose position is well defined by UTM coordinates, which define north-south and east-west boundaries	Minimum size of a manifestation is 1 ha and the maximum is 10 ha with a maximum length-to-width ratio of 10:1.	The exploitation concession will have an indefinite duration, provided that the corresponding annual licence fees are paid and the concession is protected against overlapping claims by third parties.	An exploitation concession can be achieved through a prior exploration concession or through any open ground. The applicant must file a "Request for Survey" (Solicitud de Mensura) with the court of jurisdiction, including official publication to advise the surrounding claim holders, who may raise objections if they believe their pre-established rights are being encroached upon. The manifestación may also be filed on any open ground without going through the pedimento filing process. The owner is entitled to explore and to remove materials for study only (i.e., sale of the extracted material is forbidden). If an owner exploits minerals from an exploration concession, the concession will be terminated. Within ten months from the initial filing of the manifestación claim, a government licensed surveyor must submit the survey of the claim to the court. Surrounding claim owners may be present during the survey. Once surveyed, presented to the court, and reviewed by the National Mining Service (SERNAGEOMIN), the application is adjudicated by the court as a permanent property right (a pertenencia), which is equivalent to a "patented claim" or exploitation right. Exploitation mining concessions are valid indefinitely and are subject to the payment of annual fees. Once an exploitation mining concession has been granted, the owner can remove concessionable minerals for sale.

4.3.2 Surface Rights

Under Chilean mining laws, surface rights are separate from mineral rights. Additionally, and under the Constitution, surface rights shall be subject to the obligations and limitations established by law to facilitate the exploration, exploitation, and beneficiation of mines.

According to The Chilean Mining Code, as from the constitution of the respective concession, and for the purpose of facilitating appropriate and convenient mining exploration and exploitation, surface properties shall be subject to the following encumbrances:

- The obligation to be occupied, to the extend necessary, by stockpiles and deposits of minerals, waste rock, tailings, and slag; by mineral extraction and processing plants; by communication systems; and by canals, dams, pipelines, dwellings, buildings, and other complementary works.
- The encumbrances established for the benefit of electric utility concessionaires, in accordance with the applicable legislation.
- The right of way and the obligation to be occupied by roads, railways, airstrips, pipelines, tunnels, inclined planes, aerial tramways, conveyor belts, and any other system that services to connect the concession with public roads, processing facilities, railway, station ports, airstrips, and consumption centres.

The easements may be constituted by a voluntary agreement, which shall be granted by means of a public deed. If the surface landowner is not agreeable to grant the easement voluntarily, the titleholder of the mining concessions may request said easement before the relevant Court of Justice, which shall grant it upon determination of the compensation for losses as deemed fit. In order for easements to be enforceable against third parties, they must be registered in the Registry of Mortgages and Encumbrances of the Real Estate Registrar, or of the Mining Registrar, as applicable.

4.3.3 Royalties

On August 10, 2023, the Official Gazette published Law No. 21.591, which establishes a new annual tax called “Mining Royalty”. The taxpayer of this tax is the mining operator, being any natural or legal person that extracts mineral substances of a grantable nature and sells them in any productive state in which they are found whose annual sales exceed the value equivalent to 12,000t of fine copper. The taxpayers must make a monthly provisional payment corresponding to a percentage on the gross income received or accrued from the sales of mining products.

The Mining Royalty is structured on the basis of two components: (i) “Ad Valorem”, consisting of the application of a fixed 1% rate on the annual copper sales of mining companies whose average sales for the last six years are greater than the equivalent of 50,000 t; and (ii) “Mining Margin Component”, consisting of a progressive rate applicable over the adjusted taxable mining operating income or the mining operating margin, depending on the operation’s size and if its main product is copper.

It is important to note that: (i) a maximum potential tax burden of 46,5% is set on the operating profitability of the mining entity, measured as the adjusted taxable mining operating income, before taxes; and (ii) all Mining Royalty taxpayers are required to report their financial statement on a quarterly basis, to the Financial Market Commission.

4.3.4 Environmental Regulations and Permitting

4.3.4.1 Environmental Impact Assessment

In Chile, Law No. 19.300 establishes the Environmental Impact Assessment System (SEIA for its acronym in Spanish), under which mineral development projects require environmental assessment. The project may be assessed through an Environmental Impact Study (DIA) if it does not generate significant impacts, or through an Environmental Impact Assessment (EIA) if it does. However, considering the activities involved in their development, mining exploitation projects usually require an EIA, while exploration activities are usually assessed by means of a DIA.

The steps that are included in the process comprise:

- Prepare the DIA or an EIA. In case of a DIA, it must include a complete description of the project, a baseline to develop the analysis about the absence of significant impacts, a monitoring plan, and a plan to comply with all the applicable environmental legislation. In turn, the EIA must include numerical predictive modelling, social assessment, risk assessment, management plans, mitigation plans, compensation or restoration plans, emergency response plans, a monitoring program, and summary tables;
- The processing of an EIA includes a mandatory citizen participation stage, during a 60-day period, in the form of community meetings and open houses. In the case of a DIA, the Environmental Assessment Service will initiate a citizen participation stage, during a 20-day period, regarding projects that generate environmental burdens for nearby communities and provided that at least two citizen organisations with legal status, or at least ten natural persons directly affected, request it. The Environmental Assessment Service is responsible for establishing mechanisms to ensure informed participation, through information actions and meetings;
- Additionally, if the project generates significant impacts over indigenous populations, it must also include an indigenous consultation process. This is only applicable for an EIA, not a DIA;
- The project holder must address any requests from the Environmental Assessment Service for additional information contained in the “Consolidated Report of Requests for Clarifications, Corrections and Extensions” (ICSARA), through addendums. There are usually three rounds of ISCARAs and addendums during the processing of an EIA and two in the case of a DIA, and the minimum time to submit the addendum is 30 working days. This may be extended per request of the project holder;
- At the end of the processing, the Environmental Assessment Commission issues the “Environmental Qualification Resolution” (RCA), authorizing the project if all the environmental requirements have been fulfilled. The RCA contains the summary of the requirements that the project holder must comply with, and all of the mitigation, restoration or compensation measures that must be executed;
- Once the RCA is issued, the proponent must process sectorial permits for construction and operation. The most significant and complex among these are authorizations issued by the General Directorate of Water and the mining licence from the Servicio Nacional de Geología y Minería (SERNAGEOMIN) and the permits before the National Monuments Council, if the project affects archeological or paleontological heritage. Each of these can be initiated during the EIA review period regarding their environmental aspects; however, they cannot be granted before the EIA review concludes with a

favourable decision and, after the issuance of the RCA, the relevant service will analyse the technical requirements within its competence.

- The legal term to complete the environmental assessment process is 120 working days in case of an EIA and 60 working days in case of a DIA, in both cases extendable for an additional 60 days.
- In the event of claims against the RCA, the competent authority to decide about them is the Committee of Ministers in the case of an EIA and the Executive Director of the Environmental Assessment Service in the case of a DIA.

An RCA is also required for exploration phase activities.

4.3.4.2 Permits Other than Environmental

In addition to the RCA that environmentally authorizes the Project, several sectorial permits, licences, and authorizations are required to proceed with any mine construction and operation.

Primary permits include:

- Permit for watercourse modifications;
- Permission for defence works in natural watercourses;
- Permit for water and sewage facilities;
- Permit for the construction or installation of waste storage facilities;
- Permit for the construction or installation of hazardous waste storage facilities;
- Permit for constructing outside urban limits;
- Permit for felling, destruction or clearing of xerophytic formations;
- Permit for the capture of protected animal species;
- Authorization of the Mining Exploitation Project;
- Authorization of a Mining Site Closure Plan;
- Water rights;
- Authorization for domestic water and sewage installations;
- Authorization for the transport of oversize or overweight trucks;
- Permit for the construction of accesses to public roads;
- Construction permit and final acceptance of the constructed works;
- Maritime concession, for desalination plants, seawater intake or ports;
- Pipeline construction.

4.3.4.3 Glaciers

Chile does not have a specific glacier law; however, general environmental legislation (Law 19.300, Law 20.417 and Water Code) does require assessment of impact to glaciers for industrial developments, among many other environmental components. The Regulation of the SEIA (Supreme Decree No. 40 issued in 2013) further specifies the studies required for glaciers in an EIA, including their area, thickness, surface reflectance, ice-core characterization, movement assessment, and runoff calculations.

4.3.4.4 Flora and Fauna

In Chile, the protection, conservation and sustainable use of native flora and fauna are governed mainly by Law 19.300 and Law 21.600.

Supreme Decree No. 29 of 2011 establishes the Regulations about classification of wild species of fauna regarding their conservation situation. The classification itself is updated regularly and currently Supreme Decree No. 6 of 2017 is in force, which approves the thirteenth species classification process.

Chile is signatory to the CITES.

4.3.4.5 Closure

In Chile, Law 20.551 requires that a mine closure plan and accompanying cost estimate be submitted to and approved by SERNAGEOMIN). In addition, any exploitation project with an extraction capacity exceeding 10,000 tonnes per month shall provide a financial guarantee to ensure full and timely compliance with the measures and obligations set out in the mine closure plan. The financial guarantee for closure plans can be issued by means of a cash deposit, stand-by letters of credit, surety bonds, insurance policies, or other mechanisms authorized by law.

SERNAGEOMIN approval of a mine closure plan and cost follows both the successful resolution of the DIA/EIA and sectorial permit processes but precedes the start of exploration or operation of the mining site.

The mine closure plan regarding exploitation projects with an extraction capacity over 10,000 tonnes per month must be audited every five years, and the closure plan must be updated in accordance with the result of said audit. The closure plan must be modified in case of modifications of the closure phase.

In the event of partial or temporal closures of the mining site, a temporal or partial closure plan must be submitted for approval of the SERNAGEOMIN.

4.4 Mining Integration and Complementation Treaty Between Chile and Argentina

On December 29, 1997, the Republic of Chile and Argentina signed the Mining Integration and Complementation Treaty between Chile and Argentina (the Treaty), in an effort to strengthen their historic bonds of peace and friendship and intensify the integration of their mining activities.

The Treaty provides a legal framework to facilitate the development of mining projects located in the border area of both countries. The Treaty's objective is to facilitate the exploration and exploitation of mining projects within the area of the Treaty. In this regard, the Treaty defines mining business as "all civil, commercial, or other activities directly related to the acquisition, investigation, prospecting, exploration, and exploitation of mineral deposits or mining concessions and rights in general; to the processing of minerals and obtaining products and byproducts from them by smelting, refining, or other processes; and to the transportation and marketing of minerals". To achieve this objective, the Treaty provides that the prohibitions and restrictions in force in the legislations of each state, referring to the acquisition of property, the exercise of possession or mere tenure or the constitution of real rights over real estate, to mining rights, established on the basis of the quality of foreigner and Chilean or Argentine national, will not be applicable to mining businesses governed by the Treaty.

On August 20, 1999 (as amended by an agreement granted on August 31, 1999), Chile and Argentina subscribed to the Complementary Protocol, which clarifies provisions and mechanisms within the Treaty and which specifies aspects of the Treaty related to acquiring mining rights and real estate rights in frontier zones. Further, on July 18, 2001, an Administrative Commission was created. The Treaty is administered and evaluated by the Administrative Commission comprised of representatives of the Ministries of Foreign Affairs and Mining of Chile and the Ministry of Foreign Affairs and the Secretariat of Industry, Commerce and Mining of Argentina.

Additional protocols have been signed between Chile and Argentina, which provide more detailed regulations applicable to specific mining projects. Every project or group of projects to be developed within the Treaty's area of interest and that requires the border facilitations, transnational activities, the granting of easements and the exercise of certain rights granted by the Treaty, shall be regulated by a Specific Additional Protocol (PAE for its acronym in Spanish), the objective of which is to apply the Treaty's regulations and principles to a specific project or group of projects. The PAE will indicate the specific area of operations of the corresponding project.

One of these protocols, and the first granted for exploration purposes, is the Specific Additional Protocol to the Mining Integration and Complementation Treaty between Chile and Argentina for Prospecting and/or Exploration Stage of the Vicuña Mining Project, dated January 6, 2006. This protocol allows for prospecting and exploration activities in what was called the Vicuña Mining Project area. The main benefit of the Vicuña Additional Protocol during the exploration stage is an authorization which allows for people and equipment to freely cross the international border in support of exploration and prospecting activities within an area defined as an "operational area". Development of transboundary projects is the specific objective of the Treaty.

The Vicuña Additional Protocol has been modified three times. In 2019, the Administrative Commission recommended to the parties of the PAE, to establish a new PAE for the Filo del Sol Mining Project.

Then, the Filo del Sol Mining Project was excluded from the PAE for the Vicuña Mining Project and a new PAE for the Filo del Sol Mining Project was executed.

The "Specific Additional Protocol to the Treaty between the Argentine Republic and the Republic of Chile on Mining Integration and Complementation for the Prospecting and/or Exploration Stage of the Filo del Sol Mining Project" (Filo del Sol PAE) was executed on June 26, 2019, and adopted by the Chilean and Argentinean governments through the Exchange of Notes dated October 13 and November 12, 2020, signed in Buenos Aires and Santiago respectively.

The PAE for the new Vicuña Mining Project, without the Filo del Sol Mining Project came into force on November 20, 2020, and was adopted by the Chilean and Argentinean governments through an Exchange of Notes dated October 14 and November 12, 2020, signed in Buenos Aires and Santiago, respectively.

The Project's PAEs were granted to facilitate the development of exploration and prospecting works in the Project's area of interest. Such areas of interest are defined in the PAEs.

4.5 Project Ownership

4.5.1 Ownership History

The Project area was assembled from two previous project areas, the former Filo del Sol project and the former Josemaría project, each with an independent ownership history and internal property subdivisions within the project areas due to acquisitions or provincial and international boundaries.

4.5.1.1 Filo del Sol Area

The main Filo del Sol area in Argentina was originally held by Cyprus-Amax Minerals Company (Cyprus-Amax) from 1997 to 1998. Tenke Mining Corp. (Tenke) negotiated a purchase arrangement with Cyprus-Amax in 1999 and was project operator to 2007. Tenke signed a letter of intent (LOI) with Japan Oil, Gas and Metals National Corporation (JOGMEC) which allowed JOGMEC the right to acquire a 40% equity interest in the Filo del Sol project.

In 2007, the project was transferred to a Tenke subsidiary, Suramina Resources Inc. (Suramina). During 2008, the LOI was substituted for a Joint Exploration Agreement (JEA). Under this agreement, JOGMEC held an indirect 40% interest while Suramina and its subsidiaries held the remaining 60% interest.

On April 17, 2009, Canadian Gold Hunter acquired all of the shares of Suramina and, therefore, ownership and control over the Filo del Sol project. On September 15, 2009, Canadian Gold Hunter changed its name to NGEx Resources Inc. (NGEx).

In 2011, NGEx entered into an option agreement with Compañía Minera Tamberías SCM whereby NGEx could acquire a 100% interest in mineral concessions referred to as the Tamberías property in Chile (the Tamberías Option Agreement). This agreement was amended on a number of occasions including 2015, 2020, 2023 and 2024 which now extends the final date to June 30, 2026 whereby all fees will be paid and the mineral concessions will be owned by Vicuña Chile (and indirectly by Vicuña Corp.) outright. The Tamberías property was added to the Filo del Sol project, such that the project consisted of mineral tenures in Chile and Argentina.

During 2012, JOGMEC transferred its 40% rights to the Filo del Sol area to Pan Pacific Copper Co., Ltd. (Pan Pacific Copper). NGEx acquired the 40% Pan Pacific Copper interest in 2014, to become the 100% owner of the mineral concessions.

During 2016, NGEx transferred the Filo del Sol tenures to a new company, Filo Mining Corp. (Filo Mining). Subsequently, on August 16, 2016, NGEx completed the spin-out of its wholly-owned subsidiary, Filo Mining, transferring all of the project's assets and rights to the newly formed entity. In 2023, Filo Mining underwent a name change to Filo Corp.

In mid-2024, Lundin Mining and BHP Canada entered into a definitive agreement with Filo Corp. to jointly acquire 100% of Filo's issued and outstanding common shares not already owned by Lundin Mining and BHP Canada pursuant to a court-approved plan of arrangement. This transaction was completed on January 15, 2025.

4.5.1.2 Josemaría Area

Local mining rights holders, the Lirio family, were the original Argentinean mineral tenure holders, and acquired mineral tenures in the 1990s. Solitario Resources Ltd. (Solitario) acquired the tenure in 1993 from the Lirio family. Toscana Resources Ltd (Toscana Resources, later TNR Resources Ltd, and subsequently TNR Gold Corp) acquired Solitario in 1998. TNR

Resources Ltd signed an option agreement with Compañía Minera Solitario Argentina S.A., Desarrollo de Prospectos Mineros S.A. (Deprominsa), and Tenke (subsequently, NGEx) in 2002. In 2008, NGEx and JOGMEC entered into a Joint Exploration Agreement (JEA) for the Josemaría project, which granted JOGMEC the right to acquire a 40% interest in the project. In 2017, NGEx acquired the remaining 40% interest in the Josemaría project back from JOGMEC. In July 2019, NGEx spun out its Los Helados project, together with other exploration properties, into NGEx Minerals Ltd. (NGEx Minerals). In connection with the aforementioned transaction, NGEx changed its name to Josemaría Resources Inc. (Josemaría Resources) and retained ownership of the Josemaría project.

In 2022, Lundin Mining acquired a 100% interest in Josemaría Resources and in 2025, Lundin Mining contributed the Josemaría project to Vicuña Corp. as part of its transaction with BHP Canada.

4.5.2 Current Ownership

In mid-2024, Lundin Mining and BHP Canada entered into a definitive agreement with Filo Corp. to acquire the company, which was completed in January 2025. Concurrently with the completion of the Filo Corp. acquisition, Lundin Mining and BHP Canada formed the 50:50 ownership joint venture entity, Vicuña Corp., and Lundin Mining contributed the Josemaría project to the joint venture entity. Vicuña Corp. serves as the operating entity for the former Filo del Sol project and Lundin Mining's former Josemaría project.

There are a number of in-country subsidiaries that are wholly-owned by Vicuña Corp.:

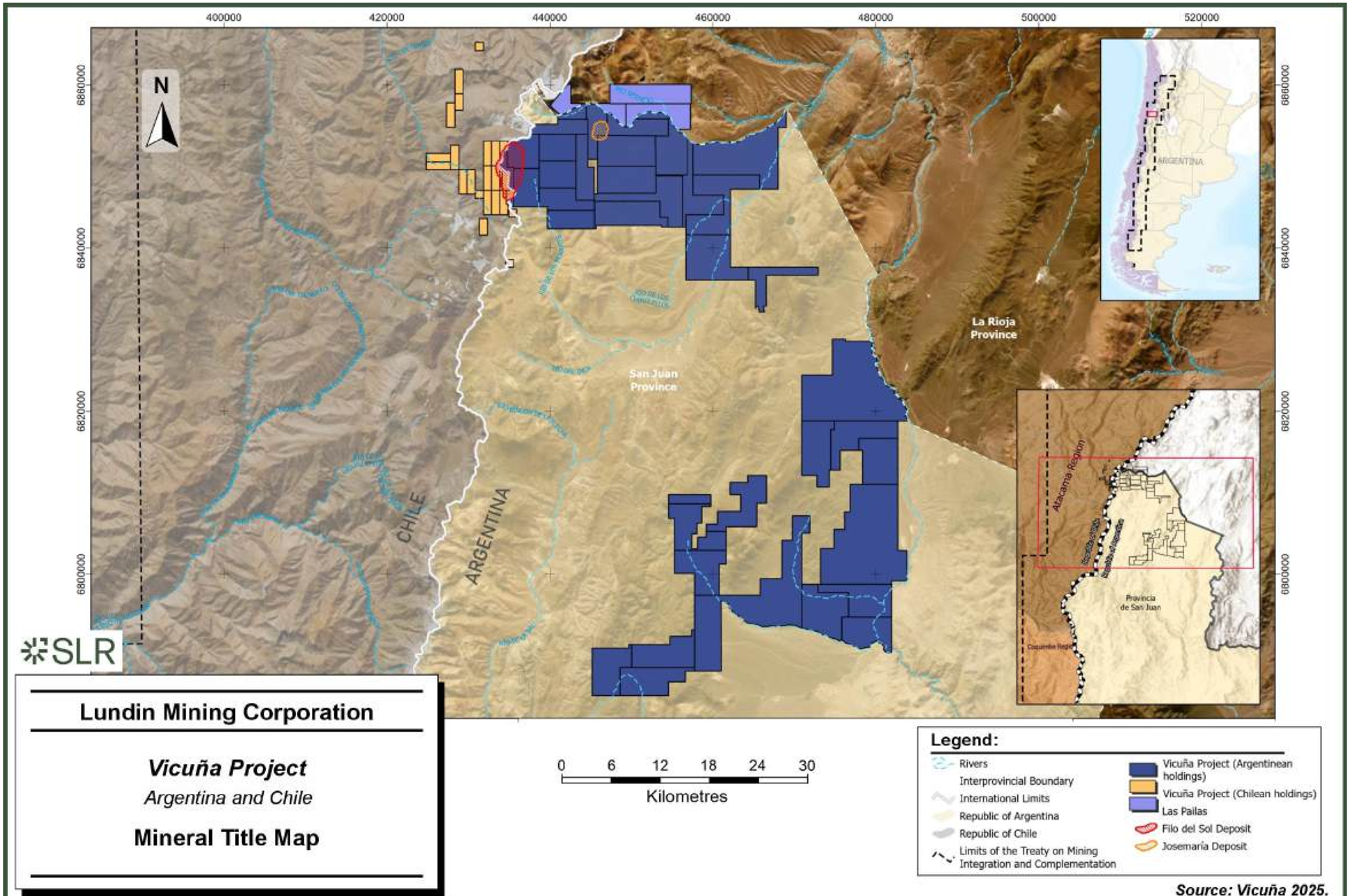
- Deprominsa: holds the mineral concessions in Argentina associated with the former Josemaría project;
- Las Pailas S.R.L.: holds the mineral tenures in the Argentinean province of La Rioja, referred to as the Las Pailas project;
- Filo del Sol Exploración S.A.: holds the mineral concessions in Argentina associated with the former Filo del Sol project;
- Vicuña Chile SpA (Vicuña Chile) [formerly known as Frontera Chile Limitada (Frontera Chile)]: holds the mineral concessions in Chile associated with the former Filo del Sol project Tamberias property.

4.6 Project Mineral Tenure

A mineral tenure plan showing the locations of the mineral tenures in Argentina and Chile, in relation to the international border, is provided in Figure 4-2. The deposit locations in relation to the granted easements and surface rights are shown in Figure 4-3.

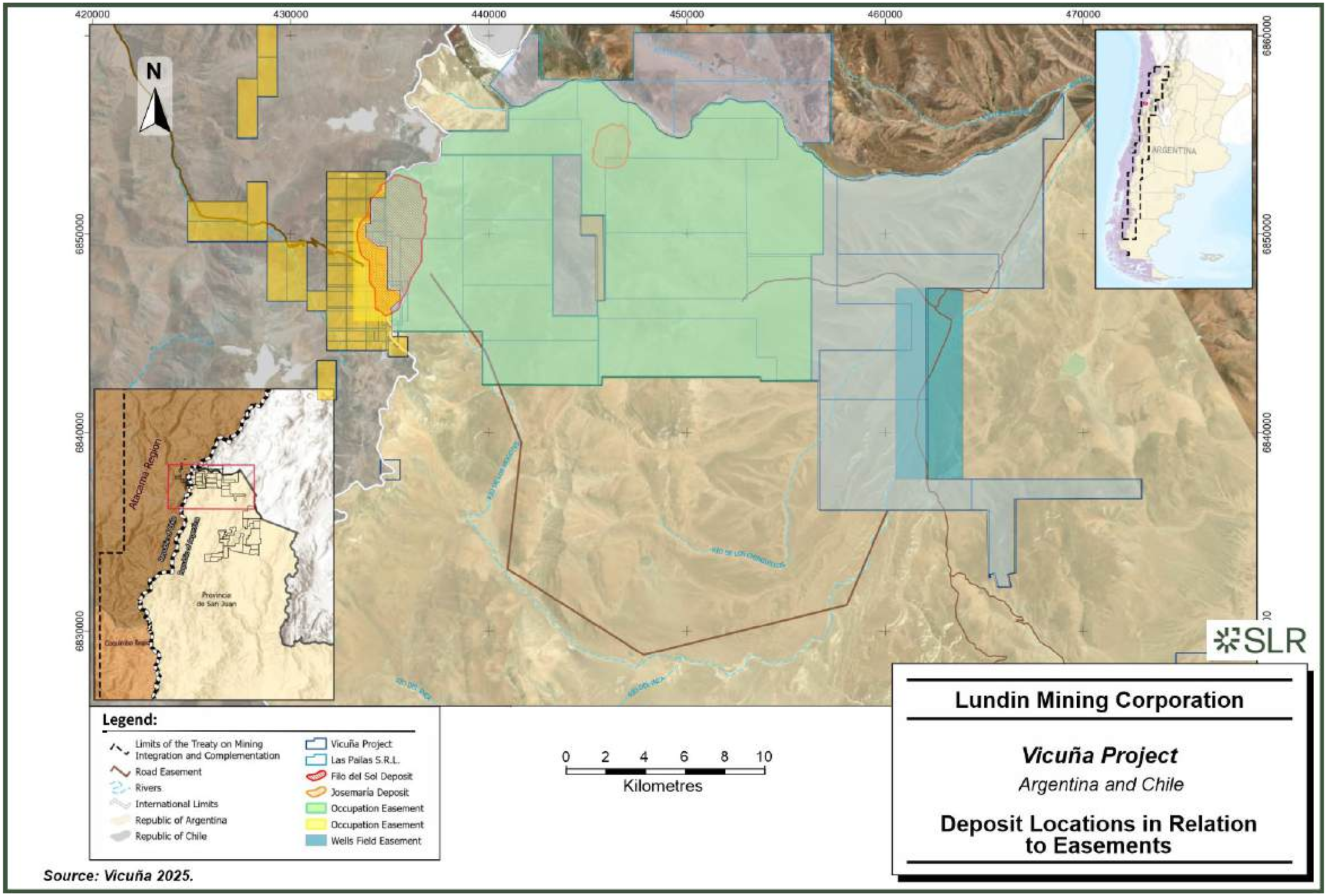
All mineral tenures were current at the effective date of this Technical Report.

Figure 4-2: Mineral Title Map



Source: Vicuña 2025.

Figure 4-3: Deposit Locations in Relation to Easements



Source: Vicuña 2025.

4.6.1 Mineral Tenure in Argentina

Mineral tenure in Argentina is held in the names of Filo del Sol Exploración S.A., Deprominsa, and Las Pailas S.R.L.

Deprominsa tenures in the Province of San Juan consist of 13 exploitation concessions (minas), and 10 exploration permits (cateos), covering a combined area of 93,041 ha (Table 4-3).

Las Pailas S.R.L. is the holder of mineral tenures in the Province of La Rioja, referred to as the Las Pailas project. This holding consists of three exploitation concessions (minas) covering a combined area of 5,129.91 ha.

In Table 4-3, the following are noted:

- Concessions in La Rioja Province are listed in the name of Energía y Minerales Sociedad del Estado (Energía y Minerales), a state-owned company. Deprominsa entered into an exploration agreement with Energía y Minerales with an option to purchase on November 19, 2021 (Energía y Minerales Agreement). The exploration agreement was registered with the La Rioja Province Mining Authority on December 3, 2021. As of April 22, 2025, Las Pailas S.R.L. holds the former contractual position held by Deprominsa in the Energía y Minerales Agreement.
- Concessions along the border between San Juan Province and La Rioja Province in Argentina have estimated areas only, as the border is not completely defined.
- The legal term of exploration concession 546.502-D-94 has expired. However, the exploration concession area is covered by the overlying exploitation concessions Josemaría 6 and Josemaría 7. The exploration concession is shown in the table, but the exploration concession hectare area is not included in the hectarage total.

Deprominsa is currently pursuing the registration of new mining properties with the Ministry of Mining of the Province of San Juan (Table 4-4). At the effective date of this Technical Report, the Ministry of Mining of the Province of San Juan had not yet issued a resolution on the matter. Four exploration permits in the Rio Blanco region are currently undergoing the process of conversion into mining properties before the Ministry of Mining of the Province of San Juan (Table 4-5).

Filo del Sol Exploración S.A. tenures consist of eight exploitation concessions (minas), covering a combined area of 9,226.19 ha.

A location plan showing the mineral tenures in Argentina is included as Figure 4-4.

The Mineral Resource estimate for the Josemaría deposit is hosted in the Josemaría 1, Josemaría 2, and Batidero I concessions. The portion of the Filo del Sol deposit in Argentina is hosted in the Vicuña 1, Vicuña 2, and Caballo 2 concessions.

Table 4-3: Mineral Title, Argentina

Name	Concession Type	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement/ Royalty or Payment
Río Blanco 1	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	520.0347-D-99	271	202,666	Yes	Approved	Lirio and JOGMEC(**)
Josemaría 1	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	414.280-L-04	1,222	878,222	Yes	Approved	Lirio and JOGMEC(**)
Josemaría 2	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	414.281-L-04	1,445	1,013,334	Yes	Approved	Lirio and JOGMEC(**)
Josemaría 3	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.284-D-14	2,053	1,418,667	Yes	Approved	Lirio and JOGMEC(**)
Batidero I	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	425.066-C-01	2,655	1824,001	Yes	Approved	Compañía Minera Solitario Argentina S.A and JOGMEC (**)
Batidero II	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	425.065-C-01	2,387	1,621,334	Yes	Approved	Compañía Minera Solitario Argentina S.A and JOGMEC(**)
Nacimiento 2	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.285-F-14	291	202,666	Yes	Approved	Filo Property Agreement (Net Smelter Return Royalty Agreement with Filo del Sol Exploración S.A.)
Vicuña 4	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	520.0447-B-99	1,062	743,111	Yes	Approved	(i) Filo Property Agreement (Net Smelter Return Royalty Agreement with Filo del Sol Exploración S.A.) (ii) Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa

Name	Concession Type	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement/ Royalty or Payment
Vicuña 3	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	520.0101-B-98	1,490	1.013.334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Josemaría 4	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.322-D-18	3,312	135,111	Yes	Submitted	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Josemaría 5	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.321-D-18	3,384	135,111	Yes	Submitted	N/A
Josemaría 6	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.034-D-2022	2,500	Payment will commence in the second half of 2025	Yes	Submitted	Lirio and JOGMEC (**)
Josemaría 7	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.035-D-2022	2,500	Payment will commence in the second half of 2025	Yes	Submitted	Lirio and JOGMEC (**)
Exploration permit	Cateo/Expired	San Juan	Desarrollo de Prospectos Mineros S.A.	546.502-D-94	3,499	Cateo legal term has expired	Yes	N/A	Lirio and JOGMEC (**)
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124.237-D-2019	1,876	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-391-D-2018	5,138	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-395-D-2018	1,441	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-389-D-2018	8,066	N/A	Yes	N/A	N/A

Name	Concession Type	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement/ Royalty or Payment
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-390-D-2018	7,344	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-392-D-2018	7,624	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-393-D-2018	8,881	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-394-D-2018	8,566	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-396-D-2018	9,765	N/A	Yes	N/A	N/A
Exploration permit	Cateo	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-397-D-2018	9,731	N/A	Yes	N/A	N/A
Caballo I	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	520-0323-C-99	451*	337,778	Yes	Approved	N/A
Caballo II**	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	520-0324-C-99	76*	87,823	Yes	Approved	N/A
Vicuña 1	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	520-0099-C-98	1,439*	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Vicuña 2	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	520-0100-C-98	1,483*	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Vicuña 5	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	425-247-B-00	1,500	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa

Name	Concession Type	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement/ Royalty or Payment
Vicuña 6	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	414-145-C-04	1,504	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Vicuña 7	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	1124-029-C-09	1,324	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Vicuña 8	Exploitation (manifestacion)	San Juan	Filo del Sol Exploración S.A.	1124-286-F-14	1,488	1,013,334	Yes	Approved	Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa
Las Pailas	Exploitation (mina)	La Rioja	Energía y Minerales Sociedad del Estado	31-E-1996	2,400	Exempt by provincial Law 9678	No	Submitted on 2 December, 2021	Optioned from Energía y Minerales Sociedad del Estado; option has not been exercised
Las Pailas I	Exploitation (mina)	La Rioja	Energía y Minerales Sociedad del Estado	83-E-1997	1,456.20	Exempt by provincial Law 9678	No	Submitted on 2 December, 2021	Optioned from Energía y Minerales Sociedad del Estado; option has not been exercised
Las Pailas II	Exploitation (mina)	La Rioja	Energía y Minerales Sociedad del Estado	84-E-1997	1,213.35	Exempt by provincial Law 9678	No	Submitted on 2 December, 2021	Optioned from Energía y Minerales Sociedad del Estado; option has not been exercised

Note: * Area uncertain due to undefined National or Provincial boundary. N/A = not applicable. ** JOGMEC = the Japan Oil, Gas and Metals National Corporation. Lirio = Lirio family.

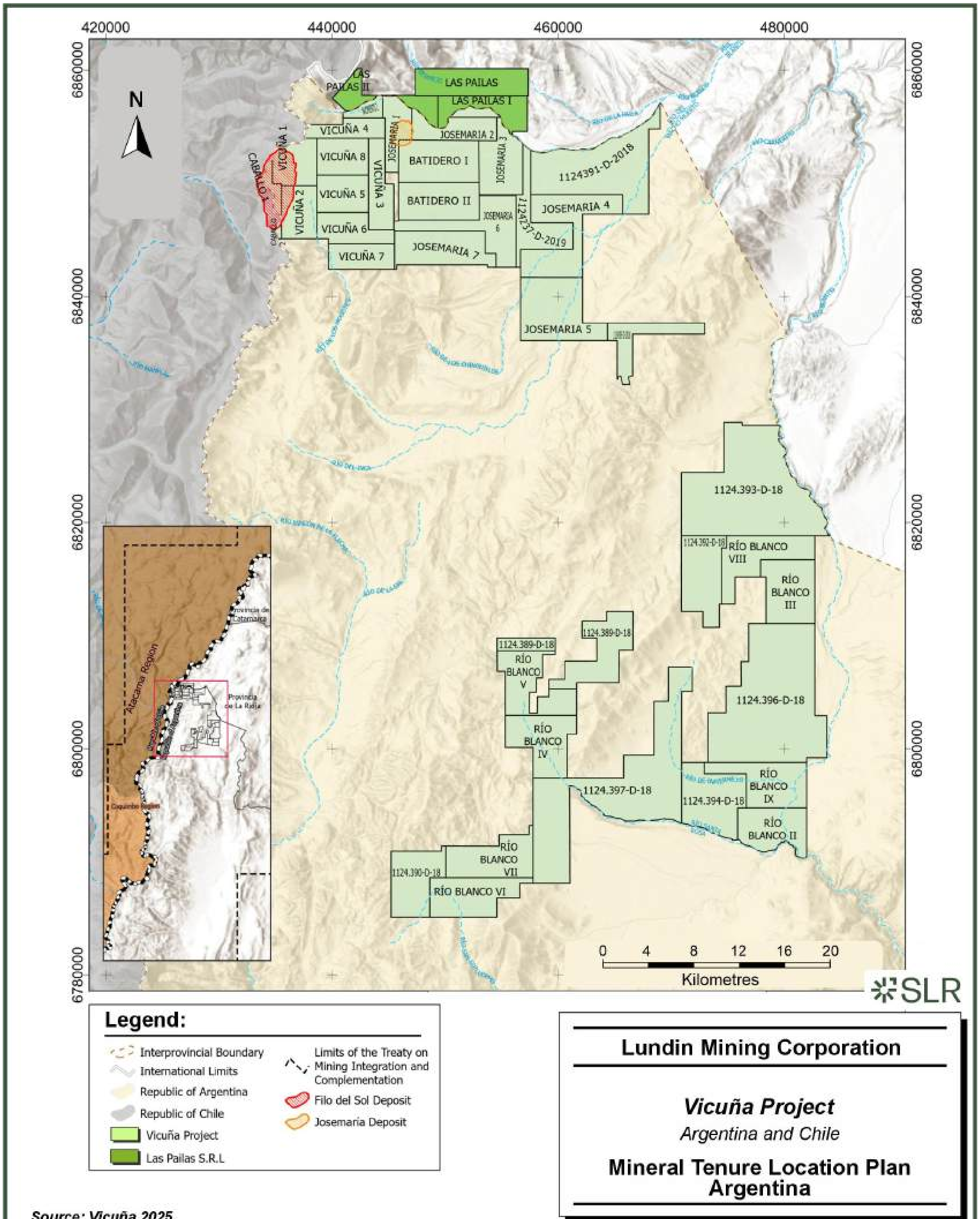
Table 4-4: Mineral Title, Argentina New Properties Under Registration

Name	Concession Type	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement
Josemaría 8	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-479-2024	2,500 requested	N/A	N/A	N/A	N/A
Josemaría 9	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-480-2024	2,500 requested	N/A	N/A	N/A	N/A
Josemaría 10	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-481-2024	2,500 requested	N/A	N/A	N/A	N/A
Josemaría 11	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-482-2024	2,500 requested	N/A	N/A	N/A	N/A
Josemaría 12	Exploitation (mina)	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-483-2024	2,582 requested	N/A	N/A	N/A	N/A

Table 4-5: Mineral Title, Argentina Exploration Permits Under Conversion To Mining Properties

Name	Concession Type	Prior Right	Mining Authority	Holding Entity	File Number	Area (ha)	Annual Fee (ARS)	Environmental Impact Report	Investment Plan	Option Agreement
Rio Blanco II	Exploitation (mina)	Cateo File No. 1124-394-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-154-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco III	Exploitation (mina)	Cateo File No. 1124-392-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-153-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco IV	Exploitation (mina)	Cateo File No. 1124-389-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-152-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco V	Exploitation (mina)	Cateo File No. 1124-389-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-151-2025	2,499.6	N/A	Yes	N/A	N/A
Rio Blanco VI	Exploitation (mina)	Cateo File No. 1124-390-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-155-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco VII	Exploitation (mina)	Cateo File No. 1124-390-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-156-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco VIII	Exploitation (mina)	Cateo File No. 1124-392-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-150-2025	2,500	N/A	Yes	N/A	N/A
Rio Blanco IX	Exploitation (mina)	Cateo File No. 1124-394-D-2018	San Juan	Desarrollo de Prospectos Mineros S.A.	1124-149-2025	2,500	N/A	Yes	N/A	N/A

Figure 4-4: Mineral Tenure Location Plan, Argentina



Source: Vicuña 2025.

4.6.2 Mineral Tenure in Chile

Mineral tenure in Chile is held in the name of Vicuña Chile. The tenures consist of 47 mining concessions, all of which have been granted, comprising:

- 21 granted mining exploitation concessions and one mining exploitation concession under the registration process, collectively covering an area of 3,329 ha (Table 4-6);
- 25 mining exploration concessions covering an area of 6,390 ha (Table 4-7);

The actual claim area and the estimated claim area do not match for a number of reasons:

- Concessions that are listed in the name of Compañía Minera Tamberías SCM are subject to a unilateral and irrevocable option to purchase agreement initially signed with Sociedad Contractual Minera Frontera del Oro SpA (Frontera). The public deed is dated March 25, 2011 before the Santiago Notary Public of Antonieta Mendoza Escalas. Frontera assigned the option agreement to Vicuña Chile by public deed dated July 27, 2012, before the Santiago Notary Public of Antonieta Mendoza Escalas. Vicuña Chile may exercise the option agreements within the period that ends on June 30, 2026.
- Concessions along the border between Argentina and Chile have estimated areas only, as the border is not completely defined.
- Vicuña Chile controls two layers of claims, which overlap.

A location plan showing the mineral tenures in Chile is included as Figure 4-5.

The Mineral Resource estimate for the portion of the Filo del Sol deposit that is in Chile is hosted in the Vicuña 8 1/30; Vicuña 9 1/30; Vicuña 10 1/30; Vicuña 11 1/30; Vicuña 13 1/30; Vicuña 12 1/30; Tronco 1 1/41; Tronco 2 1/76; Tamberia 3 1/30; Tamberia 1 1/20; Tronco 6 1/39; Anillo 10 1/81; Austral 1/5; Tamberia ii 14, 1/28; and Tamberia ii 13, 1/40 concessions.

Table 4-6: Mineral Title, Chile, Mining Exploitation Concessions

No.	Concession Name	ID Number	Area (ha)	Expiration Date	Option Agreement Royalty
1	Vicuña 8 1/30	032032884	300	N/A	Compañía Minera Tamberías SCM Royalty
2	Vicuña 10 1/30	032032886	300	N/A	Compañía Minera Tamberías SCM Royalty
3	Vicuña 11 1/30	032032887	300	N/A	Compañía Minera Tamberías SCM Royalty
4	Vicuña 13 1/30	032032888	300	N/A	Compañía Minera Tamberías SCM Royalty
5	Vicuña 7 1/12	032032881	120	N/A	Compañía Minera Tamberías SCM Royalty

No.	Concession Name	ID Number	Area (ha)	Expiration Date	Option Agreement Royalty
6	Vicuña 9 1/30	032032885	300	N/A	Compañía Minera Tamberías SCM Royalty
7	Vicuña 12 1/30	032032882	300	N/A	Compañía Minera Tamberías SCM Royalty
8	Vicuña 14 1/30	032032889	300	N/A	Compañía Minera Tamberías SCM Royalty
9	Tronco 1 1/41	032034145	41	N/A	Compañía Minera Tamberías SCM Royalty
10	Tronco 2 1/76	032034146	76	N/A	Compañía Minera Tamberías SCM Royalty
11	Tronco 3 1/50	032034147	50	N/A	Compañía Minera Tamberías SCM Royalty
12	Tamberia 3 1/30	032034048	300	N/A	Compañía Minera Tamberías SCM Royalty
13	Tamberia 1 1/30	032034047	300	N/A	Compañía Minera Tamberías SCM Royalty
14	Tamberia 1 1/20	032034046	200	N/A	Compañía Minera Tamberías SCM Royalty
15	Tronco 6 1/39	032034193	178	N/A	Compañía Minera Tamberías SCM Royalty
16	Anillo 10 1/81	032034351	81	N/A	Compañía Minera Tamberías SCM Royalty
17	Anillo 11 1/19	032034352	19	N/A	Compañía Minera Tamberías SCM Royalty
18	Frontera IV 1/60	032037278	300	N/A	N/A
19	Frontera V1/60	032037279	300	N/A	N/A

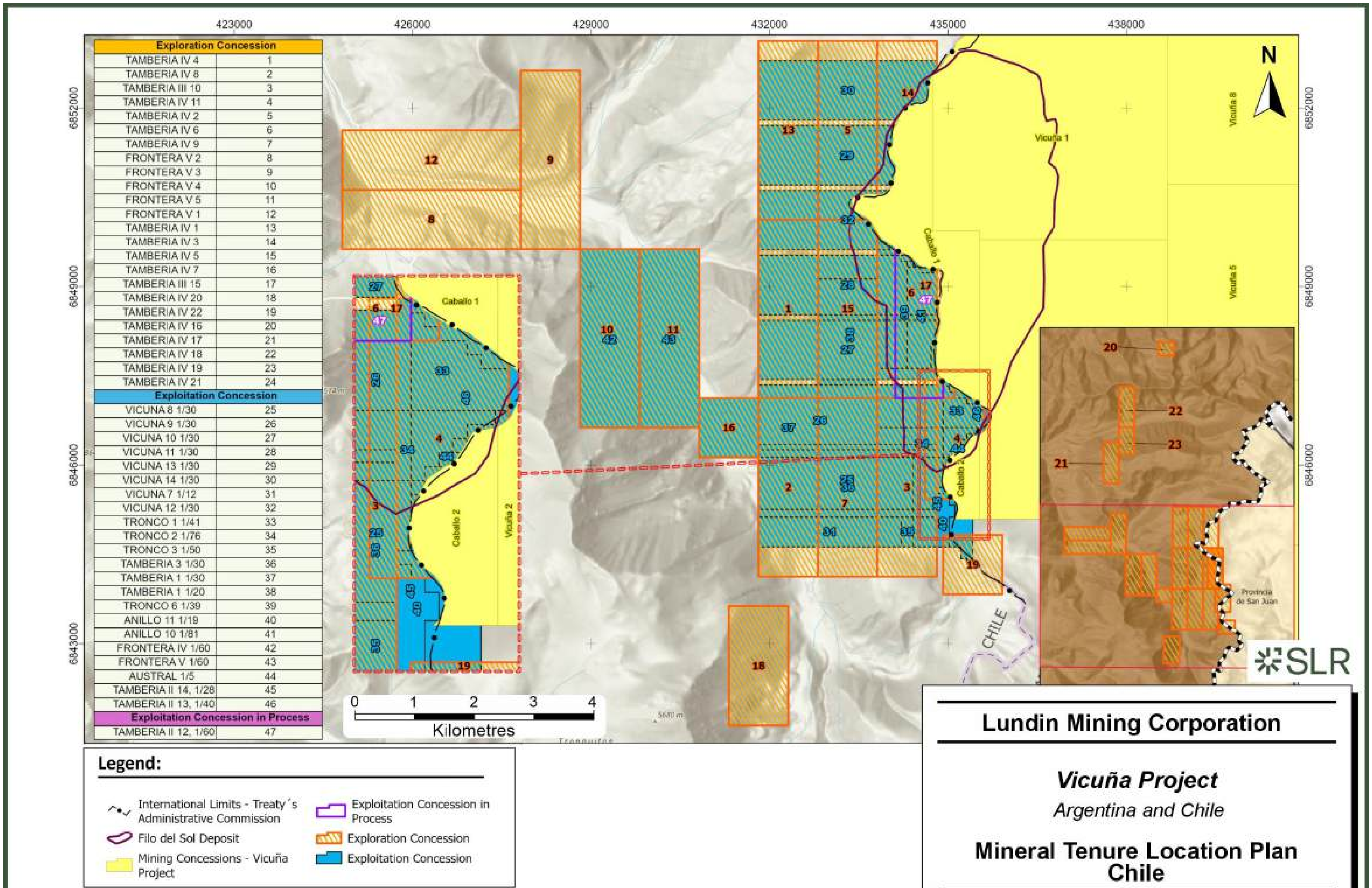
No.	Concession Name	ID Number	Area (ha)	Expiration Date	Option Agreement Royalty
20	Austral 1/5	032034757	5	N/A	N/A
21	Tamberia II, 13 1/40	032037751	300	N/A	N/A
22	Tamberia II 14, 1/40** (now, "Tambería II 14, 1/28")	032037763	200	N/A	N/A
Note: N/A = not applicable. Tamberia II 12, 1/60 is under registration process. Only pending matter for its registration is that the court issues the constitutive sentence of the mining exploitation concession. ** Note that Tamberia II 14, 1/40 has filed a change of name on April 22, 2025, to Tamberia II 14, 1/28, which is currently under registration with the SERNAGEOMIN. Maps will outline the new name "Tamberia II 14, 1/28".					

Table 4-7: Mineral Title, Chile, Mining Exploration Concessions

No.	Concession Name	ID Number	File No.	Area (ha)	Expiration Date (day/month/year)	Option Agreement Royalty
1	Tamberia III 10	03203-G580-K	V-335-2021	300	28-01-2026*	N/A
2	Frontera V 1	03203H490 -6	V-1465-2022	300	29-06-2027	N/A
3	Frontera V 2	03203H489 -2	V-1472-2022	300	19-05-2027	N/A
4	Frontera V 3	03203H488 -4	V-1465-2022	300	22-05-2027	N/A
5	Frontera V 4	03203H487 -6	V-1473-2022	300	31-05-2027	N/A
6	Frontera V 5	03203-H682-8	V-449-2023	300	30-08-2027	N/A
7	Tamberia IV 1	03203-H818-9	V-1235-2023	300	30-11-2027	N/A
8	Tamberia IV 3	03203-H859-6	V-1237-2023	300	23-11-2027	N/A
9	Tamberia IV 5	03203-H819-7	V-1234-2023	300	23-11-2027	N/A
10	Tamberia IV 7	03203-H858-8	V-1236-2023	100	23-11-2027	N/A
11	Tamberia IV 4	03203-H839-1	V-1238-2023	300	28-12-2027	N/A
12	Tamberia IV 8	03203-H843-K	V-1237-2023	300	28-12-2027	N/A
13	Tamberia IV 2	03203-H868-5	V-1239-2023	300	29-01-2028	N/A

No.	Concession Name	ID Number	File No.	Area (ha)	Expiration Date (day/month/year)	Option Agreement Royalty
14	Tamberia IV 6	03203-H866-9	V-1238-2023	300	29-01-2028	N/A
15	Tamberia IV 9	03203-H865-0	V-1237-2023	300	29-01-2028	N/A
16	Tamberia IV 11	03203-H831-6	V-1233-2023	200	06-02-2028	N/A
17	Tamberia III 15	03203-I041-8	V-1119-2024	300	23-10-2028	N/A
18	Tamberia IV 16	03203-I043-4	V-1176-2024	100	03-10-2028	N/A
19	Tamberia IV 17	03203-I042-6	V-1134-2024	300	23-10-2028	N/A
20	Tamberia IV 18	03203-I046-9	V-1128-2024	300	15-10-2028	N/A
21	Tamberia IV 19	03203-I040-K	V-1131-2024	200	09-10-2028	N/A
22	Tamberia IV 20	03203-I044-2	V-1132-2024	200	03-10-2028	N/A
23	Tamberia IV 21	03203-I039-6	V-1175-2024	100	09-10-2028	N/A
24	Tamberia IV 22	03203-I045-0	V-1127-2024	100	15-10-2028	N/A
* Note: Vicuña Chile is in the process of renewing the exploration concession on this property.						

Figure 4-5: Mineral Tenure Location Plan, Chile



Source: Vicuña 2025.

4.7 Project Surface Rights

4.7.1 Surface Rights In Argentina

The mineral tenures held by Filo del Sol Exploración S.A. and a portion of the mineral tenures held by Deprominsa are located in the "Cerro el Potro" area, which falls within the multiple use area of the San Guillermo Provincial Reserve, where mining activities are fully authorized. The landownership of this area has not yet been determined because of the lack of clear titles.

Part of the northern access road that was proposed as part of the historical feasibility study in 2020 on the Josemaría deposit falls within a buffer zone that has been designated by the San Guillermo Provincial Reserve. Activities within the buffer zone require environmental supervision and may also require prior approval by the Secretary of Environment and Sustainable Development.

The right to claim for compensation for the establishment of a mining easement lies with the surface owner holding valid and enforceable title. Notwithstanding this, the establishment of an easement may proceed if backed by a legal sufficient bond. At present, no such opposition nor any qualifying title meeting these requirements has been filed by the alleged landowners for the land overlapped by the mining property. However, four claimants, collectively the Lancaster Group, filed an opposition in all mining dockets, held at the time by Filo Mining, allegedly based on their capacity as owners of the "Los Tres Mogotes" ranch. Oppositions have been rejected by the company due to the lack of registered title for ownership, except for "Vicuña 7" in which there has been no response to Lancaster Group presentation yet. As of 2025, the Lancaster Group oppositions remain undecided by the Authority, which is a situation that is not preventing mining activity from being carried out. A mediation hearing was held but ended without a settlement.

The Lancaster Group has also filled an opposition in the road easement docket (Dossier No. 1124-163-F-2022), in which there has been no response yet, and the occupation easement docket (Dossier No. 1124-616-F-2021), that has been rejected by the company due to the lack of registered title for ownership. In this last easement, the Authority rejected the filing made by the Lancaster Group requesting the interruption of works.

The Lancaster Group has also presented oppositions as surface owners in the following dossiers: Vicuña 3 (No. 520-101-B-98), Vicuña 4 (No. 520-447-B-99), Rio Blanco 1 (No. 520-347-D-99), Batidero II (No. 425-065-C-01), Batidero I (No. 425-066-C-01), Josemaría 1 (No. 414-280-L-04), Josemaría 2 (No. 414-281-L-04), Josemaría 3 (No. 1124-284-D-14), Nacimiento 2 (No. 1124-285-F-14), Josemaría 4 (No. 1124-322-D-18), Josemaría 5 (No. 1124-321-D-18), and exploration permits 546.502- D-1994, 1124.237-D-2019, and 1124.391-D-2018. Oppositions have been rejected by the company due to the lack of registered title for ownership. As of 2025, the Lancaster Group oppositions remain undecided by the Authority, which is a situation that is not preventing mining activity from being carried out. Mediation hearings were held only regarding Josemaría 4, Josemaría 5, and exploration permit 1124.391-D-2018 but ended without a settlement.

The Lancaster Group has also filed an opposition to the camp and road easement (Dossier No. 425-354-C-02) and occupation easement (Dossier No. 1124-314-D-18). In addition, in relation to the camp and road easement, Francisco Biset e Hijos SRL has filed an opposition requesting to be deemed as surface rights holder since it states that it is the owner of 90% of the Campo San Guillermo. Mr. Damian Escobar, landowner of an area where the road easement passes, has filed a presentation, requesting a bond and compensation for being the owner of part of the land in which the road easement is located.

Deprominsa has requested before the Provincial Mining Authority certain occupancy easements for different activities related to the placement of infrastructure, the creation of roads and the use of water. Within these easements, certain authorizations have been granted, while others remain in process. Deprominsa has been granted three occupancy easements. One occupancy easement was granted for the proposed mine infrastructure contemplated in the historical feasibility study on the Josemaría deposit which included the Batidero camp and the road right-of-way that provides access to the Josemaría area. Another occupation easement was granted for the freshwater wellfield areas (CPA and CPB) and ancillary facilities that might be needed for logistic support. An additional occupation easement was granted for the construction of a camp, water intake and ancillary service and logistical support facilities.

Five additional easements are in process of being granted. Deprominsa has requested an occupancy easement for the installation of an antenna around La Brea and within the province of La Rioja.

An easement of occupancy for the right of drilling of water wells in the La Majadita area is also in process. Another occupation easements for the installation of certain facilities have been requested which are in the registration process, related to the installation of a high voltage powerline (LAT); extra high voltage powerline (LEAT), transformer station (ET Chaparro), and an access road easement for the transformer station.

An easement of occupancy has been requested for the installation of the La Guanaca camp which would be used during road construction.

Filo del Sol Exploración S.A. has been provisionally granted an occupation easement that encompasses all its mining tenures. Also, Filo del Sol Exploración S.A. is under the process of being granted a road easement and two occupation easements before the Mining Authority of the Province of San Juan.

No easements or surface rights are in place in Las Pailas mineral tenures in the Province of La Rioja. Regarding the Las Pailas mining tenures in the Province of La Rioja, on March 14, 2022, the Lancaster Group filed an opposition in the three mining tenures (Las Pailas, Las Pailas I, and Las Pailas II), claiming to be the surface rights owners of the lands covered by these mining rights by being owners of the “Los Tres Mogotes” ranch. As of 2025, the oppositions of the Lancaster Group have only been alleged and remain unapproved by the Mining Authority, which has not yet ruled on the matter.

4.7.2 Surface Rights In Chile

Vicuña Chile has entered into two agreements to secure access to the Tamberías property. Vicuña Chile entered into an easement agreement with a local community, Comunidad Civil Ex-Estancia Pulido. Vicuña Chile entered into an easement agreement with Carmen del Rosario Olivares, the surface rights owner of the land that connects public roads with the Ex-Estancia Pulido estate, and which authorizes Vicuña Chile to access and transit such land with the Project’s vehicles, equipment, and personnel. Vicuña Chile has an agreement with both landowners to provide access to the property for a period of four years, beginning on November 30, 2021. The company is engaged in current negotiations to extend these agreements for a period of another four years, prior to the expiration of the existing agreements.

Compensation was timely paid in full by Vicuña Chile for both easements. Both agreements are transitory agreements, which have been replaced by new agreements on several occasions. Both agreements are legally effective since they were executed with the issuance of the public deed and both agreements are binding for the parties.

4.8 Project Water Rights

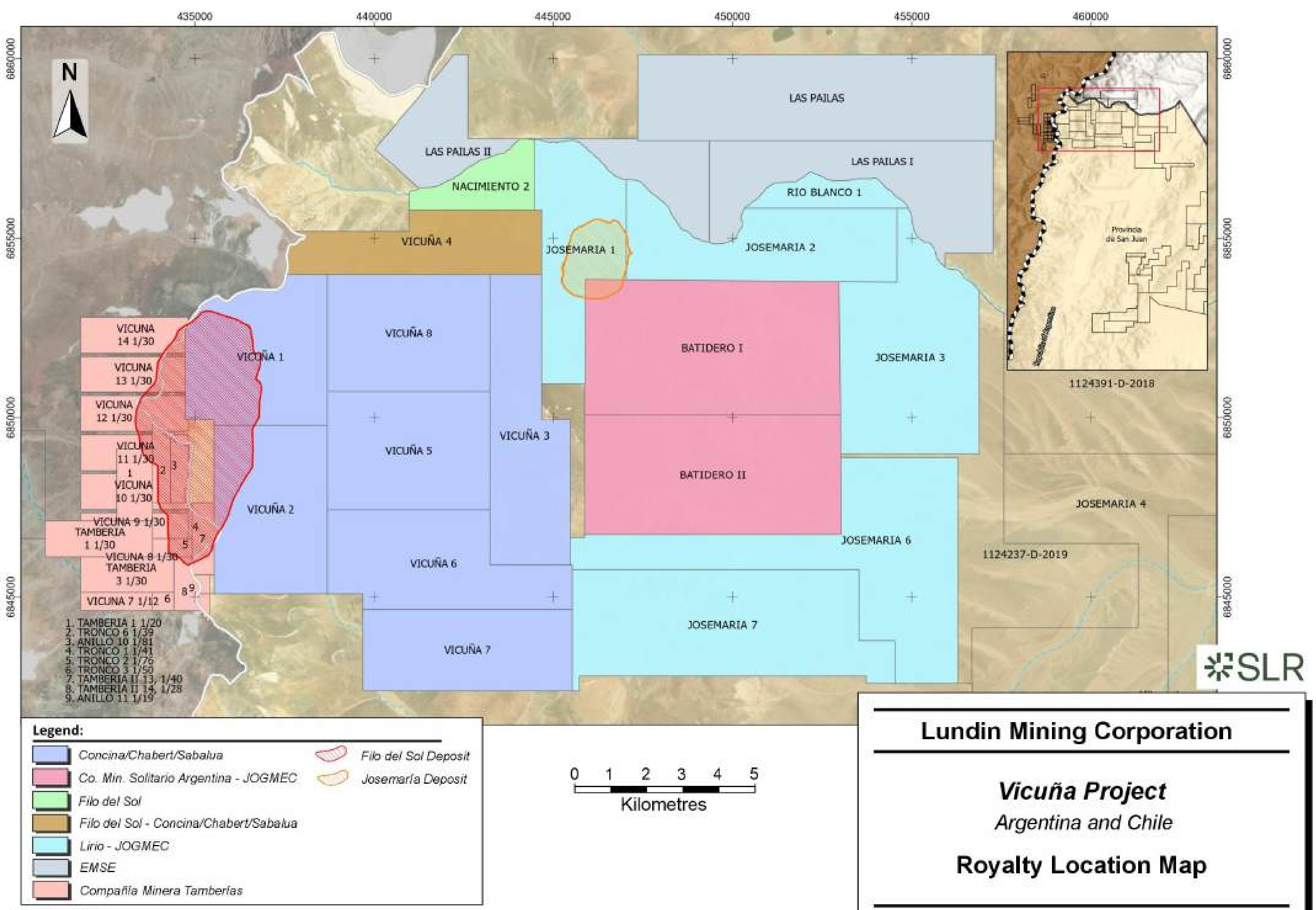
For the mineral tenures in San Juan Province, water rights are owned by the Province. Temporal water permits are used for exploration activities. It is likely that a similar approach will be used during any future construction activities. An understanding of the volume of water needed for processing is a prerequisite for any environmental approval of a water concession application. Once the environmental approval is granted, the sectorial water concession permit can be applied for.

For the mineral tenures in Chile, water rights are privately held.

4.9 Project Royalties and Encumbrances

Figure 4-6 shows the location of the various royalty agreements in relation to the mineral tenures.

Figure 4-6: Royalty Location Map



Source: Vicuña 2025.

4.9.1 Royalties in Argentina

4.9.1.1 Private Royalties

The following royalties are applicable to the Argentinean mineral tenures.

Lirio Royalty

The Lirio property was acquired from the Lirio family through an exploration agreement with an option to purchase, dated July 15, 2003. This option was exercised on June 25, 2009.

Deprominsa holds a 100% interest in the Lirio property, subject to a 0.5% net profit interest (NPI) royalty (for a period of 10 years), and an additional $2 million payment within six months of the completion of the second full year of mine operations.

The Lirio property agreement covers most of the Mineral Resource estimate associated with the Josemaría deposit.

Batidero Royalty

The Batidero property was acquired through an agreement with Compañía Minera Solitario Argentina S.A. dated July 1, 2002 and transferred to Deprominsa through public deed No. 01 dated January 4, 2013.

Deprominsa holds a 100% participating interest in the Batidero property, subject to a 7% NPI.

A small portion of the currently estimated Mineral Resource on the Josemaría deposit would be subject to the Batidero royalty.

Filo Property Agreement (Net Smelter Return Royalty Agreement with Filo del Sol Exploración S.A.)

The Filo del Sol property was acquired from Filo del Sol Exploración S.A., a subsidiary of Filo Mining, through an agreement dated January 11, 2018 (Filo Property Agreement).

Deprominsa holds a 100% interest in the Filo del Sol property subject to a 3.0% net smelter return (NSR) royalty in favour of Filo del Sol Exploración S.A. Deprominsa has the right to buy back 2% of the NSR for an aggregate of $2 million.

On May 13, 2024, a Royalty Buyback Agreement was executed and Deprominsa executed its right to buy back 2% of the NSR for US$500,000. Filo del Sol Exploración S.A. will continue to hold a 1% NSR royalty.

No Mineral Resources are currently estimated within the area covered by the Filo Property Agreement.

JOGMEC Purchase and Sale Agreement

This agreement is not strictly a royalty, but rather a payment upon occurrence of specific construction and production milestones.

Through a Purchase and Sale Agreement dated November 9, 2017, JOGMEC sold to NGEx the JOGMEC interest in the JEA in regard to the Josemaría project, free and clear of all encumbrances in exchange for a purchase price comprised of two payments:

- US$5,000,000 upon a development decision being made (the construction milestone); and

- US$13,000,000 upon the commencement of commercial production (the production milestone).

The mining rights covered by this Purchase and Sale Agreement include the following mining concessions: Rio Blanco 1, Josemaría 1, Josemaría 2, Josemaría 3, Batidero I, and Batidero II.

JOGMEC Offtake Agreement

The JOGMEC Offtake Agreement, dated November 9, 2017, does not rule for a royalty but an offtake option to acquire up to 40% of the material produced from and after commencement of commercial production, at a price not exceeding prevailing market, in favour of JOGMEC.

The mining rights covered by the JOGMEC Offtake Agreement include the following mining concessions: Rio Blanco 1, Josemaría 1, Josemaría 2, Josemaría 3, Batidero I, and Batidero II.

Other Vicuña Royalty Joint Exploration Agreement

According to the JEA dated February 1, 2008, Deprominsa was contractually obligated to pay a 0.5% NSR royalty to JOGMEC over the net revenue extracted from any operating mine associated with the Nacimiento 2, Vicuña 3, and Vicuña 4 exploitation concessions.

When NGEx acquired Pan Pacific Copper's 40% interest in the Filo del Sol project (see discussion in Section 4.5.1), an agreement was made to exclude the former Filo del Sol project from the JEA, such that the project was no longer subject to the JEA.

No Mineral Resources are currently estimated within the area that was formerly covered by these royalty obligations.

Energía y Minerales Agreement

Under the Energía y Minerales Agreement, a contractual royalty of 3% of the fiscal year results, or 3% net profits interest is payable to Energía y Minerales if any part of the Las Pailas mineral tenure holdings is put into production. Deprominsa can purchase 1% of the NPI (33.33% of the royalty) for US$1.05 million once it has acquired the mineral tenure holdings. Deprominsa can purchase the remaining 2% of the NPI (the remaining 66.67% of the royalty) for US$2.1 million upon a decision to commence mine construction.

There are currently no Mineral Resources estimated within these tenures.

Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa

By means of an Exploration with Option to Purchase and Exploitation Agreement dated December 17, 2002, Deprominsa committed to pay to Raúl Ernesto Concina, Mario Roberto Chabert and Juan Carlos Sabalúa (the Owners) a one-time payment of US$1.1 million if any of the mining rights included in the agreement enters into production (Section 8.6). This amount should be paid six months after the end of the second fiscal year following the commencement of exploitation.

The mining rights covered by this agreement include the following mining concessions: Vicuña 1, Vicuña 2, Vicuña 3, Vicuña 4, Vicuña 5, exploration permit Dossier No. 334.214-C-92 (currently Vicuña 6 and Vicuña 7), and exploration permit Dossier No. 334-215-C-92 (currently Vicuña 8).

The portion of the Filo del Sol deposit that falls within the Vicuña 1 and Vicuña 2 concessions would be affected by this royalty.

4.9.2 Royalties in Chile

Vicuña Chile must pay an NSR royalty of 1.5% to Compañía Minera Tamberías SCM (as defined in the Tamberías Option Agreement) from the sale or transfer of the minerals, metals, or other mineral products, refined or not, from the mining concessions which are the subject matter of the Tamberías Option Agreement in the event that the option under the Option Agreement is exercised and Vicuña Chile acquires the mining concessions that are the object of such agreement. The royalty is paid each half year in US dollars, once Vicuña Chile has recovered the investments, including payment of third-party credits, costs, and expenses incurred in exploration, development and/or construction to convert the mineral tenures into a mine or mines capable of being commercially exploited.

Vicuña Chile has the pre-emptive right to prepay the royalty at any time at the price of US$20 million (half of which Vicuña Chile can choose to pay in Filo Corp. shares). If a third party makes an offer for the royalty, then Vicuña Chile has the right of first refusal to acquire the royalty by matching the price, terms and conditions set out in the third-party's offer.

The tenures subject to this royalty are provided in Table 4-8.

Table 4-8: Mineral Title Subject to Compañía Minera Tamberías SCM Royalty

Concession's Name	ID Number	Area (ha)	Expiration Date
Vicuña 8 1/30	032032884	300	N/A
Vicuña 10 1/30	032032886	300	N/A
Vicuña 11 1/30	032032887	300	N/A
Vicuña 13 1/30	032032888	300	N/A
Vicuña 7 1/12	032032881	120	N/A
Vicuña 9 1/30	032032885	300	N/A
Vicuña 12 1/30	032032882	300	N/A
Vicuña 14 1/30	032032889	300	N/A
Tronco 1 1/41	032034145	41	N/A
Tronco 2 1/76	032034146	76	N/A
Tronco 3 1/50	032034147	50	N/A
Tamberia 3 1/30	032034048	300	N/A
Tamberia 1 1/30	032034047	300	N/A
Tamberia 1 1/20	032034046	200	N/A
Tronco 6 1/39	032034193	178	N/A
Anillo 10 1/81	032034351	81	N/A
Anillo 11 1/19	032034352	19	N/A
Tamberia II, 13 1/40	032037751	300	N/A
Tamberia II 14, 1/40	032037763	200	N/A
Tamberia II 12 1/60	0320377528	290	N/A
Note: N/A = not applicable.			

4.10 Property Agreements

Deprominsa is contractually obliged to make construction and production milestone payments of US$5 million and US$13 million, respectively, to its former joint venture partner, JOGMEC, over a portion of the mineral tenures in Argentina, according to the Purchase and Sale Agreement dated November 9, 2017.

JOGMEC also has certain rights (according to the JOGMEC Offtake Agreement dated November 9, 2017) to acquire up to 40% of the material produced from the Rio Blanco I, Josemaría 1, Josemaría 2, Josemaría 3, Batidero I, Batidero II exploitation concessions and exploration permit 546.502-D-94 (currently the Josemaría 6 and Josemaría 7 concessions) at market terms and conditions.

4.11 Environmental Considerations

4.11.1 Baseline and Supporting Studies

A number of studies were completed in support of historical mining studies. These are summarized in Table 4-9.

Table 4-9: Baseline and Supporting Studies

Study	Comment
Meteorology	Collection of air temperature, precipitation, wind speed and wind direction, relative humidity, snowpack depth, albedo, and solar radiation data.
Noise and vibration	Ambient noise levels are generally low. Higher decibel readings of up to 53 dBA were associated with strong winds. Outside of the mineral exploration activity, there was no human-caused noise generation. In the baseline condition, ground vibrations were negligible. As part of proposed mine development activities for the Josemaría deposit, noise and vibration monitoring continued near the construction and exploration works and at various road locations potentially impacted by the Project. Monitoring locations include the Josemaría camp, the tailings storage facility and the town of Guandacol, to measure the impact of Project-related traffic on the local community.
Glaciology	Annual glacial and periglacial studies, development of a probabilistic permafrost distribution model, initiation of a cryosphere monitoring program (analysis of satellite imagery and ground truthing of glacial and periglacial cryoforms, continuous monitoring of weather conditions, ground surface temperatures, ground thermal regimes, and stream flows, together with time-lapse photogrammetry of selected cryoforms)
Hydrology	In the Chilean portion of the Project area, the Los Mogotes watershed flows into the Macho Muerto watershed, which ultimately feeds into the Blanco River watershed. The Upper Montoso River feeds into the Montoso River, which in turn feeds into the Pulido River, which is a tributary to the Copiapó River. In the Argentinean sector, the mineral tenures sit at the upper boundaries of both the Upper Rio Blanco and the Upper Arroyo Pircas de los Bueyes watersheds. The Arroyo Pircas de los Bueyes watershed flows into the Macho Muerto River, which ultimately feeds into the Rio Blanco, one of the principal rivers of the San Juan Province. The Rio Blanco is referred to as the Rio Jachal after passing through the Cuesta del Viento Reservoir. Regional hydrogeological studies and hydrogeological site studies were completed based on estimates of aquifer recharge values and surface runoff. Stream flows are highly influenced by snowmelt, with the highest flows usually occurring after big snowfall events between February and May. Inter-annual variability in streamflow records can be largely attributed to El Niño Southern Oscillation (ENSO) climate events.

Study	Comment
Soils	Soils were typically rated Class VIII under the U.S. Department of Agriculture Natural Resources Conservation Service rating. Such soils are generally considered to be non-productive for agricultural purposes.
Ecosystems	The Project is located within the High Andean Ecoregion, commonly referred to as “paramo” or alpine desert. The ecosystems can be divided into two large groups, steppe and wetlands (vegas). In general, the area is characterized by rocky terrain, and a resultant scarcity of vegetation. No persistent vegetation is observed above 4,700 MASL.
Flora	The dominant vegetation is characterized by xerophytic grasses. Patches of low bush steppe vegetation were noted at lower elevations. Wetlands or vegas are found in valley bottoms where hydrologic conditions allow. Since 2022, the different biotic and abiotic components of the vegas have been monitored with in-situ monitoring and satellite monitoring of plant cover.
Fauna	Faunal diversity is limited by the extreme habitat conditions. This results in a relatively low diversity of terrestrial vertebrate wildlife and a unique species composition, adapted to the extreme environmental conditions. The highest wildlife abundance is associated with vegas habitat. This includes several waterfowl species, passerine birds, and small mammals. Guanaco and vicuña are present in the general Project area and along the access road corridors.
Water quality and aquatic biota	Sites throughout the Filo del Sol deposit area and in downstream catchments were sampled for water quality and for invertebrates and phytoplankton. Species richness of invertebrates was very low in the upper Mogotes and Montoso Rivers. Invertebrates were found in much higher abundance in the Arroyo Pircas de Bueyes. No fish were identified.
Archaeology	A baseline study identified 54 archaeological sites of varying significance within the general Project area. The sites were generally composed of rock formations (circles, semi-circles, or walls), with some associated with lithic material. The spatial distribution of the archaeological sites clearly corresponds to the availability of water resources, since almost all of them are in the river basins associated with ravines, meadows, bodies of water, wetlands and valleys up to an approximate altitude of 4,300 MASL. A smaller percentage is located on hills and plateaus from where there is great visibility of the environment and the basins.
Geochemical testing	Tests included acid-base accounting (ABA), solid-phase elemental analysis, shake flask extraction, mineralogy analysis, and humidity cell testing. ABA results indicate that mineralization and tailings have very low neutralization potential. Neutralization potential is generally low for all samples that would be considered to be waste in any mining operation.

The environmental baseline and supporting studies characterized the physical, chemical, and biological aspects of the Project area, including water quality and quantity, geochemistry, and climate. Flora and fauna studies have identified species and their habitat that will require mitigation. Specific studies, relating to meteorology, noise, vibration, water flowrate, and water quality are ongoing.

However, Chilean environmental assessment authorities require recent baseline studies for the approval of an EIA or DIA, so the existing information must be updated and complemented for the preparation of the respective instrument.

Vicuña Corp. developed a Biodiversity Management Plan that includes several monitoring programs to determine the status of the plant communities, fauna, and limnology. The bioaccumulation of metals in aquatic biota is also monitored. A relocation program for both fauna (mainly low mobility rodents) and vegas (wetlands) is being implemented.

Vicuña Corp. created an Archaeological Management Plan for the archaeological sites in Argentina. That plan was submitted and approved by the Secretariat of Culture of the Province of San Juan and is currently being implemented. Sites were physically marked with signage to prevent any restricted activity from taking place.

An Environmental Management Program (EMP) that documents the processes, systems, and actions used to manage key environmental priorities and risks was completed.

Lundin Mining has a Responsible Mining Development Policy in place, which obligates the company to follow good international industry practices and recognized sustainability standards.

4.11.2 Permits in Support of Exploration Activities

The most recent DIA for exploration on the Argentinean mineral tenures was issued on January 7, 2025, and is valid for two years, whereupon it can be renewed.

The most recent RCA for exploration on the Chilean mineral tenures was issued on August 22, 2019 and is valid until 2027, whereupon it can be renewed.

The useful life of the exploration project was extended by virtue of the answer of the Environmental Assessment Service to a relevance consultation (consulta de pertinencia - by which a project holder asks whether certain changes to the content of the RCA require a mandatory environmental assessment) until January 2, 2027, whereupon it can be renewed.

Vicuña Chile has filed three relevance consultations for the amendment of the Project with the SEIA. The first one is related to RCA No. 192/2013; and the remaining two are related to RCA No. 100/2019.

In the first amendment, an application filed on August 30, 2016, Vicuña Chile consulted on the pertinence of entering into the SEIA the project “Modificaciones al proyecto de Prospección Minera Vicuña, Sector Tamberías”, which sought to introduce some changes to the original project authorized by RCA No. 192/2013. This request was resolved by Exempt Resolution No. 133 dated November 30, 2016, which declared that the consulted project did not require a mandatory filing with the SEIA.

In the second amendment, an application filed on January 22, 2020, Vicuña Chile filed a new relevance query on the pertinence of entering into the SEIA, this time in relation to the project called “Cambio método sondaje Proyecto Tamberías” which sought to introduce changes to the project approved by RCA No. 100/2019. The requested modification consisted of drilling 50 of the 153 drill holes remaining at that date, using the reverse air drilling method. Also, Frontera wanted to replace the three core drilling rigs with three reverse air drilling rigs. By Exempt Resolution No. 20200310117 of May 28, 2020, the Environmental Assessment Service (SEA) of the Atacama Region resolved that the project submitted for consultation of relevance did not require the mandatory assessment in the SEIA.

Finally, on June 13, 2022, Vicuña Chile submitted a new relevance consultation to the SEA regarding the pertinence of entering the SEIA of the project called “Actualización Vida Útil Proyecto Modificación Prospección Minera Vicuña, Sector Tamberías”, seeking to introduce modifications to the project approved by the RCA No. 100/2019, as it could not be developed in a normal way for reasons related to the social outbreak, COVID-19, and climatic interruptions typical of the mountain, among others, which hindered the normal development of the prospecting and drilling activities. More specifically, the objective of the project submitted for consultation was to modify and extend the useful life of the original project in three additional years (extending the Project’s lifespan to a total of 10 years). The consultation was resolved by the SEA of the Atacama Region through Exempt Resolution No. 202203101170 dated August 24, 2022, by which it was established that the consulted project did not require the mandatory assessment in the SEIA, as the project’s authorized impacts were not produced during the period of occurrence of the described circumstances, and therefore, the intended extension of the lifespan would not mean a modification in the extension, magnitude, or duration of said impacts. Therefore, in accordance with the SEA's criteria incorporated in the response to this relevance consultation, the project's current lifetime would be 10 years (and therefore, ending on January 2, 2027).

4.11.3 Environmental Liabilities

Existing environmental liabilities are limited to those associated with exploration activities, and would involve removal of the exploration camps and rehabilitation of drill sites and drill site access roads.

4.12 Permitting Considerations

All permits required to support exploration level activities were applied for and granted. However, according to the RCA for the exploration activities in Chile, the mine closure plan must be presented and approved before the end of the useful life of the project (i.e., January 2, 2027).

A number of permits will be required to support any future Project activities such as construction or development of a mining operation. Key permits are summarized in Section 4.2.4 and Section 4.3.4 for Argentina and Chile, respectively.

4.13 Social Considerations

4.13.1 Indigenous Communities

No indigenous people have been identified in the Argentine mineral tenure areas in San Juan Province. The government of San Juan Province confirmed that there are no registered indigenous groups in the likely Project area of influence. The Federal Instituto Nacional de Asuntos Indígenas provided confirmation in July 2021 that there are no indigenous communities in the Project area of influence in San Juan Province.

Guandacol, a community in La Rioja Province, has an indigenous community, known as the Coingua, which belongs to the Diaguita group and has registered its legal status with the Instituto Nacional de Asuntos Indígenas. However, that group is based in an urban community and does not have any registered traditional lands that fall within the Project mineral tenure. Lundin Mining, via Vicuña Corp., engages with the community on a regular basis.

There are identified communities and indigenous people of the Colla ethnic group in the Community of Tierra Amarilla in Chile. As part of the environmental permits for the Project exploration, an anthropological study was conducted in 2012 to ensure that impacts to the Colla del Torín Indigenous Community were minimized. Afterwards, during the environmental assessment process of the second DIA for the exploration project, a complementary report regarding indigenous communities was presented to prove the absence of significant impacts affecting them. Updated studies would be completed concomitant with future detailed mining studies.

Should any other indigenous group(s) be identified and registered, Lundin Mining and Vicuña Corp. will work with the relevant government entities to accommodate existing access to culture and livelihood in accordance with Convention 169 of the International Labour Organization.

4.13.2 Land Use

In Argentina, the nearest settlements or homesteads are more than 100 km from the Project. The nearest town is Guandacol, which is approximately 150 km distant from the Project, and accessed via remote mountain roads. Those few community members that live in this zone, either permanently or seasonally, have limited access to government resources or infrastructure. They are largely self-reliant, subsisting on small scale farming and ranching.

The largest population centre in Project proximity is the city of Copiapó, and the towns of Paipote and Tierra Amarilla in Chile. Mining is the dominant economic contributor to the Atacama Region and to Tierra Amarilla. It is responsible for nearly 90% of exports and 45% of the regional gross domestic product. There is a well-established workforce and supply chain for mineral activity in this area. Commercial agriculture in the Copiapó valley includes principally grape growing, but also olives, tomatoes, peppers, and other fruits and vegetables. At higher elevations, more proximate to the Project, the predominant economic activity is livestock ranching (sheep and cattle), primarily sold locally, accompanied with small-scale farming.

4.13.3 Community Relations

The Lundin Foundation (a registered Canadian non-profit organization that works with corporate partners, including Vicuña Corp., and stakeholders to improve the operations for the benefit of communities) developed a Community Relations Plan. The plan uses dialogue and communication using diverse formats (meetings, field visits, local media, and website information). It is based on a platform of community participation and joint decision-making processes.

A formal grievance mechanism/feedback process will be implemented. The mechanism will assign procedures and responsibilities to individuals to ensure the proper depth of response is provided.

Increased interaction with the communities and implementation of formalized engagement is planned to be concomitant with future detailed mining studies.

4.14 Environmental Liabilities, Permitting, and Other Significant Factors

The QPs are not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property that are not discussed in this Technical Report.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Access

The Vicuña Project can be accessed from either Copiapó, Chile or the City of San Juan, Argentina (refer to Figure 4-1).

Access from Copiapó is via the C-35 sealed road in a southeasterly direction through the towns of Tierra Amarilla and Punta del Cobre, along the Copiapó River valley through the small villages of Pabellon, Los Loros, La Guardia, and Iglesia Colorada. Past these villages, the road becomes the C-453 and continues towards the El Potro bridge for approximately 130 km. Crossing the bridge, a gravel road is used for the final 50 km of access to the Project area. The total driving time from Copiapó is approximately four hours.

Access from the City of San Juan runs northwards via National Route 40 (NR40), through the town of San Jose de Jachal to Guandacol. From Guandacol, travel is along approximately 220 km of gravel road toward the northwest to the Project area. Access via this route takes approximately nine to ten hours.

Vehicle access with a suitable four-wheel drive vehicle is possible to most of the property.

Prior mining studies had envisaged access to the Josemaría deposit via a planned new 220 km access road, referred to as the northern corridor access road, which would connect the deposit area to the town of Angualasto in Argentina, located close to the RN40 connecting to the City of San Juan.

Bi-national access to the Project area is provided through the Mining Integration and Complementation Treaty between Chile and Argentina (refer to discussion in Section 4.4).

San Juan has a domestic airport with daily scheduled flights to Buenos Aires, Argentina. Mendoza, 170 km south of the City of San Juan, has an international airport with limited flights to Santiago in Chile and elsewhere internationally and within Argentina. Copiapó has a modern airport and several daily flights to Santiago. A site within the Project area was identified that could be used for an airstrip for future personnel movements.

Through Lundin Mining's 80% ownership of the Candelaria Copper Mining Complex, Lundin Mining operates, and is the sole user of, the Punta Padrones concentrate export terminal in Chile, which is located near the entrance to Bahia de Caldera, approximately 300 km from the Project area. The terminal, which was constructed in 1995, has been in operation for almost 30 years. It covers an approximately 55 ha area, of which 35 ha is undeveloped. A seawater desalination plant was built in 2014. There is potential for any future mining operations to use this facility for cathode export and supply transshipment.

A second option for the export of concentrate may be the use of facilities at the Port of Caldera, located approximately 77 km from Copiapó. The port has several suitable existing terminals for the export of product and import of consumables.

5.2 Climate

The climate is dry to arid, frequently cold and windy, typical of the high Andes. Precipitation is unevenly distributed throughout the year, with the majority of the precipitation, in the form of rain and snow, occurring in the winter months from May to August.

It is expected that any future mining operation will be able to be conducted on a year-round basis.

Exploration fieldwork is generally possible from mid-October to early May. During winter, it is common to encounter severe operating conditions and continuous operation requires the presence of snow removal equipment to manage sudden snowfalls.

5.3 Local Resources and Infrastructure

The city of San Juan is the nearest major commercial centre to the Project in Argentina, with a population of approximately 818,000. Copiapó, in Chile, which has a population of approximately 175,000, is a regional mining hub.

Personnel to support exploration activities are mainly sourced from the San Juan Province, with some personnel coming from other parts of Argentina as well as Chile. Personnel for any future mining activities would be sourced from the San Juan Province and Argentina where possible, but could also be sourced in Chile, which has a robust mining industry and experienced mining staff.

Power could be sourced from either or both of the Argentinean and Chilean national grids. In Argentina, the closest likely interconnection point would be near the town of Rodeo. This alternative would require a new sub-station to be built at Rodeo, a new 500 kV transmission line that would extend 167 km north to a new substation at Chaparro, and a new 220 kV double-circuit transmission line that would extend 93 km northwest from Chaparro to the Josemaría deposit. In Chile, power could be sourced using a 127 km long, 110 kV, single circuit power transmission line that could be connected from the Filo del Sol deposit area to the Los Loros substation in Chile.

Water supplies are likely to be provided from aquifer sources in Argentina. Any such groundwater well fields would require permitting.

Previous mining studies identified potential locations for facilities assuming a heap leach operation associated with the Filo del Sol deposit and a sulphide plant process operation exploiting the Josemaría deposit:

- Filo del Sol deposit area: heap leach pad, waste rock storage facilities, pregnant leach solution, raffinate and water management ponds, solvent extraction and electrowin facility, workshops, truckshop and administrative buildings, and electricity/power facilities.
- Josemaría deposit area: stockpiles, waste rock storage facilities, process facility, truckshop and mine support facilities, tailings storage facility, administrative buildings, gatehouse, water and waste management facilities, fuel storage, and electricity/power facilities.

It is likely that any future mining studies would evaluate the location selections in these previous studies as a starting point. The previous mining studies support that there is sufficient area for the layout of infrastructure to support future mining operations.

The Project is remote, and little infrastructure is currently available other than road access, field offices, medical facilities, and contractor lay-down and storage facilities.

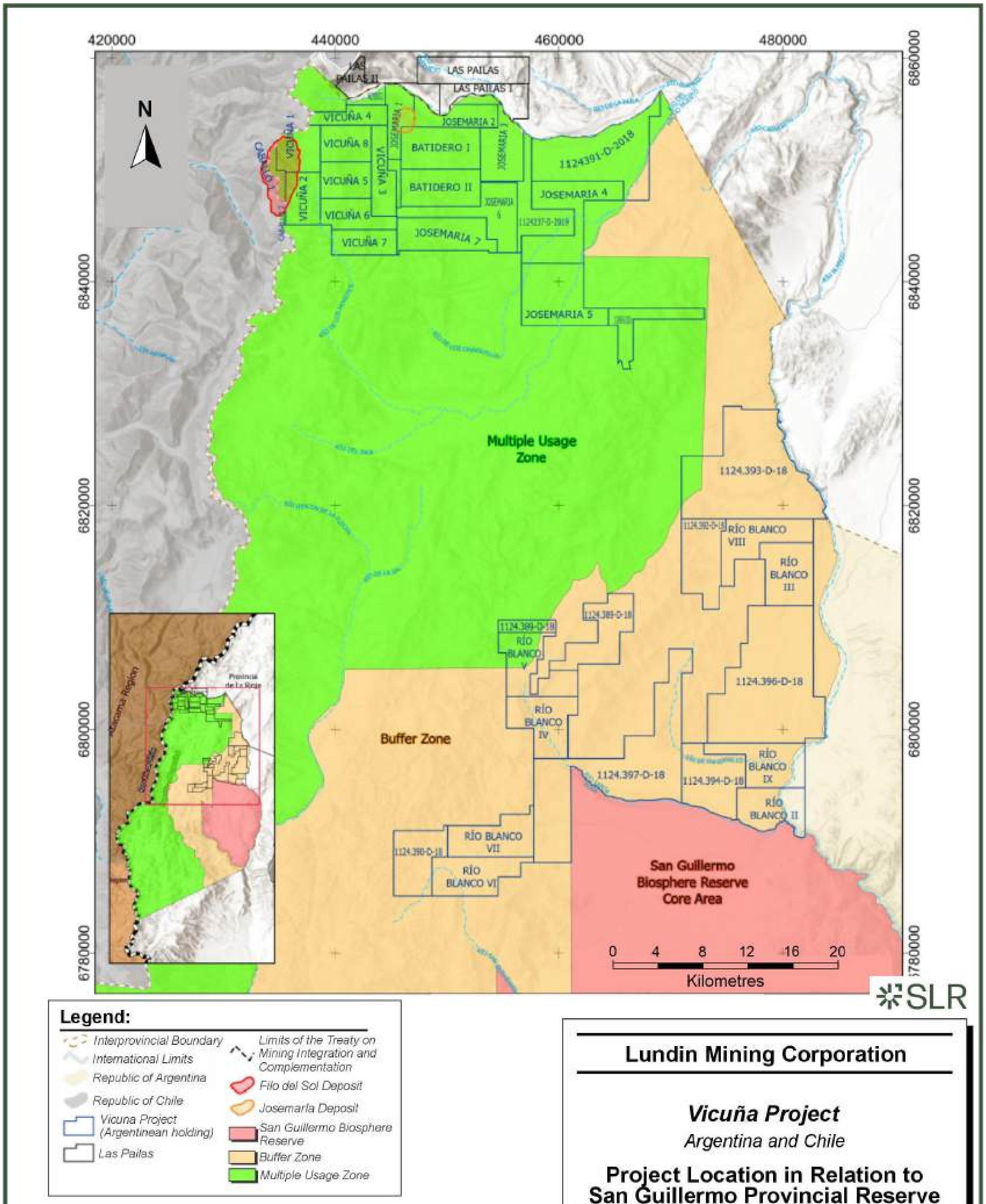
Field staff are based out of the Batidero camp, owned and operated by Vicuña. The 1,068-person Batidero camp is located in Argentina at an altitude of approximately 4,000 m and is approximately 32 km by gravel road from the Filo del Sol deposit and 14 km by gravel road southeast of the Josemaría deposit.

The geology/exploration buildings, as well as the on-site logging sampling facilities, are located approximately 400 m southeast of the main accommodations at the Batidero camp. The on-site logging facilities are used to quick-log drill core, take basic geotechnical measurements, and complete core scanning.

There are two main core shacks, and logging and sampling facilities. The core shacks used for the Josemaría drill programs are located in Chimbas, San Juan Province, Argentina, approximately 400 km southeast of the Batidero camp. The Filo del Sol core shack is located in Rodeo, Iglesia, San Juan Province, Argentina, approximately 365 km southeast of the Batidero camp.

The Project is partly located in the Iglesia Department of the Province of San Juan, within the “usos multiples”, or “multiple usage”, zone of the San Guillermo Provincial Reserve. Mining activities are fully authorized within this zone of the reserve. The Project location in relation to this reserve is shown in Figure 5-1.

Figure 5-1: Project Location in Relation to San Guillermo Provincial Reserve



Source: Vicuña 2025.

5.4 Physiography

The Project is located in the high Andes, with elevations ranging from 4,500 MASL at the valley bottom to 5,500 MASL at the Chile–Argentina border.

The topography in the western Project area is mountainous with moderately steep slopes leading to rounded ridges and peaks with varying steepness. Broad alluvial plains in the eastern Project area could be used for future infrastructure sites.

The Project is located within the High Andean Ecoregion, commonly referred to as paramo or alpine desert. In general, the paramo area is characterized by rocky terrain, and a resultant scarcity of vegetation.

The dominant vegetation type is xerophytic grass, which forms isolated tussocks. Patches of low bush steppe vegetation are also present in the lower elevation areas. Vegas, or wetland areas, are characterized by rushes and grass-like plants. No persistent vegetation is observed above 4,700 MASL.

The western Project area is situated in a glacial and periglacial belt that is characterized by permafrost and various cryoforms such as glaciers and rock glaciers.

5.5 Seismicity

Historically, seismic activity is highest along the coastal region of Chile, where earthquakes are generated by the Nazca (oceanic) plate subducting under the South America (continental) plate. This seismicity is associated with interface subduction earthquakes, intra-slab earthquakes in the subducted oceanic tectonic plate, and shallow crustal earthquakes on fault systems related to the tectonic pressures and crustal flexure caused by the subducting Nazca plate (Knight Piésold 2020).

Lettis Consultants International Inc. conducted seismicity assessments starting in 2022 as part of previous mining studies evaluating the Josemaría deposit to determine appropriate seismic design parameters for selected infrastructure locations such as the proposed process plant. Seismic ground motion parameters (including peak ground acceleration, spectral accelerations, and earthquake magnitude) were determined from probabilistic and deterministic seismic hazard analyses.

The maximum earthquake ground motion for seismic design was defined in earlier mining studies as the ground motion with a 2% probability of exceedance in 50 years (return period of 2,475 years), in accordance with the International Building Code.

6.0 History

6.1 Exploration History

The Project area was assembled from two previous project areas, the former Filo del Sol project and the former Josemaría project, each with an independent ownership history and internal property subdivisions within the project areas due to acquisitions or provincial and international boundaries. The ownership history is summarized in Table 6-1 below and set out in further detail in Section 4.5.1.

Table 6-1 also summarizes the exploration and development work completed to the effective date of this Technical Report.

Table 6-1: Project History

Operator	Year	Area	Work Completed
Sr Lino	Early 1990s	Josemaría	Acquired mineral tenure in the Project area.
Solitario	1993	Josemaría	Optioned the Lino property. Completed a small amount of prospecting.
Cyprus-Amax	1997–1999	Filo del Sol	Identified a gold-bearing silica and Cu-Au porphyry occurrence on the Chilean side of the border. Completed geological mapping, talus fine sampling, rock chip sampling, and 16 RC drill holes (2,519 m).
Solitario (Toscana Resources)	1998	Josemaría	Acquired Solitario and retained company as the operating entity in Argentina.
Tenke	1999–2007	Filo del Sol	Negotiated a purchase arrangement with Cyprus-Amax in August 1999. Signed a LOI with JOGMEC which allowed JOGMEC the right to acquire a 40% equity interest in the Filo del Sol project. Completed talus fines, trench, and rock channel sampling, ground-based magnetic, controlled source audio-magnetotelluric (CSAMT) and induced polarization (IP)–resistivity geophysical surveys, and drilling (two core drill holes (606.45 m) and 38 reverse circulation (RC) drill holes (8,548 m)).
Tenke	2000-2001	Filo del Sol	In 2000 and 2001, the Filo del Sol area was optioned to Rio Tinto, with Tenke's local subsidiary, Deprominsa, being the operator. 3,112 m of scout RC drilling was completed, following which Rio Tinto terminated the option agreement.
Solitario	2000–2001	Josemaría	Concluded a joint venture exploration agreement with Barrick Exploraciones de Argentina S.A. The agreement created a joint venture, Comparlia Minera San Juan S.A. However, when the joint venture was dissolved in 2001 and Compania Minera San Juan S.A. was deregistered and the mineral tenure returned to Solitario's ownership.
	2002	Josemaría	Option agreement (among other entities) with Tenke (subsequently Josemaría Resources).
Tenke/NGEx	2003–2018	Josemaría	Reconnaissance prospecting; geological mapping; talus fines sampling; rock chip and trench sampling; ground-based magnetic, CSAMT and IP–resistivity geophysical surveys; RC and core drilling; metallurgical test work, mining studies.

Operator	Year	Area	Work Completed
			Discovered Josemaría deposit in 2004. An initial Mineral Resource estimate was completed in 2006, and was subsequently updated in 2007, 2012, 2013, 2015, and 2016. Mineral Reserves were first reported in 2018. Completed preliminary economic assessment in 2016, and pre-feasibility study in 2018. Both studies envisaged open pit mining methods. Exploration activities over the Las Pailas tenures was conducted from 2005 to 2007, and consisted of geological mapping, talus fines, and rock chip sampling, IP–resistivity geophysical surveys, and ground and air magnetometry geophysical surveys.
Suramina	2007–2009	Filo del Sol	During 2008, the LOI was substituted for a Joint Exploration Agreement. Under this agreement, JOGMEC held an indirect 40% interest while Tenke's subsidiary Suramina and its subsidiaries held the remaining 60% interest. Completed talus fines sampling, ground-based magnetic and IP–resistivity geophysical surveys, and drilling (10 RC drill holes for 2,884 m).
NGEx	2009–2011	Filo del Sol	Suramina became a wholly-owned NGEx subsidiary. Completed geological mapping (1:5,000 scale), drilling (one core hole for 155.5 m).
	2011–2012	Filo del Sol	Entered into an option agreement with Compania Minera Tamberias SCM whereby NGEx could acquire a 100% interest in mineral concessions referred to as the Tamberias property in Chile. Subsequently added to the Filo del Sol property package. Completed pole–dipole IP survey, and drilling (seven core drill holes for 1,850.9 m).
JOGMEC	2012	Filo del Sol	Transferred its 40% rights to the Filo del Sol area to Pan Pacific Copper.
NGEx	2012–2016	Filo del Sol	Acquired the 40% Pan Pacific Copper interest in the Filo del Sol area in 2014. Completed geological mapping (1:5,000 and 1:7,500 scales); PIMA sampling, pole–dipole IP surveys, drilling (nine core drill holes (1.390.45 m) and 41 RC drill holes (15,153 m)), and Mineral Resource estimates.
Filo Mining Corp.	2016–2023	Filo del Sol	During 2016, NGEx transferred the Filo del Sol tenures to a new company, Filo Mining. Subsequently, NGEx completed the spin-out of its wholly-owned subsidiary, Filo Mining, transferring all of the project's assets and rights to the newly formed entity. Completed talus fines sampling, trenching, metallurgical sampling, drone magnetic, ground IP and magnetotelluric geophysical surveys, drilling (core drilling for 80,582.84 m and RC, for 19,567 m), metallurgical test work, mining and environmental studies. Updated Mineral Resource estimates in 2017. Mineral Reserves estimated 2019. Completed a preliminary economic assessment in 2017, and a pre-feasibility study in 2019. Both studies envisaged open pit mining methods.

Operator	Year	Area	Work Completed
Josemaría Resources	2019–2021	Josemaría	In July 2019, NGEx spun out its Los Helados project, together with other exploration properties, into NGEx Minerals, and changed its name to Josemaría Resources and retained ownership of the Josemaría property. Metallurgical test work, mining and environmental studies. Updated Mineral Resource and Mineral Reserve estimates in 2020 and 2021. Completed a feasibility study in 2020, assuming open pit mining methods. Undertook bridging engineering studies in 2021 to increase plant availability, provide additional production flexibility, review de-risking options for ore throughput, and define project infrastructure in more detail. Additional studies in support of project permitting
Lundin Mining	2022–2024	Josemaría	Acquired Josemaría Resources in 2022. Additional studies in support of project permitting. Completed risk reviews and additional engineering studies on aspects of the planned project development. Batidero exploration camp expanded to a total of 1,052 beds to accommodate the Early Works construction workforce. Early Works construction program initiated in 2022. Completed updated feasibility study in 2024. The study envisaged open pit mining methods. Exploration conducted over Portones, Batidero, and Cumbre Verde targets includes completed talus fine, trench and rock chip sampling, ground-based magnetic, magnetotelluric and IP–resistivity geophysical surveys and drilling (core, 102,95.6 m). An airborne geophysical survey (AFMAG) was also completed over the majority of the property. Hydrogeological exploration within the Rio Blanco tenures.
Filo Corp.	2023	Filo del Sol	Name change from Filo Mining Corp. Completed talus sampling, core drilling. Updated Mineral Resource and Mineral Reserve estimates. Additional studies in support of project permitting. Completed updated pre-feasibility study. The study envisaged open pit mining methods.
Vicuña Corp.	2024–Report effective date	Josemaría and Filo del Sol	Completed talus sampling, magneto-telluric and IP–resistivity geophysical surveys, geological mapping and drilling (62 core drill holes (60,893.9 m) primarily at Filo del Sol). Updated Mineral Resource and Mineral Reserve estimates. Retraction of mining studies and Mineral Reserves prior to a planned full re-evaluation of the Vicuña Project area. In mid-2024, Lundin Mining and BHP Canada entered into a definitive agreement with Filo Corp. to acquire the company, which was completed in January 2025. Concurrently with the completion of the Filo Corp. acquisition, Lundin Mining and BHP Canada formed the 50:50 ownership joint venture entity, Vicuña Corp., and Lundin Mining contributed the Josemaría project to the joint venture entity.

A number of mining studies have been completed on the Filo del Sol and Josemaría deposits. Mineral Resources reported in Section 14 of this Technical Report supersede all previous and historical Mineral Resource estimates pertaining to the Filo del Sol and Josemaría deposits. Elements of the historical studies are used to support the assessment of reasonable prospects for eventual economic extraction in Section 14. These historical studies (including the Mineral Resource and Mineral Reserve estimates reported therein) are not considered current and the Mineral Reserve estimates reported therein (to the extent applicable) are declassified.

6.2 Past Production

There has been no production from the Project area.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Vicuña Project area encompasses the crest of the central Andes mountain range along the Chile–Argentina border and the area eastward into Argentina at approximately 28.5° N (Figure 7-1).

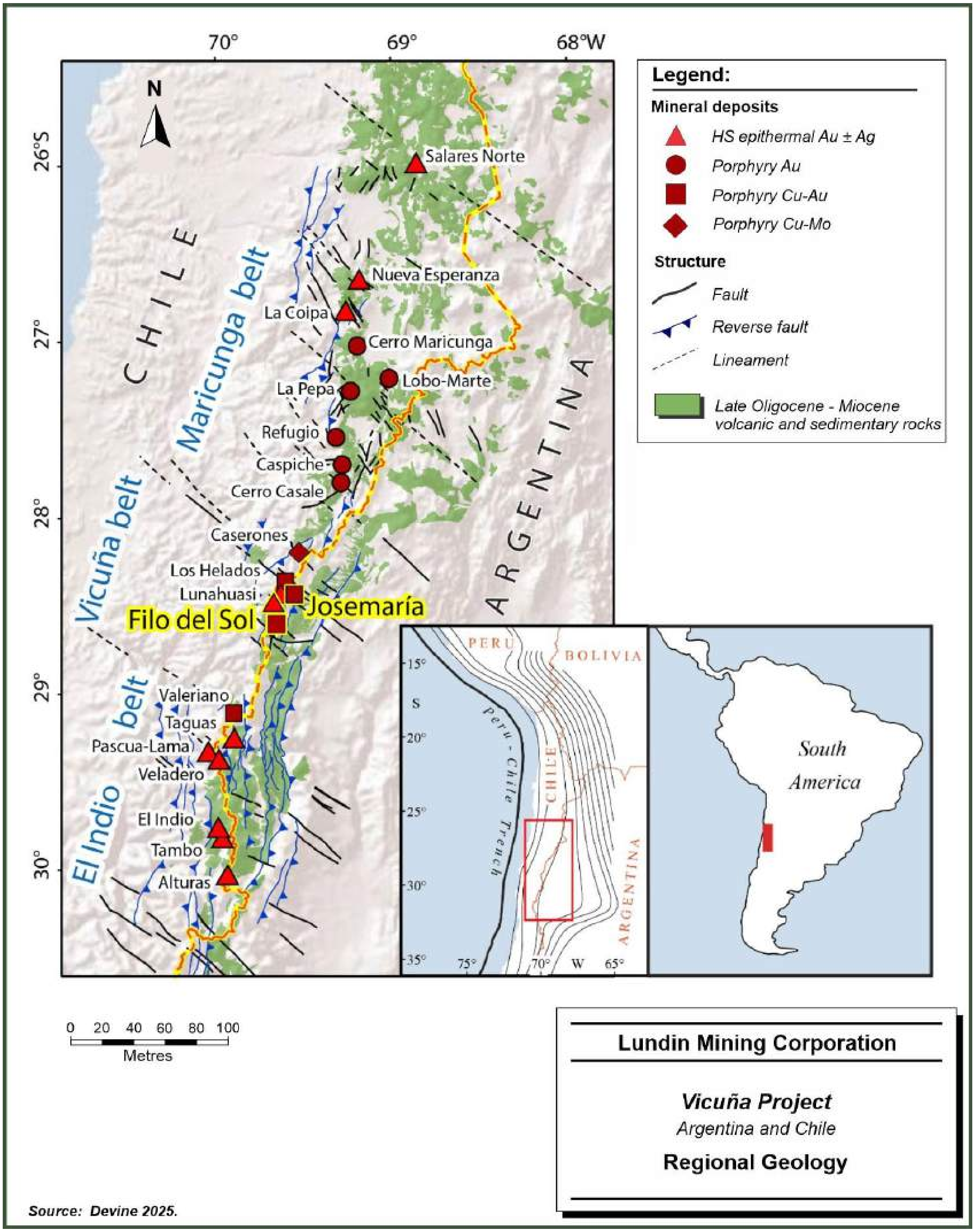
It forms a significant part of the Vicuña metallogenic belt, defined by a trend of copper and gold (± silver) mineralization related to porphyry and epithermal systems developed during compressive stages of Andean arc development. The Vicuña belt is correlative and age-equivalent with the Maricunga belt in Chile to the north, notable for its porphyry gold-copper systems, as well as the El Indio belt to the south, including Pascua Lama, notable for its high-sulphidation epithermal deposits (Figure 7-2).

Mineralization discovered to date in the Vicuña region is of two different ages, related to two distinct phases of Andean compression. Late Oligocene (25 Ma) porphyry Cu-Au deposits and prospects, including Josemaría porphyry copper-gold deposit, are aligned along a general north-south trend, and continue northward from the Vicuña belt into the Maricunga belt, across a zone of structural displacement (Figure 7-2). Middle Miocene (ca.12–16 Ma) porphyry copper-gold and associated copper-gold-silver epithermal systems occur slightly westward in the Vicuña belt, along the crest of the modern mountain range. These include Filo del Sol, Lunahuasi, and Los Helados, which are broadly age equivalent with porphyry-epithermal systems in the Maricunga and El Indio belts.

Basement rock within the Vicuña belt includes Permian–Triassic granitic and rhyolitic volcanic rocks, intruded by Triassic tonalite–diorite intrusive complexes. Latest Oligocene and Miocene porphyry intrusions and associated porphyry copper-gold and epithermal mineralization occur primarily within the Permian–Triassic basement rocks, but also locally within relatively small remnants of Late Oligocene–Miocene sedimentary and volcanic rocks where they have escaped erosion.

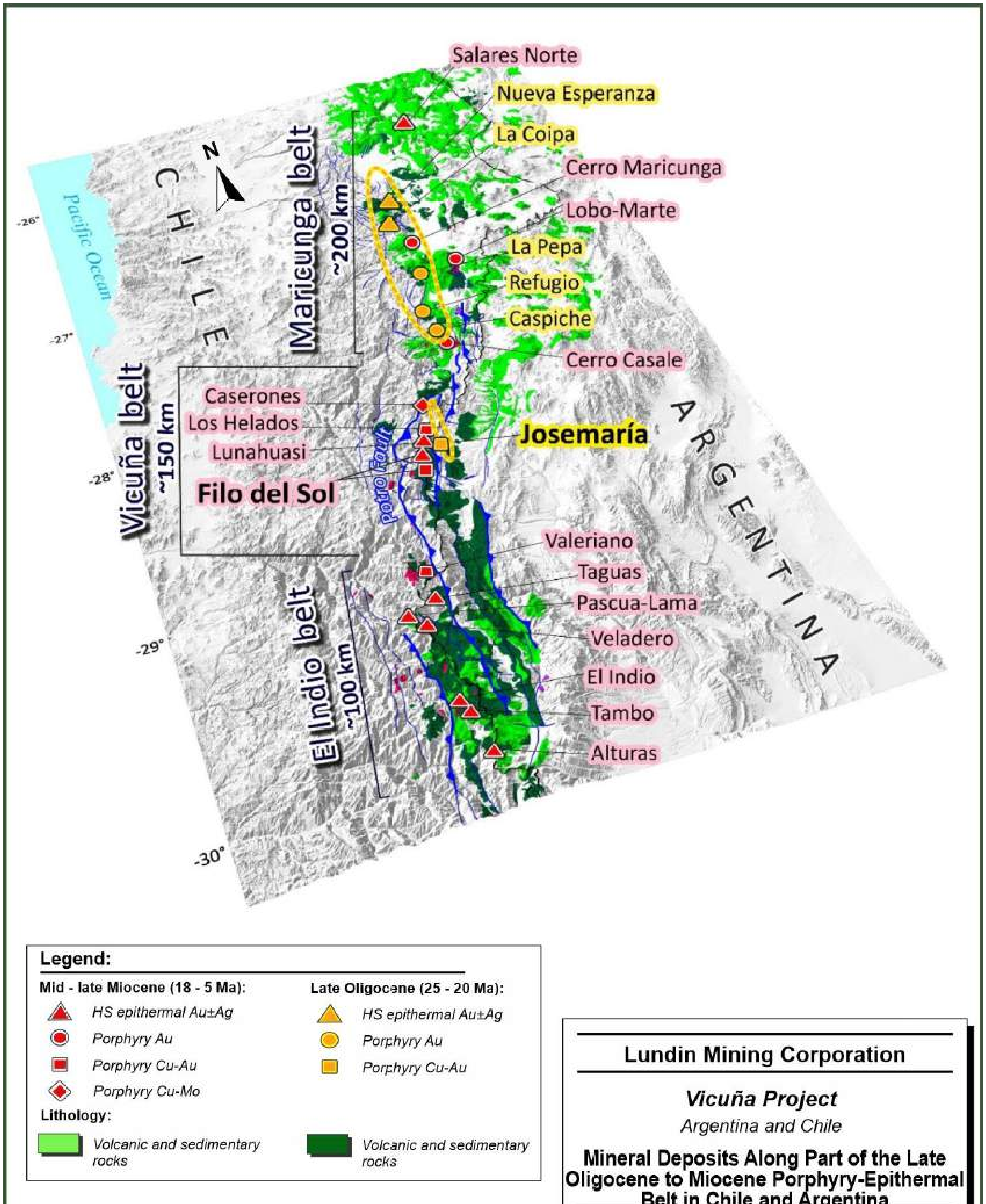
A high degree of tectonic inversion along the belt has led to the predominant exposure of basement rocks, and the sparse preservation of overlying sedimentary and volcanic sequences. Faults related to extension during pre-Andean and early Andean arc development were reactivated as early as Late Oligocene, followed by a main pulse of compression and inversion as high-angle reverse faults in the Miocene. The Potro fault is a significant reverse structural feature in the region, responsible for a large degree of upthrow of the Paleozoic basement rocks to the west creating a juxtaposition with younger sedimentary units to the west. The Potro fault effectively marks the northern boundary of the Vicuña belt, across which mineralization is stepped to the east into the Maricunga belt. In the south, the Potro fault also separates the Vicuña region from the El Indio belt.

Figure 7-1: Regional Geology



Source: Devine 2025.

Figure 7-2: Mineral Deposits Along Part of the Late Oligocene to Miocene Porphyry-Epithermal Belt in Chile and Argentina



Source: Devine 2025.

7.2 Project Geology

7.2.1 Lithologies

The Project area covers the northern part of the Vicuña belt (Figure 7-2 and Figure 7-3).

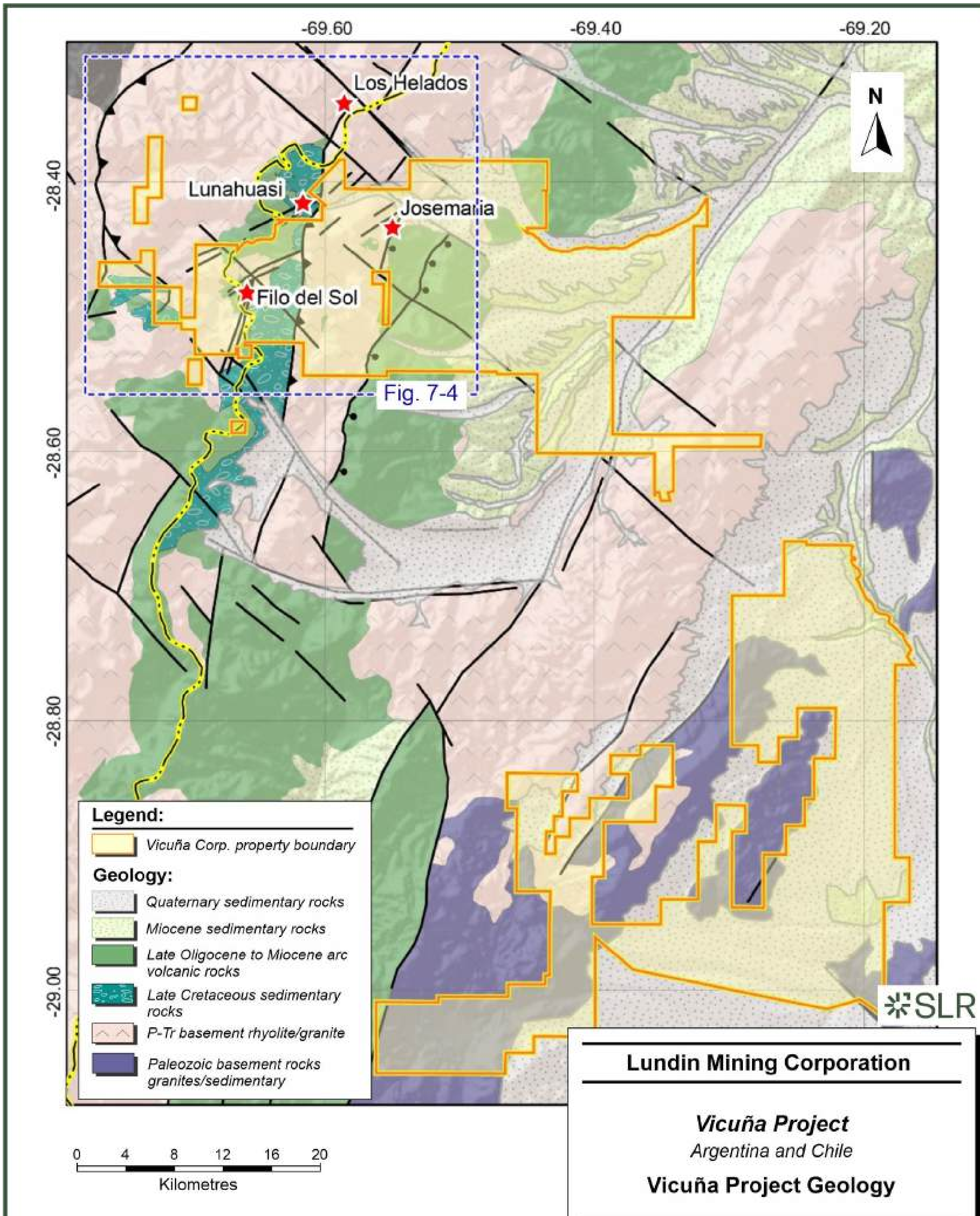
To the southeast, the claims overlie Miocene–Quaternary sedimentary rocks and fault-uplifted basement blocks.

The tenures in the western portion of the Project area include the Filo del Sol and Josemaría deposits (Figure 7-4).

In this area, the host rock lithologies are typical of the Vicuña belt, including Permian-Triassic basement granite and rhyolite assigned to the Choiyoi Group, which are intruded by Triassic diorite-tonalite intrusive complexes. These are unconformably overlain by terrigenous sediments, the lowermost of which are red bed conglomerates, and andesitic volcaniclastic rocks. This clastic sequence is tentatively assigned a Late Cretaceous age, assumed from correlations with Late Cretaceous rocks outside the area.

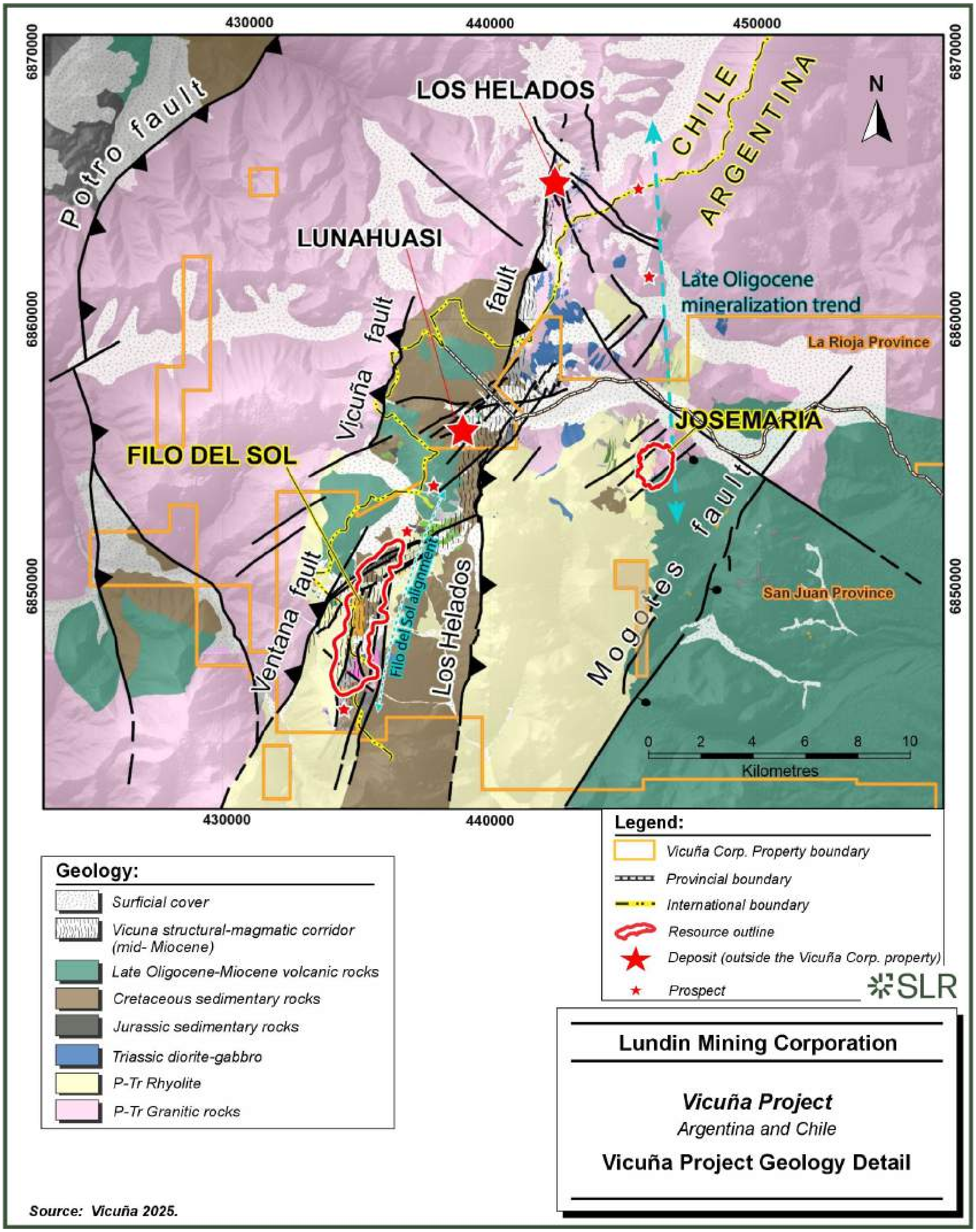
Andesitic to dacitic volcanic rocks overlie the Josemaría deposit area and have been dated to be Late Oligocene in age, correlative with the Dona Aña Group rocks in the El Indio belt. Similar, although undated, mafic volcaniclastic rocks occur in the Filo del Sol area. Other dacitic to andesitic volcaniclastic rocks overlie the crest of the range in the Filo del Sol area; these are in part inferred to be younger, Miocene to modern age volcanic rocks that overlie all earlier units.

Figure 7-3: Vicuña Project Geology



Source: Vicuña 2025.

Figure 7-4: Vicuña Project Geology Detail



Source: Vicuña 2025.

7.2.2 Structure

The deposits and prospects at Vicuña are located along, or at intersections of, major structures. Movement on the Potro fault and ancillary high-angle reverse faults such as the Los Helados fault, led to uplift of the region in Late Oligocene to Mid-Miocene time, placing older basement units over Cretaceous sedimentary rocks and Miocene volcanic rocks (refer to Figure 7-4). An important set of northeast-trending faults transect the northern part of the Project area, and are associated with an inferred lithospheric-scale fault that trends through that area.

Mid-Miocene mineralization at Filo del Sol lies along a 25 km long structural-magmatic corridor that leads northeastward from Filo del Sol, up to the copper-gold-silver deposit at Lunahuasi and the Los Helados porphyry copper-gold deposit. The mid-Miocene structural-magmatic corridor within the district is defined by a one to two kilometre wide domain of faults and fault zones that coincide with occurrences of contemporaneous mineralization. This structural domain lies along the northern segment of the Los Helados fault and steps westwards as it moves south, along intersections with northeast-trending faults. The Filo del Sol deposit lies along the corridor, along a trend parallel to the Los Helados fault but stepped to the west. Structural features within the deposit mimic the larger trends observed at the district scale.

The Late Oligocene deposit at Josemaría, and associated prospects, are located along a distinct north-south trend that is controlled by a fault that separates Permian-Triassic rhyolite and granodiorite. This is an inherited basement feature that later guided emplacement of porphyry intrusions in the Late Oligocene.

7.2.3 Alteration

Alteration is consistent with alteration zoning patterns around porphyry epithermal systems. Deeper potassic alteration of porphyry intrusions and associated host rocks transitions upward to sericite-clay (± chlorite) assemblages, and into advanced argillic quartz-alunite (± clay) alteration within the epithermal lithocap domain. Due to the rapid uplift and erosion indicated during both the Late Oligocene and mid-Miocene, a high degree of telescoping is apparent in both the Josemaría and Filo del Sol systems. This is indicated by the deeper potassic parts of the systems having been overprinted by the typically higher-level alteration, presumably as the surface level dropped while erosion took place and the magmatic hydrothermal system continued to develop.

In the Josemaría area, the system was almost immediately covered by post-mineral volcanic rocks, which shielded the system from erosion, although post-mineral faulting has exposed the system to the level of the lower part of the advanced argillic domain. It is assumed that perhaps the same shielding happened at Filo del Sol, where even the highest level of the system, the steam-heated domain which formed above the water table at the time of emplacement, is preserved.

7.2.4 Mineralization

Mineralization includes both porphyry and epithermal styles. Disseminated copper mineralization occurs as chalcopyrite and bornite associated with potassic alteration in both major centres discovered to date. With the nature of the telescoped epithermal systems, in both deposits on the property, the porphyry-related copper mineralization has been largely reconstituted and upgraded to high-sulphidation assemblages to varying degrees.

Epithermal styles of mineralization are better preserved along the mid-Miocene (Filo del Sol) trend within the Project area. All parts of the epithermal system are preserved, including a vuggy residual silica core and surrounding rock hosting disseminated and vein style high-sulphidation mineralization.

Supergene remobilization of copper occurs in both the Filo del Sol and Josemaría deposits. Different levels of surface exposure of the systems, into the porphyry domain at Josemaría, and into only the upper parts of the epithermal domain at Filo del Sol, have led to differing supergene enrichment styles. At Josemaría, porphyry copper mineralization was reconstituted by the overprinting of high-sulphidation chalcocite and digenite, and further upgraded by a supergene enrichment blanket. At Filo del Sol, leaching of the upper parts of the system has led to the development of a supergene enrichment blanket at the base of a leached zone, at the bottom of the oxide portion of the deposit.

7.3 Deposit Descriptions

7.3.1 Filo del Sol

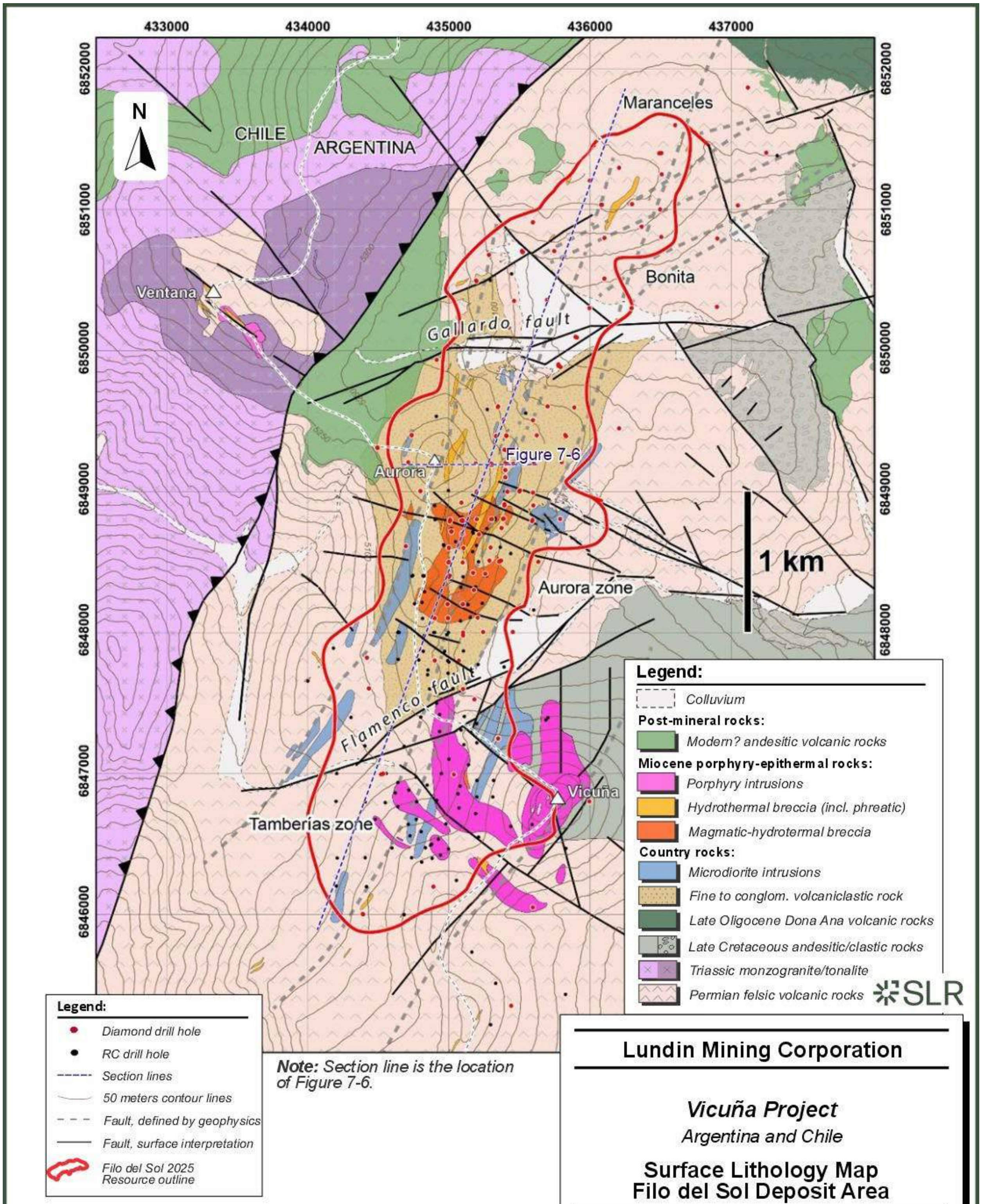
7.3.1.1 Deposit Dimensions

The Filo del Sol deposit includes three zones of contiguous mineralization, Tamberías, Aurora, and Bonita (Figure 7-5).

An older, more deeply eroded porphyry copper-gold mineralized domain in the Tamberías area to the south, is separated by the Flamenco fault from a main centre of slightly younger, partly blind to the surface porphyry copper-gold mineralized intrusions in the Aurora zone to the north. Extreme telescoping in the Aurora zone led to the overprinting of the copper-gold mineralized porphyry domains in both Tamberias and Aurora by high-sulphidation copper-gold-silver epithermal mineralization within a large area of advanced argillic alteration. The Aurora zone transitions northward, across the Gallardo fault, into the Bonita zone. Bonita is the extension of the northeast trend of high-grade mineralization from the Aurora centre. At depth the north-northeast trend to high-grade copper and gold mineralization is apparent, however, at shallower levels (< 800 m) mineralization may change to a more predominantly northeast trend where parts of the epithermal mineralization are controlled by northeast-oriented structures.

The overall Filo del Sol deposit, including the Tamberías, Aurora, and Bonita zones is 6.5 km long from northeast to southwest and 1.5 km in width (east-west) at its widest part in the Aurora zone. It has been drill tested to 1.8 km below surface. The deposit remains open to the north, south, east, west and at depth, although mineralization appears to be weakening in the deepest holes drilled in the Aurora zone as of the effective date of this Report.

Figure 7-5: Surface Lithology Map, Filo del Sol Deposit Area



Source: Vicuña 2025.

7.3.1.2 Lithologies

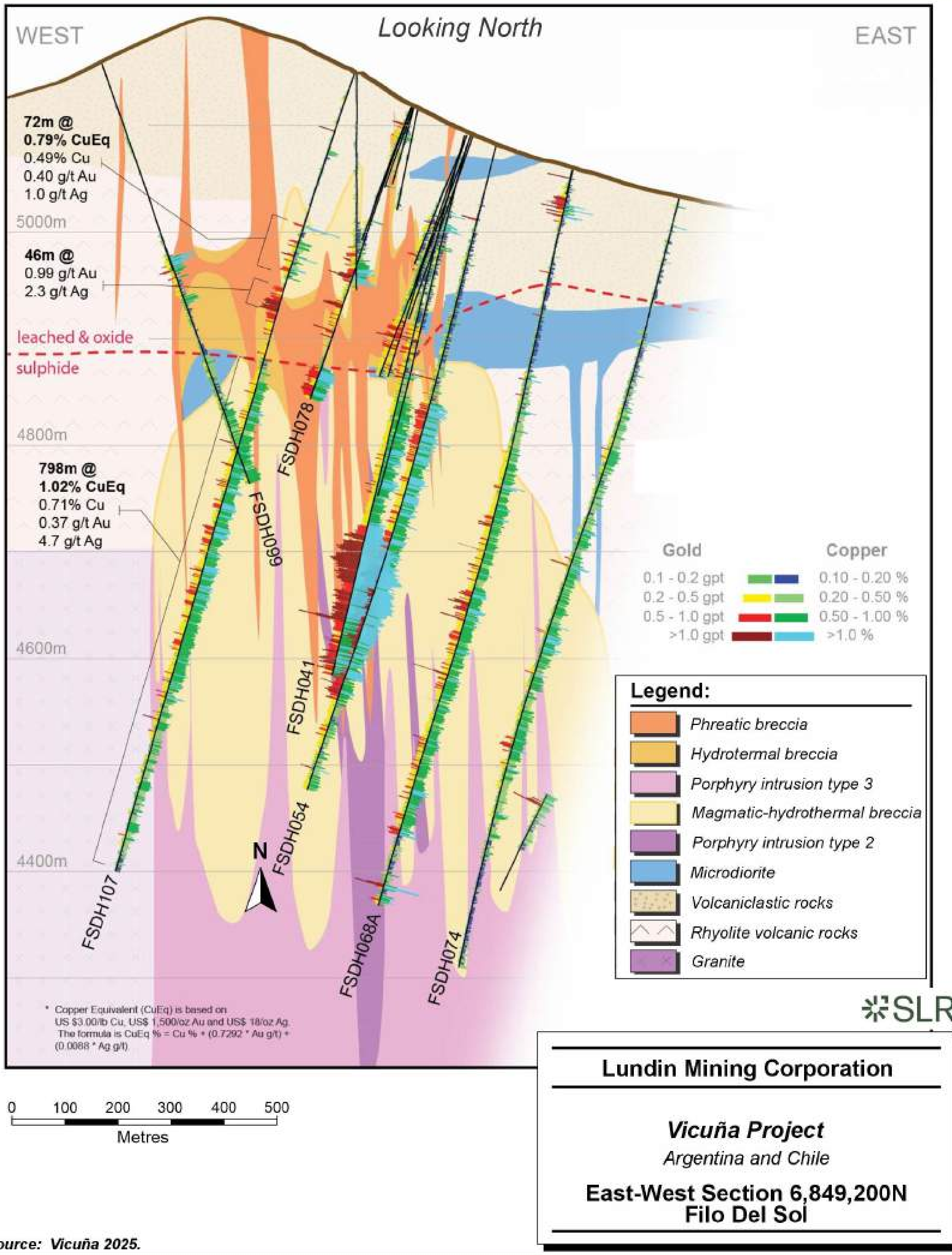
Host Rocks

Host rocks to the mineralization are Permian-Triassic felsic volcanic and monzogranitic basement units of the Choiyoi magmatic province, which are unconformably overlain by a sequence of terrigenous sedimentary and andesitic volcanic rocks, assumed to be Cretaceous in age (refer to Figure 7-5).

A fine-grained clastic unit is host to the mineralization in the central part of the deposit, in the upper part of the Aurora zone. It is locally bedded, and at least in part dips shallowly to the north-northwest. This unit may be an upper Oligocene or early Miocene volcanic unit that predates the Filo del Sol hydrothermal system, however, the possibility that is a pre-mineral vent facies volcaniclastic unit is also being considered.

These units are intruded by a series of mafic dykes and sills of unknown age, microdioritic in texture and composition, that define a north- to northeast-trending swarm all along the deposit and beyond. Detailed section work has shown that a major microdiorite sill is commonly, although not everywhere, emplaced along the contact between the Permian rhyolite and the overlying clastic unit (Figure 7-6).

Figure 7-6: East–West Section 6,849,200N (View North), Filo del Sol



Source: Vicuña 2025.

Table 7-1 summarizes the rock types in the Filo del Sol area.

Table 7-1: Rock Types, Filo del Sol

Rock Type	Code	Age	Description
Phreatic breccia	BXF (not modeled)	~15.5 Ma	Ground rock/lapilli matrix breccia. Matrix-supported breccia characterized by subangular fragments of residual or silicified silica ranging from 1 cm to 3 cm in diameter; generally poorly sorted, in a matrix of lapilli and/or ground rock (> 50% matrix). Unlike other recognized lithologies, they do NOT contain quartz veinlets, but they do contain sulphide veinlets.
Banded breccia	BXB	~15.5 Ma	Matrix-supported breccia characterized by clast-like fragments of veins and refractory veinlets embedded in an aphanitic quartz-alunite mass. Clasts of other lithologies may also be present; however, their main protolith is microdiorite.
Ghost breccia	BXG	~15.5 Ma	Clast-supported, monomictic and polymictic composition. Clasts of rhyolite, granite, microdiorite, and/or the clastic-volcaniclastic member. It presents clasts with truncated veinlets and quartz veinlet clasts (A-type and/or B). This lithology is the main host rock for mineralization, typically pyrite-enargite/covellite and bornite chalcopyrite at depth.
Porphyry intrusion type 3	PD3	~15.5 Ma	Aurora zone late intermineral porphyry intrusion: Porphyry with a "fine" porphyritic texture, almost devoid of A-type veinlets. It is generally devoid of copper sulphides and contains only a small amount of pyrite.
Porphyry intrusion type 2	PD2	~15.5 Ma	Aurora zone intermineral porphyry intrusion: "Highly porphyritic" porphyry, with large phenocrysts in an aphanitic groundmass. This phase presents with a lower percentage of veinlets than type 1. It corresponds to the intermineral phase, temporally correlative with the BXG.
Porphyry intrusion type 1	PD1	~15.5 Ma	Aurora zone pre-mineral porphyry intrusion: Fine-textured crowded porphyry. The phenocrysts in a microcrystalline groundmass. It exhibits intense A-type veining.
Porphyry intrusion	PDA	~16 Ma	Tamberias area dacitic quartz-feldspar porphyry.
Porphyry intrusion	PDB	~16 Ma	Tamberias area dacitic feldspar-biotite porphyry.
Microdiorite sill	MDS	Uncertain age, possibly immediately pre-mineral	Mafic sills of dioritic-andesitic composition with a very fine, granular to microgranular texture, ranging from black to dark grey.
Microdiorite dyke	MDD	Uncertain age, possibly immediately pre-mineral	Mafic dykes of dioritic-andesitic composition with a very fine, granular to microgranular texture, ranging from black to dark grey (eventually reddish due to the presence of FeOx).
Volcaniclastic rock	RCV	Uncertain age	Poorly sorted, polymictic conglomerates and breccias, ranging in size from sand to conglomeratic, occasionally layered. Clast shapes varying from rounded to very angular volcaniclastic layers of andesitic composition may also be present.
Granite/granodiorite	GRN	Permian-Triassic	Hypabyssal intrusive of granitic to granodioritic composition, medium to coarse granular inequigranular texture, composed of quartz, potassium feldspar and plagioclase.
Rhyolite	RYO	Permian-Triassic	Tuff, lapilli tuff, and subvolcanic flows of rhyolitic-rhyodacitic composition.

Porphyry Intrusions

Several inter-mineral porphyry phases are distinguished in the Filo del Sol area and form a large subsurface swarm with greater than one kilometre of vertical extension and at least three kilometres of strike length, coincident with the more broadly defined north-to-northeast-trending Filo del Sol alignment. Within the Aurora zone, the porphyry intrusions have been dated as mid-Miocene in age (~15.5 Ma) and are recognized to be relatively early-mineral (PD1), inter-mineral (PD2), and late mineral (PD3).

However, the Tamberías porphyry intrusions and associated hypogene copper–gold mineralization are discordant to this trend and display a clear north and northwest attitude. These have been dated as slightly older (~16 Ma), consistent with them being more deeply eroded at the modern day surface.

In general, porphyry dykes have fine- to coarse-grained (up to 6 mm) porphyritic textures and an overall dioritic to quartz-dioritic composition, with phenocrysts of plagioclase, biotite, and amphibole, in addition to minor quartz. All were originally potassic altered.

Hydrothermal Breccias

Three principal types of breccias are recognized in the area: early-stage magmatic-hydrothermal, a variant of the magmatic-hydrothermal breccia that transects the microdiorite sill in Aurora (BXB), and late-stage phreatic (BXF). A large zone of magmatic-hydrothermal breccias occurs along the entire extension of the porphyry dyke swarm at Aurora.

The early-stage magmatic-hydrothermal breccia (BXG) is predominantly clast-supported, polymictic, and includes clasts of all country rock units and early-stage porphyry intrusions, as well as fragments of A-type veinlets. The breccia was originally emplaced under potassic-stable conditions and drilling shows that it is the main host to both early porphyry-related copper-gold mineralization and transgressive high-sulphidation copper-gold-silver mineralization.

The banded breccia (BXB) is a predominantly monomictic breccia where microdiorite is the main clast type. Models show that it occurs in the area where the main BXG body transects the major microdiorite sill above the Aurora zone.

Late hydrothermal phreatic breccia bodies (BXF) occur as irregular rock-flour dykes at the surface where they follow the main trends of the porphyry intrusions and are guided by high-level structures. All the phreatic breccias were emplaced during advanced argillic alteration and while they have not been cut by later generations of quartz veinlets, they do host pyrite mineralization.

7.3.1.3 Structure

The Filo del Sol magmatic-hydrothermal system is controlled by a deep north-northeast-trending structure. This structure is evident in control on mineralization from the Aurora zone continuing into the Bonita zone which remains consistent in orientation at depths below 800 m. Two main northeast-trending younger faults transect the deposit and divide it into three domains. While the Aurora and Bonita zones display relatively consistent mineralization styles across the Gallardo fault, the southern Flamenco fault bounds the higher-grade mineralization of the Aurora zone to the south. The Tamberias zone to the south is part of the same hydrothermal system, but displays different style of alteration and mineralization. Some degree of vertical displacement on the Flamenco fault is possible.

The main Filo north-northeast syn-mineral structure controlled the emplacement of porphyry intrusions and breccia emplacement. At upper levels in the system, several parallel structures guided the emplacement of late phreatic breccias and minor fault offsets of earlier units as the system deflated. There is an interference of northeast-trending structures within the deposit, both syn-mineral, particularly in the Bonita zone where upper-level epithermal veins and high-level breccias have turned to a northeast trend.

The overall pattern of structural control at the deposit scale mimics the district-scale pattern of the structural-magmatic corridor that controls the emplacement of all of the mid-Miocene mineralization that had been discovered as of the effective-date of this Technical Report.

7.3.1.4 Alteration

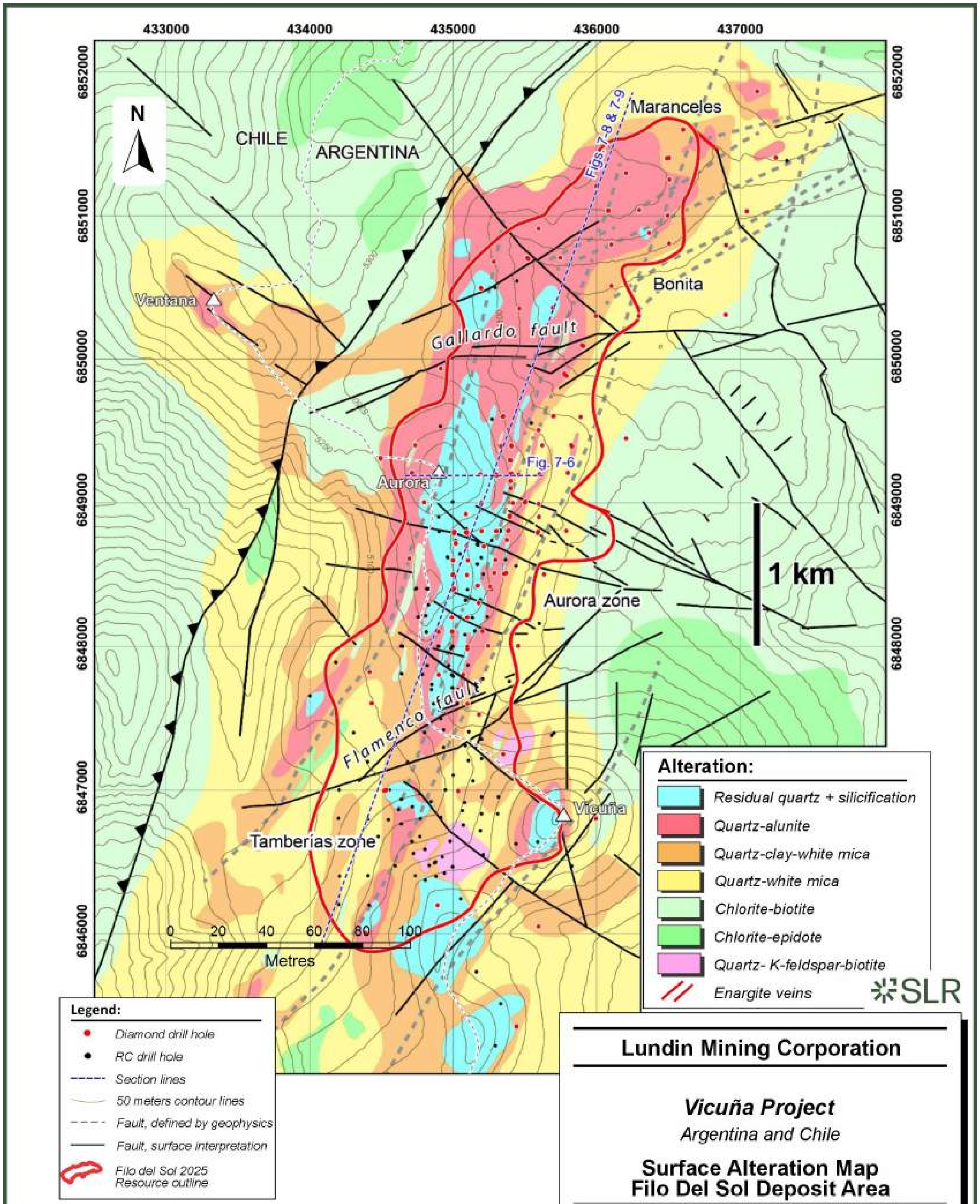
Two principal alteration types are modelled in the Filo del Sol area: early potassic at depth, and later advanced argillic overprinting at higher levels (Figure 7-7).

The boundary between the two types of alteration and their related mineralization is relatively abrupt, and is clearly differentiated by geochemistry, notably arsenic and sequential copper leach analyses. Intervening zones of quartz and sericite (fine-grained white mica) are also present. Laterally, at the surface, propylitic alteration fringes the system on both sides, but has not been intersected by drilling in the main body of the deposit. The advanced argillic alteration assemblages are part of the large lithocap, with its best expression coincident with the Aurora zone of the deposit (Figure 7-8).

The uppermost part of the lithocap underwent intense steam-heated alteration, with corresponding transformation of original components to friable, poorly indurated and highly disaggregated, quartz and quartz-alunite associations.

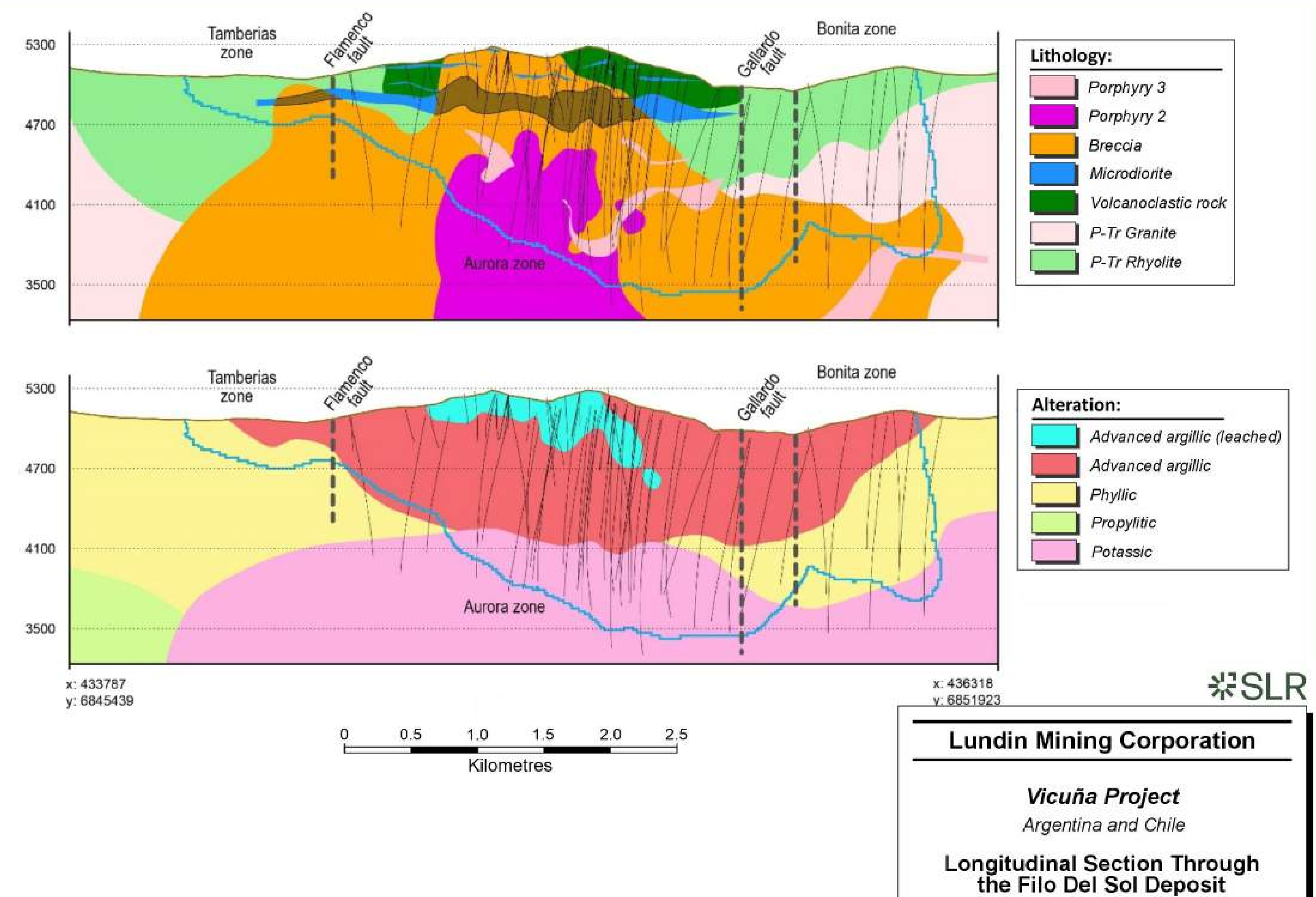
Table 7-2 summarizes the alteration styles and their relationship to mineralization.

Figure 7-7: Surface Alteration Map, Filo del Sol Deposit Area



Source: Filo Mining 2024.

Figure 7-8: Longitudinal Section Through the Filo del Sol Deposit Looking Northwest



Source: Vicuña 2025.

Table 7-2: Alteration Types and Relationship to Mineralization, Filo del Sol

Alteration Type	Host Lithologies	Description	Mineralization Association
Early biotite-dominated potassic alteration (POT)	Predominantly present in hornfelsed andesitic country rocks and mafic intrusions	Typically consists of quartz, K-feldspar, anhydrite, and biotite. Hydrothermal magnetite and/or mushketovite are integral parts of the potassic associations. A-type quartz veinlet stockworks are common in potassic altered rock and are cut by planar, molybdenite-bearing, B-type quartz veinlets (Gustafson and Hunt 1975).	Chalcopyrite and pyrite, with localized bornite. Copper mineralization in potassic centres at Tamberías and Filo del Sol–Aurora is dominated by chalcopyrite.
Late potassic alteration (POT)	Best developed in magmatic–hydrothermal breccia at depth in the Filo del Sol–Aurora zone		
Advanced argillic: steam-heated & vuggy residual quartz (AA)	Prominently developed for ~3 km along the continental divide and international frontier between Argentina and Chile	The uppermost parts of the advanced argillic alteration domain, including the central zone of vuggy residual quartz, and the overlying/overprinting steam-heated zone. The steam heated zone is composed of a white, powdery rock comprised of cristobalite, chalcedony, kaolinite, and alunite, with additional native S and cinnabar occurring in places. The blanket-like zone, developed above the paleo-groundwater table, typically occupies the shallowest parts of the system exposed at ~5,300 m to 5,400 m, and attains a thickness of ~150 m to 200 m beneath the ridge crest. Downward-penetrating roots, up to ~400 m, possibly caused by a descending water table, are also present. The deep roots can be guided by vertical structures and zones of damage, lithologic units (e.g., phreatic breccia), and previously formed vuggy residual quartz. The vuggy residual quartz zone forms the central core of the advanced argillic domain and includes high sulphidation mineralization within the uppermost part of the hydrothermal system.	The vuggy residual quartz zone contains high sulphidation Cu, Au, and Ag mineralization, particularly the 'late' pyrite type mineralization. Where overprinted by the descending steam-heated zone, this domain is barren of metals, except where pockets of the vuggy residual quartz remain.
Advanced argillic: quartz–alunite & quartz–alunite-clay (QAC)	Best developed in the Aurora and Bonita zones	The main body of the advanced argillic domain, underlying the vuggy residual quartz and steam-heated zones above. A more centrally located zone of quartz–alunite, and an external zone of quartz–white mica–clay minerals (dickite, pyrophyllite, kaolinite).	Multiple high-sulphidation-state sulphide associations with one or more of pyrite, melnikovite, marcasite, Cu sulphides (bornite, covellite, chalcocite, digenite) and Cu–As–Sb sulphosalts (enargite, luzonite, famatinite, tennantite), plus numerous Cu-bearing Ag–As sulphides and sulphosalts. Native Au, calaverite,

Alteration Type	Host Lithologies	Description	Mineralization Association
		The advanced argillic and intervening quartz-white mica associations are completely transgressive to the products of the early potassic alteration- mineralization event, which they partially to totally destroyed. In the Aurora zone, the advanced argillic alteration associations define a conventional, deeply rooted (~1 km) and steeply dipping body but, at Tamberías, they are far more restricted and irregular.	electrum, and auricupride Au are also present. The sulphides occur in a variety of forms, including metre-wide massive sulphide lodes, hydrothermal breccia cements, veins, veinlets, and disseminations. In all cases pyrite is the earliest-formed sulphide and is progressively replaced by the Cu–As sulphosalts and/or Cu-bearing sulphides.
Phyllic: quartz–white mica (PHY)	Strongly developed in the Aurora and Bonita zones; is also main alteration type in Tamberias	Transitions downward and outward from the quartz-alunite-clay domain above, overprinting the potassic domain. Presence of muscovite, pengite, paragonite, generally strong silicification.	
Propylitic (PROP)	Fringes the system, mapped on surface but has not been drilled within the deposit area.	Fringes the system, mapped on surface but has not been drilled within the deposit area. Weak and variable silicification, chlorite, magnetite, epidote veins.	No associated mineralization

7.3.1.5 Mineralization

Overview

The Filo del Sol deposit occurs as a 6 km north-northeasterly elongate domain of contiguous mineralization. Porphyry intrusions (~16 Ma and 15.5 Ma) and related inter-mineral magmatic–hydrothermal breccia were emplaced predominantly along a northeast structural trend, with associated copper-gold mineralization in potassic alteration. A high rate of uplift and syn-mineral erosional unroofing of the system is inferred as the potassic porphyry copper-gold mineralization is largely overprinted by advanced argillic alteration with associated high-sulphidation copper-gold-silver mineralization as pyrite, enargite, bornite, chalcocite, covellite, and Ag-bearing sulphosalts in a core zone with vuggy residual silica, silicification, and surrounding quartz-alunite alteration. Metal distribution within the hypogene part of the deposit is controlled by these two types of alteration and mineralization, with a relatively sharp boundary between the two at depth.

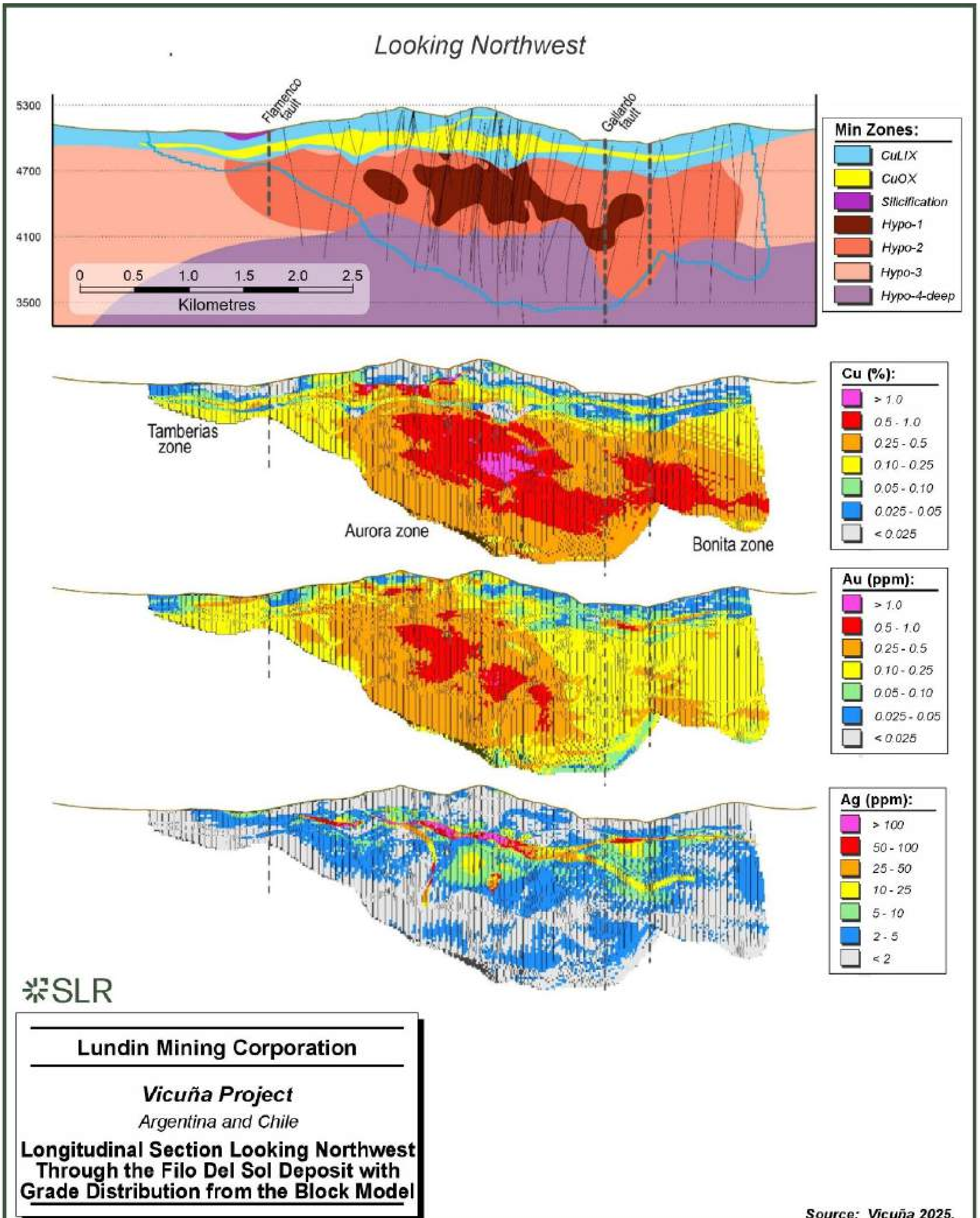
A later style of pyrite mineralization with high silver grades is related to late, higher-level phreatic breccias along the north-to-northeast mineralized corridor. Steam-heated alteration is preserved as the uppermost part of the lithocap domain, forming the ridgetop at Filo del Sol.

Telescoping of the younger Aurora system over the older Tamberías porphyry is inferred to largely be responsible for the juxtaposition of zones of quartz-alunite and quartz-white mica-clay alteration that contains gold–silver mineralization with the older (~16 Ma) potassic-altered host dacitic Tamberías porphyry intrusions.

No high-grade silver domain occurs in the Tamberías zone, as it is interpreted to daylight just between the Aurora and Tamberias zones; the leached zone is underlain by an oxide zone with Cu-sulphates that progresses down to a copper-gold hypogene sulphide domain that has only been drill tested in a limited area. In the Tamberías zone, dacitic plagioclase-hornblende-biotite porphyry intrusions intrude the rhyolite basement and have associated biotite–magnetite (potassic) alteration. These porphyries are intruded by younger feldspar-phyric porphyry phases (undated and potentially Aurora-age) that are only partly exposed, largely blind to the surface, and are associated with copper sulphide mineralization and elevated gold values. These younger targets have only partly been drilled in Tamberías.

A longitudinal section through the Filo del Sol deposit, illustrating the mineralization distribution, is provided in Figure 7-9.

Figure 7-9: Longitudinal Section Looking Northwest Through the Filo del Sol Deposit with Grade Distribution from the Block Model



Source: Vicuña 2025.

A summary table showing the different mineralization zones is included as Table 7-3.

Table 7-3: Mineral Zones, Filo del Sol

Min Zone/Code	Description	Mineralization Association
CuLIX	Copper leached zone	Less than 0.05% copper; does contain Au and Ag mineralization
CuOX	Copper oxide zone	Copper oxides and sulphates
SILIC	Silica flooded zone	Gold and silver oxides
HYPO-1	High-sulphidation mineralization, high arsenic	Chalcocite, covellite with enargite, arsenic above 800 ppm
HYPO-2	High-sulphidation mineralization, low arsenic	Chalcocite, covellite
HYPO-3	Potassic-associated and high-sulphidation mineralization	Chalcopyrite with chalcocite and covellite
HYPO-4-deep	Deep hypogene (potassic), very low arsenic	Chalcopyrite with minor bornite
Note. Min Zone – Mineralized Zone		

The extension of the Aurora system to the north, into the Bonita zone across the Gallardo fault, has been the focus of the most recent drilling, extending the Bonita zone northwards. There is a change to a more northeasterly control on mineralization in the Bonita zone, and higher copper and gold grades are found at depths of up to one kilometre. The deposit remains open in all directions, with significant potential to extend the Bonita zone further northward along trend.

Epithermal

High-sulphidation epithermal mineralization forms the largest part of the sulphide domain at Filo del Sol. Copper-gold-silver mineralization occurs as pyrite, enargite, bornite, chalcocite, covellite, and Ag-bearing sulphosalts in a core zone with vuggy residual silica, silicification, and surrounding quartz-alunite alteration that is centred on the Aurora zone. Mineralization in the upper parts of the system occurs as disseminations and vein-type, while the lower parts nearing the potassic boundary replace earlier formed potassic-related chalcopyrite and bornite. A relatively late type of sooty pyrite mineralization that has higher silver grades is related to phreatic breccias in the uppermost part of the Aurora system.

Porphyry Mineralization

Potassic-alteration hosted porphyry style mineralization occurs at the deepest parts of the Filo del Sol system, below approximately one kilometre in the Aurora zone and 800 m in the Bonita zone. Disseminated chalcopyrite with minor bornite occurs within the host rhyolite, porphyry intrusions, and magmatic-hydrothermal breccia (BXG).

Oxide and Supergene Mineralization

The zone of near-surface supergene sulphide oxidation comprises a relatively small part of the overall deposit area. It reaches its maximum thickness (approximately 300 m) below the ridge crest in the northern Filo del Sol zone (refer to Figure 7-9), but it is more irregularly distributed at Tamberías. In general, it consists of three subzones, including upper leached, intermediate oxidized, and lower mixed oxide-sulphide. The upper leached zone is mainly developed at the expense of advanced argillic vuggy residual quartz and steam-heated alteration, within which copper has been completely removed but some gold remains. Iron-bearing sulphates are common. The intermediate, Cu-rich oxide zone is characterized by the presence of iron, iron-copper, copper, molybdenum, and cobalt oxides and hydroxides and hosts the bulk of the soluble copper mineralization. Chalcanthite and cuprocopiapite are dominant, and brochantite occurs locally. Enargite is present upon approaching the lower mixed oxide-sulphide zone, and sooty chalcocite occurs in localized pockets of supergene sulphide enrichment.

Silver Zone

A high-grade silver zone is a key part of the Filo del Sol deposit, occurring as a shallowly dipping zone 10 m to 130 m thick that extends approximately four kilometres from the southern limit of the Aurora zone (near the Flamenco fault) up to the northern limit of the deposit above the Bonita zone. Its east-west extent is more irregular, but it is up to 700 m in the central part of the Aurora zone. The highest silver grades are concentrated on the central Aurora zone, near the locus of breccia emplacement, but high-grade zones within the Bonita zones have also been drilled and show a split to several different trends (refer to Figure 7-9). There is some indication that the zone may be partly lithologically controlled with emplacement at the boundary of the main mafic sill above Aurora, however, the relationships are more complex and varied to the north into the Bonita zone.

Silver grades in this zone are commonly greater than 60 g/t, averaging 200 g/t. In the southern part of the deposit, silver mineralization commonly appears as unconsolidated greyish to black sandy mud, often with associated soluble copper mineralization as Cu-sulphates.

Silver mineralization in this zone consists primarily of chlorargyrite (AgCl) and Ag- and Cu-sulphosalts of proustite–pyrargyrite [Ag, (As, Sb), S] (Di Prisco 2014). It has a distinct geochemical anomaly pattern characterized by anomalous values of metals such as copper, silver, molybdenum, antimony (±Au), arsenic, mercury, tungsten (±Bi, Sn) and low aluminum, calcium, strontium, and vanadium (±Th) values.

7.3.2 Josemaría

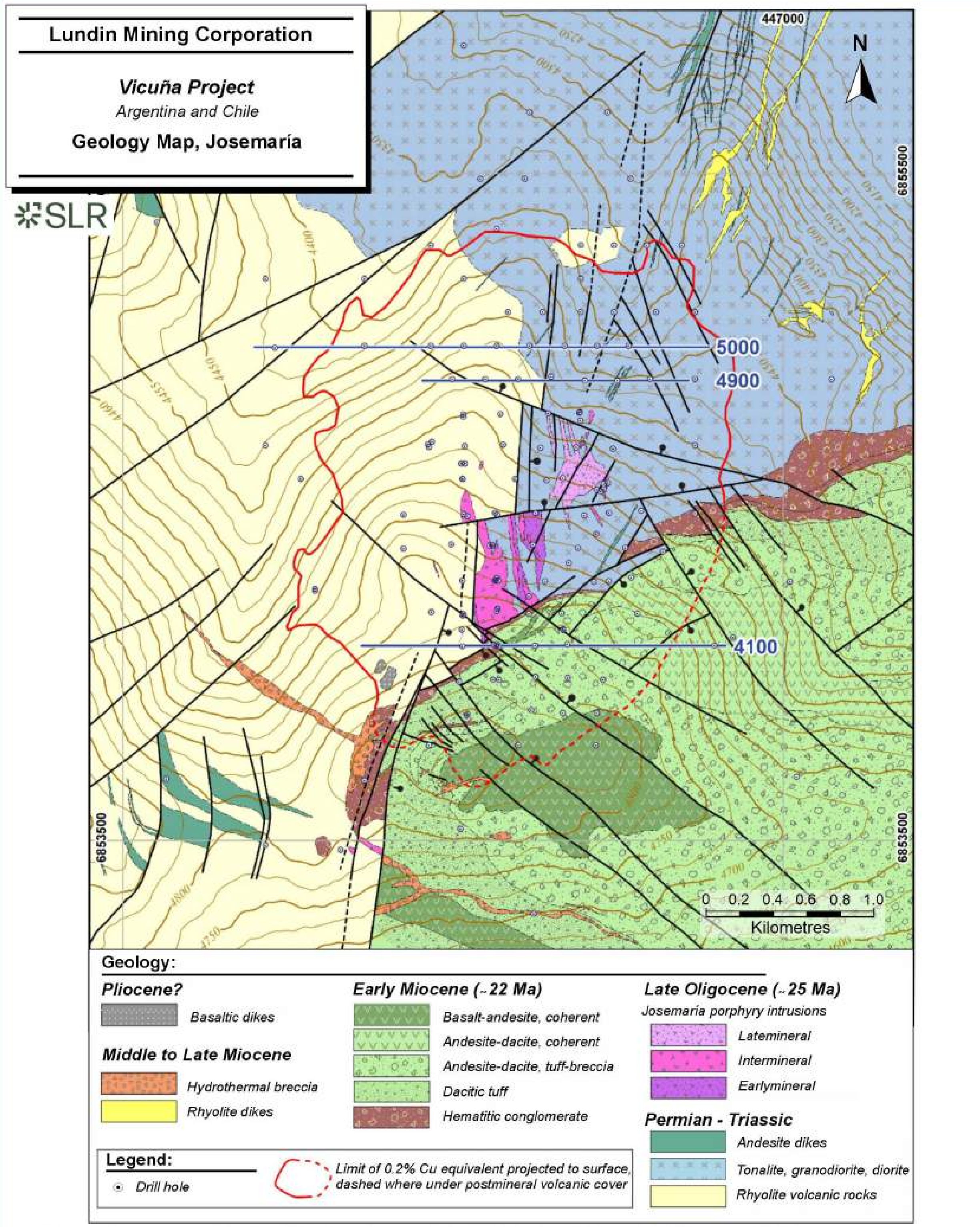
7.3.2.1 Deposit Dimensions

The Mineral Resource estimate is hosted in an area that is approximately one kilometre east-west, 1.5 km north-south, extending to 600 m–700 m vertical depth. The deposit remains open to the south.

7.3.2.2 Lithology

The host rock units in the Josemaría area are assigned to the Permian–Triassic Choiyoi Group (Figure 7-10).

Figure 7-10: Geology Map, Josemaría



Source: *Figure prepared by NGEx 2020, based on mapping by F. Devinde in 2020, and after Sillitoe et al. (2019).*

To the west of the main north-northeasterly-trending Josemaría structure, rhyolite ignimbrite and tuff-breccia form the predominant units at surface.

Bedded volcaniclastic textures are mapped locally and welded, black to cream coloured, quartz and feldspar-phyric rhyolite with an aphanitic groundmass is common where primary textures are preserved. These volcaniclastic rhyolites overlie and are interpreted to be intruded by the tonalite-granodiorite unit.

Tonalite, granodiorite, and diorite intrusive rocks are exposed on the northern and eastern sides of the Josemaría deposit. They are medium-to-coarse grained and equigranular with varying quartz content.

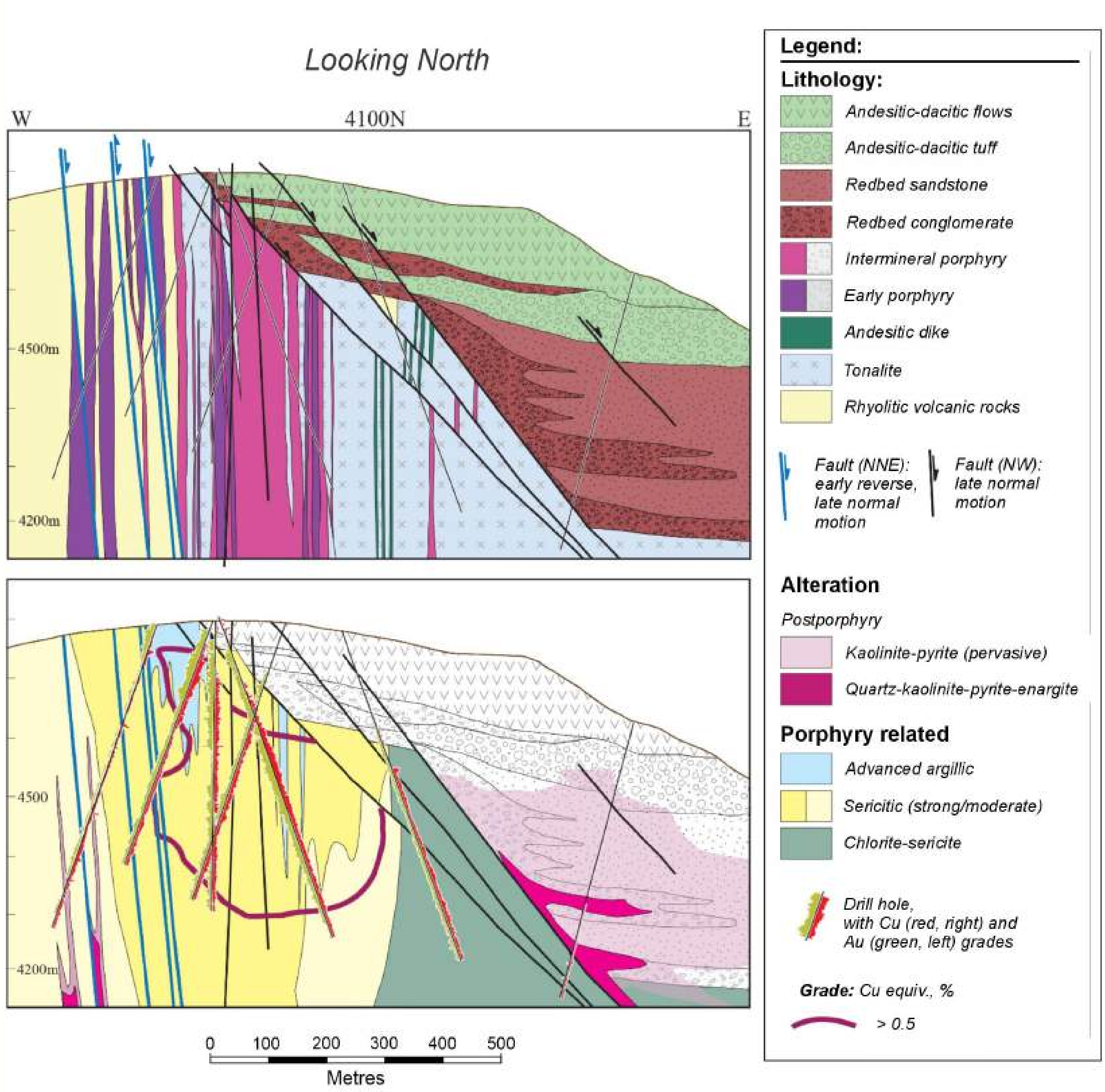
Andesite dykes ranging from sub-metre to 10 m wide cut both the tonalite and rhyolite, locally as dyke swarms with a northerly trend. These are similar to andesite dykes common in the Permian-Triassic basement rocks throughout the region.

The Josemaría Late Oligocene (~25 Ma) porphyry intrusions occur over an approximate 1,000 m x 400 m area, on both sides of the main structural corridor, although predominantly to the east. They include a series of feldspar-quartz-hornblende-biotite-phyric dacitic intrusions that have been divided into three main phases based on their compositions, as well as timing based on the presence of vein fragments and relative vein density and intensity of mineralization.

The early-mineral porphyry intrusions are fine-grained and feldspar phyric with less than 5 mm, lath-shaped feldspar phenocrysts and occasional small quartz phenocrysts. They can be difficult to distinguish from the host tonalite where it is strongly overprinted by porphyry-related alteration. The inter-mineral phase includes strongly quartz and feldspar-phyric variants, with up to 50% feldspar phenocrysts and round clear-to-grey quartz phenocrysts up to one centimetre in size. The late mineral phases are quartz and feldspar porphyritic with an aphanitic groundmass.

Figure 7-11 presents a cross-section showing the major lithologies and alteration.

Figure 7-11: Lithology and Alteration Cross-Section 4100 N, Josemaría



Note: Figure prepared by NGEx 2019, based on mapping by F. Devine in 2014, and after Sillitoe et al. (2019).

Source: NGEx 2019.

A Late Oligocene erosional surface that cuts down into the porphyry system is overlain by a distinct, haematitic red-bed conglomeratic unit. It comprises cobble conglomerate and wacke with a variety of clast types, including a predominance of rhyolite clasts, but also mineralized porphyry intrusive clasts. The conglomerate is overlain by an andesitic to dacitic volcaniclastic and coherent volcanic package of earliest Miocene age (together referred to as the PMV, ~22 Ma).

Hydrothermal breccias (HBX), younger than the porphyry system and also younger than the post-mineral volcanic rocks, cut all units in the southern part of the Josemaría deposit area. They are narrow, dominantly northwest-trending, quartz–alunite-cemented, polymictic breccias that expand in size where their trend intersects the Josemaría structural corridor but taper out into quartz–kaolinite-cemented dyke-like bodies laterally.

Associated chalcedony-alunite and kaolinite alteration with pyrite-enargite mineralization is mapped more broadly around these bodies and extends along post-mineral volcanic layering; similar alteration and arsenic values are found within narrow, structurally controlled domains along the Josemaría structural corridor.

Fine-grained, northerly-trending rhyolite dykes are found on the northern slope of Josemaría, and locally within the deposit area. They are generally less than 10 m wide where intersected by drilling and on the northern slopes form interconnecting dykes and intrusive bodies with domains up to 30 m wide. While relative age relationships, particularly with the younger sedimentary and volcanic units at Josemaría, are not conclusive, similar rhyolite dykes to the north of Rio Blanco are relatively young (possibly Miocene) and cut Late Oligocene mineralization.

Local, small basaltic plugs occur at the top of the Josemaría deposit stratigraphy. They are vesicular, black, and interpreted to post-date all other local units.

7.3.2.3 Structure

A significant, post-mineral north-northeasterly-trending fault system passes through the centre of the deposit. It is interpreted to be a reactivated pre-mineral structure that guided porphyry emplacement that now forms a structural zone with inferred early (pre-22 Ma) high-angle reverse motion, but most recent down-to-the-east normal displacement on the order of 100 m to 200 m.

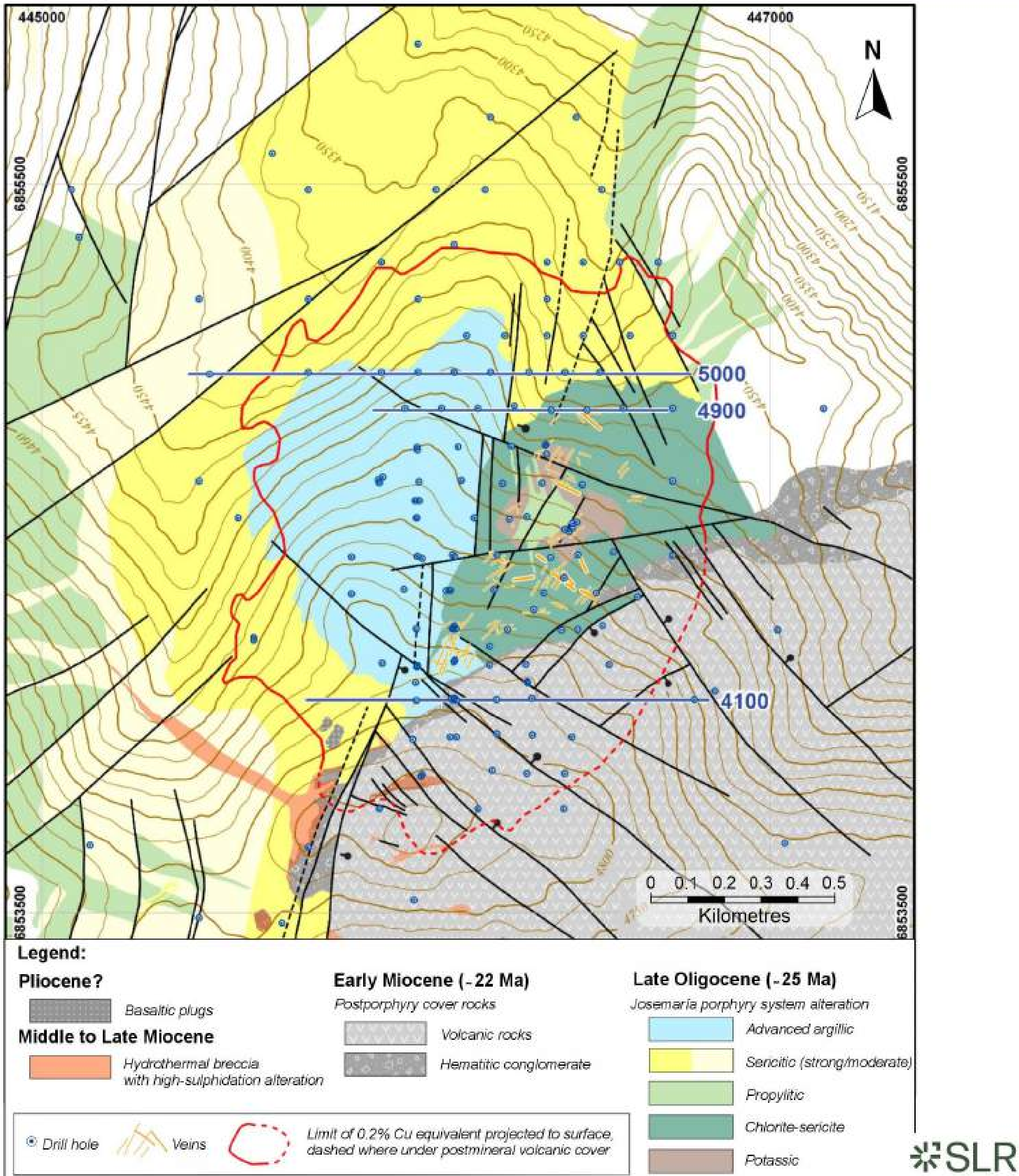
A set of northeast-trending faults have disrupted the contact between the mineralized rocks and the overlying post mineral sedimentary and volcanic rocks, with normal displacement down to the east.

A series of northwest-trending faults also cut the overlying post-mineral volcanic rocks, with similar normal displacement to the northeast. These northwest-trending structures, while responsible for relatively minor recent offsets of the mineralized domains within the deposit, locally offset the supergene copper enrichment blanket, indicating relatively young displacement.

7.3.2.4 Alteration

Alteration zonation within the Josemaría porphyry system is centred on the porphyry intrusions that underlie the top and uppermost northern slope of the Josemaría deposit area (Figure 7-12 and Figure 7-13).

Figure 7-12: Alteration Map, Josemaría



Lundin Mining Corporation

Vicuña Project

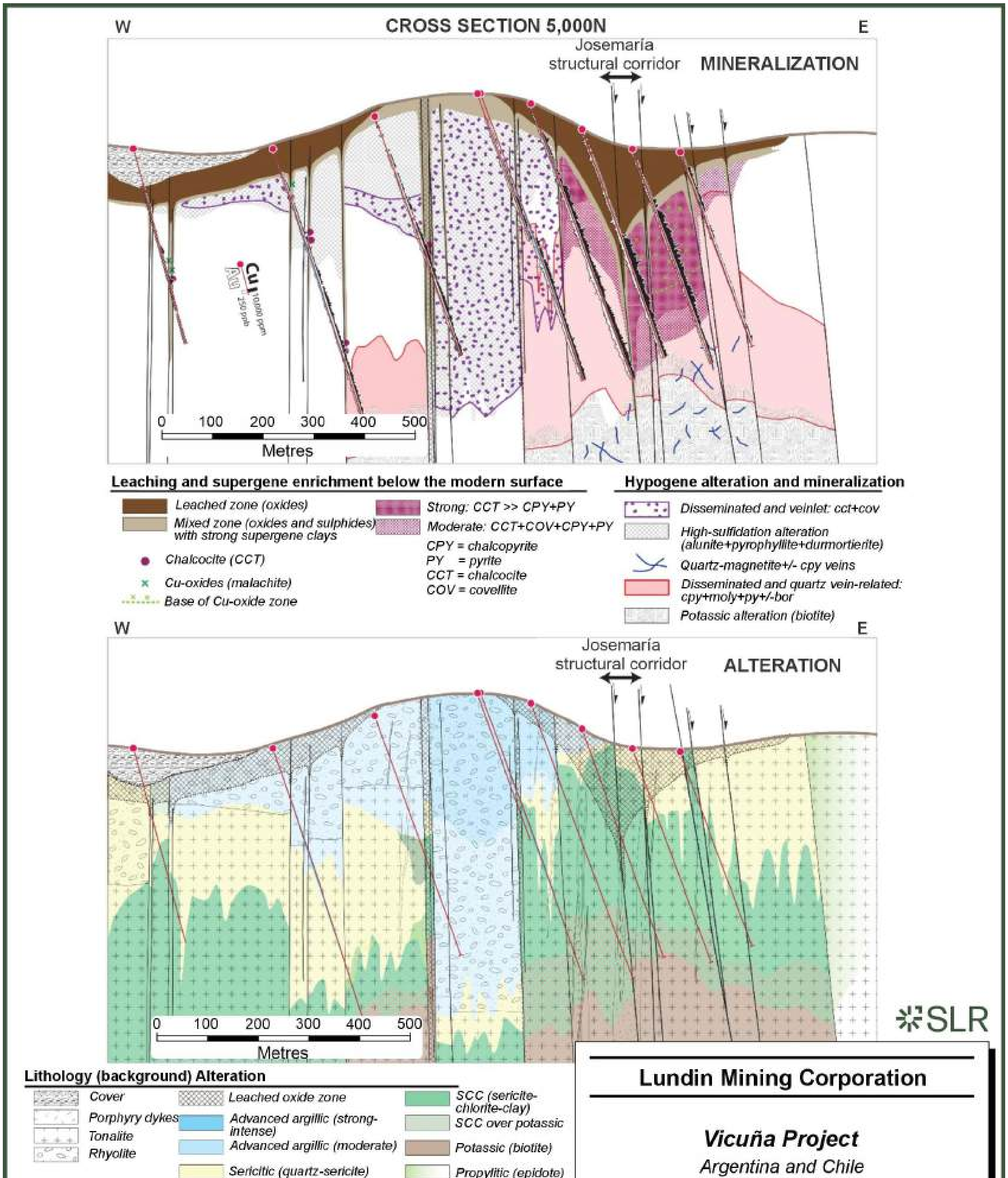
Argentina and Chile

Alteration Map, Josemaría

Note: *Figure prepared by NGEx 2019, based on mapping by F. Devine in 2014, and after Sillitoe et al. (2019).*

Source: NGEx 2019.

Figure 7-13: Alteration and Mineralization Cross-Section, 5000N, Josemaría



Note: Figure prepared by NGEx 2019, based on mapping by F. Devine in 2014, and after Sillitoe et al. (2019).

Source: NGEx 2019.

The alteration footprint extends for approximately two kilometres east–west and four kilometres north–south, and is covered by alluvium in the Rio Blanco valley to the north.

The deepest alteration is potassic, occurring in all drill holes in the central part of the system within the tonalite host rock at depths of 400 m to 600 m below surface. A steeply inclined column of potassic alteration is also preserved around the late mineral porphyry intrusions in the northern part of the system. Fine-grained biotite with disseminated and vein magnetite define the mineralogy of the potassic zone, with some bleached feldspars indicating replacement by albite or K-feldspar alteration. Multidirectional quartz veinlets, mainly A-type chalcopyrite-magnetite veins, were introduced with the potassic event, with slightly more distal molybdenite B-type quartz veins.

Sericite-chlorite-clay alteration formed at the expense of potassic alteration, with the intensity of the overprint decreasing with depth. Surface exposures in the central part of the Josemaría deposit, to the east of the north-northeasterly-trending structural zone, are sericite-chlorite-clay altered, with distinctive mineralogy and haematitic overprint of magnetite. Potassic alteration is also preferentially preserved within the host rock andesite dykes, even where they are enclosed by sericite-chlorite-clay-altered tonalite.

High-sulphidation alteration and underlying sericitic alteration are best preserved to the west of the north–northeast-trending structural zone, within the rhyolite host rock. However, the system displays significant telescoping of alteration within its central most part. Advanced argillic alteration has overprinted potassic alteration, most evident in the tonalite, early and inter-mineral porphyry phases that underlie the topographically highest part of the deposit. Advanced argillic alteration in the rhyolite includes quartz-pyrophyllite and local quartz-alunite alteration, while related alteration within the more reactive tonalite is represented by sericitic alteration below the higher-level advanced argillic assemblage.

The porphyry intrusions also record progressive development of alteration within the system with the early mineral phase displaying strong potassic and sericite-chlorite-clay alteration, while the late mineral phase is only propylitic. A relatively weak sericitic and propylitic halo surrounds the deposit.

A second high-sulphidation alteration event post-dates the Josemaría mineralizing system as well as the post-mineral volcanic rocks. It is associated with quartz-alunite- and quartz-kaolinite-cemented breccia dykes, predominantly in the southern part of the deposit area. The breccias and related chalcedony-alunite-kaolinite-pyrite-enargite alteration invade the northwest-trending structures. The alteration can also locally be distinguished along the north-northeast- and northeast-trending structures, and the Late Oligocene unconformity.

7.3.2.5 Mineralization

There are two main types of hypogene mineralization that occur in proximity to one another due to a high degree of telescoping of high-sulphidation alteration and mineralization over deeper mineralization related to potassic alteration. Late supergene enrichment within the northern part of the deposit has upgraded copper values over part of the system.

The first and most widespread type of hypogene mineralization is associated with the upper parts of the potassic alteration zone (Min zone PyCpy). Disseminated and vein-style chalcopyrite mineralization is associated with an A-type quartz–magnetite veinlet stockwork in the area above and around the porphyry intrusions. Minor bornite is present, but in an approximate ratio of 30:1 (chalcopyrite:bornite) within the potassic zone.

Sericite-chlorite-clay alteration overprints the potassic alteration zone, but was not grade-destructive. Some of the better copper grades are found within this domain. Where overprinted, which is through much of the deposit, the sulphide assemblage has been variably reconstituted to pyrite-chalcopyrite with pyrite:chalcopyrite ratios of approximately 3–10:1. Copper and gold values are in the range of approximately 0.35% Cu and 0.2 g/t Au.

The copper-gold mineralization is overlapped by a molybdenite-bearing annulus best developed on the northern and eastern sides, with grades averaging greater than 50 ppm Mo. It is related to molybdenite-bearing B-type veins surrounding the central part of the system.

The second type of hypogene sulphide mineralization is located along the western and central parts of the system, associated with the advanced argillic domain and the underlying sericitic alteration (Min zone PyCc(H)). This high-sulphidation assemblage includes disseminated grains of pyrite rimmed by hypogene chalcocite, bornite, and/or covellite with trace amounts of tennantite and enargite. Arsenic values are relatively low, in the range of approximately 10 ppm to 100 ppm. Pyrite:copper-bearing sulphide ratios are approximately 10:1.

In the central part of the system, where the highest degrees of alteration telescoping are mapped, the high-sulphidation alteration extends downward over the potassic and sericite–chlorite–clay-related chalcopyrite mineralization. In this area, the early potassic-related sulphide mineralization is reconstituted and upgraded by the high-sulphidation sulphide assemblage, reflected in higher gold and hypogene copper grades in the central part of the system.

Supergene copper enrichment (PyCc(S)) is focused along the north-northeast-trending structural zone through the northern part of the deposit. The Late Oligocene erosional event removed the upper parts of the mineralized system, however, erosion took place at a rapid rate that did not allow for development of an extensive leached cap or supergene enrichment at that time. Only more recently, likely during most recent glacially aided erosion into the system, has a leached cap been developed over the system (Ox and Mix) with an underlying supergene enrichment zone. The leached zone ranges from 10 m to 20 m in thickness over the relatively impermeable felsic volcanic rocks in the west to a maximum of 230 m within the north–northeasterly-trending structural corridor and the tonalite farther east where it was facilitated by gauge zones along faults and increased permeability through groundwater removal of sulphate veins.

Appreciable oxide copper mineralization (malachite and neotocite) is restricted to a small zone of fractures within the leached cap (Ox) in the northern part of the deposit. This is interpreted to be the result of leaching of the pyrite-poor potassic domain. A portion of the leached cap, between section lines 4100N and 4600N, in the deposit centre, is gold-enriched. This area corresponds to the central, and perhaps deepest, parts of the advanced argillic alteration zone within the system.

Mineralized zones for modelling purposes were defined by the relative abundance of chalcopyrite, pyrite and chalcocite/covellite, as well as the mode of occurrence of chalcocite/covellite (hypogene or supergene) and the level of oxidation:

- Oxide (leached cap) (Ox);
- Pyrite + hypogene chalcocite/covellite (PyCc(H));
- Pyrite + supergene chalcocite/covellite (PyCc(S));
- Mixed sulphide and oxide (MIX);
- Pyrite + chalcopyrite (PyCpy).

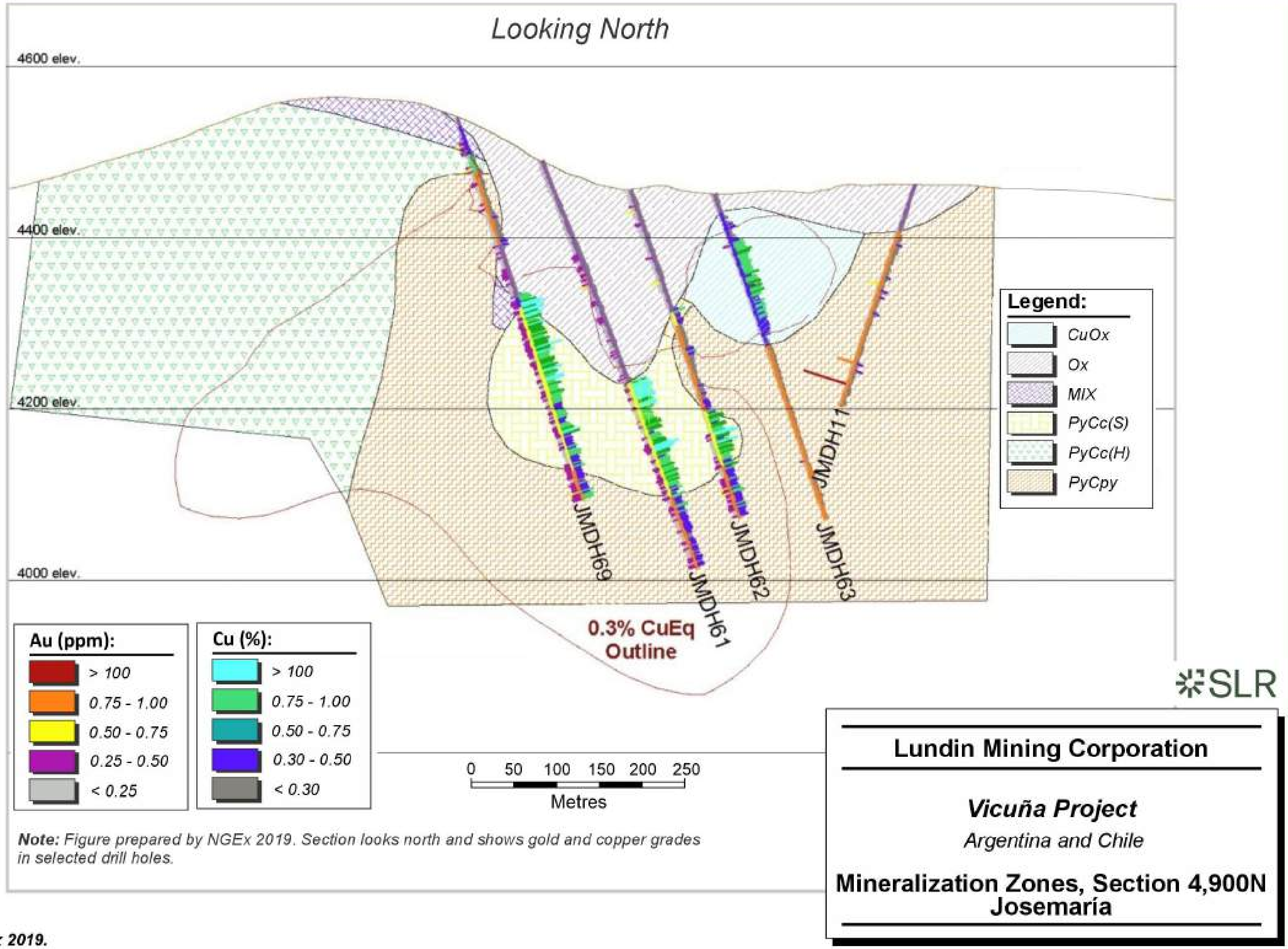
The mineral zones at Josemaría are summarized in Table 7-4.

Table 7-4: Mineral Zones, Josemaría

Min Zone/Code	Description	Mineralization Association
Ox	Oxide (leached cap)	Malachite and neotocite in restricted domain
MIX	Mixed sulphide and oxide	Malachite over sulphides below
PyCc(S)	Domain of supergene enrichment	Pyrite + supergene chalcocite/covellite
PyCc(H)	Below supergene enrichment	Pyrite + hypogene chalcocite/covellite, bornite and/or covellite with trace amounts of tennantite and enargite
PyCpy	Porphyry mineralization	Disseminated chalcopyrite, minor bornite ~ 30:1 (chalcopyrite:bornite)

Figure 7-14 presents a cross-section of the Josemaría deposit showing mineralized zones.

Figure 7-14: Mineralization Zones, Section 4900N - Josemaría



Source: NGEx 2019.

8.0 Deposit Types

Mineralization in the Project area includes both porphyry copper-gold and high-sulphidation copper-gold-silver epithermal systems. The mineralized system in its entirety is a telescoped porphyry-epithermal system, with multiple intrusive and breccia centres, and so combines aspects of both deposit types.

8.1 Copper-Gold Porphyry

Copper-gold porphyry deposits are well documented along the Andes and represent a widespread deposit type and mineralization style in Chile and Argentina, and into Peru.

Porphyry deposits, in general, are large, low- to medium-grade deposits in which primary (hypogene) sulphide minerals are dominantly structurally controlled and which are spatially and genetically related to felsic to intermediate porphyritic intrusions (Kirkham 1972). The large size and structural control (e.g., veins, vein sets, stockworks, fractures, 'crackled zones', and breccia pipes) serve to distinguish porphyry deposits from a variety of other deposit types that may be peripherally associated, including skarns, high-temperature mantos, breccia pipes, peripheral geothermal veins, and epithermal precious metal deposits. Secondary minerals may be developed in supergene-enriched zones in porphyry copper deposits by weathering of primary sulphides. Such zones typically have significantly higher copper grades, thereby enhancing the potential for economic exploitation (Sinclair 2007). An important characteristic of porphyry districts is that they do not form deposits in isolation but tend to occur in “clusters.” This is known to be the case in Maricunga belt systems; for example, such as Refugio where mineralized porphyry bodies are spaced in the order of one kilometre apart.

Porphyry deposits occur throughout the world in a series of extensive, relatively narrow, linear metallogenic provinces. They are predominantly associated with Mesozoic to Cenozoic orogenic belts in western North and South America and around the western margin of the Pacific Basin, particularly within the southeast Asian archipelago. However, major deposits also occur within Paleozoic orogens in Central Asia and eastern North America, and to a lesser extent, within Precambrian terranes (Sinclair 2007).

Porphyry deposits are large and typically contain hundreds of millions of tonnes of mineralization, although they range in size from tens of millions to billions of tonnes. Grades for the different metals vary considerably but generally average less than 1%. In typical porphyry copper deposits, copper grades range from 0.2% to greater than 1% Cu; molybdenum content ranges from approximately 0.005% to approximately 0.03% Mo; gold content ranges from 0.004 g/t Au to 0.35 g/t Au; and silver content ranges from 0.2 g/t to 5 g/t Ag (Sinclair 2007).

8.2 High-Sulphidation Copper-Gold-Silver Epithermal

Many features of the Filo del Sol and Josemaría deposits are typical of high-sulphidation epithermal systems produced by porphyry-related hydrothermal activity at shallow depths and relatively low temperatures. In these systems, deposition normally takes place within one kilometre of the surface in the temperature range of 50°C to 200°C, although temperatures up to 400°C are not uncommon. Most deposits occur as siliceous vein fillings, irregular branching fissures, stockworks, breccia pipes, vesicle fillings, and disseminations. The fissures have a direct connection with the surface, which allowed the mineralizing fluids to flow with comparative ease. In many cases, the deposits are related directly to deeper intrusive bodies. The country rocks located near epithermal veins are commonly extensively altered. Relatively high porosity and open-channel permeability allow fluids to circulate in the wall rocks for great distances.

Favourable temperature gradients promote reactions between cool host rocks and warm to hot invading solutions. As a result, wall-rock alteration is both widespread and conspicuous. Among the principal alteration products are alunite, pyrophyllite, illite, dickite, kaolinite, silica and pyrite, as well as other metal-bearing sulphides and oxides.

Remobilization of copper, and possibly silver, particularly through weathering processes (oxidation, leaching, and replacement) appears to have significantly altered the original metal zonation patterns in the upper part of Filo del Sol.

8.3 Applicability of Deposit Models to the Project Area

The SLR QP considers that copper-gold porphyry and copper-gold-silver high sulphidation epithermal genetic models are appropriate models to use in exploration vectoring.

9.0 Exploration

9.1 Grids and Surveys

The datum for the reporting of sample coordinates is the UTM WGS84 datum.

The base topography used to constrain both the Josemaría Mineral Resource and the Filo del Sol estimates was obtained from PhotoSat Information Ltd. (Vancouver, Canada) in 2019, and consists of a one-metre digital elevation model (DEM) with 50 cm precision produced satellite images generated using ground control points with orthophotography overlay of the area.

9.2 Mapping Programs

Geological mapping was carried out in several phases, with each phase building on and refining information from the previous phases. Mapping included the following scales:

- Regional: 1:10,000 (Cyprus–Amax);
- Prospect/deposit: 1:5,000 and 1:7,500 (NGEx).

Results were incorporated into the Project and deposit maps shown in Section 7.

9.3 Geochemical Sampling

Geochemical samples included collection of talus fines, rock chip (grab and channel), and trench samples (Table 9-1). Sample locations are shown in Figure 9-1.

Talus sampling initially focused on areas of alteration identified through satellite image analysis, and was followed up by sampling of expanded areas to complete coverage over most of the Project area.

Three broad geochemical anomalies (Cu, Au, Ag, As, Bi, Mo, and Sb) were outlined over the Filo del Sol, Tamberías and Maranceles areas, with several other, less distinct areas of anomalism also identified. The anomaly forming the Filo del Sol alignment is much larger than the area of current drilling.

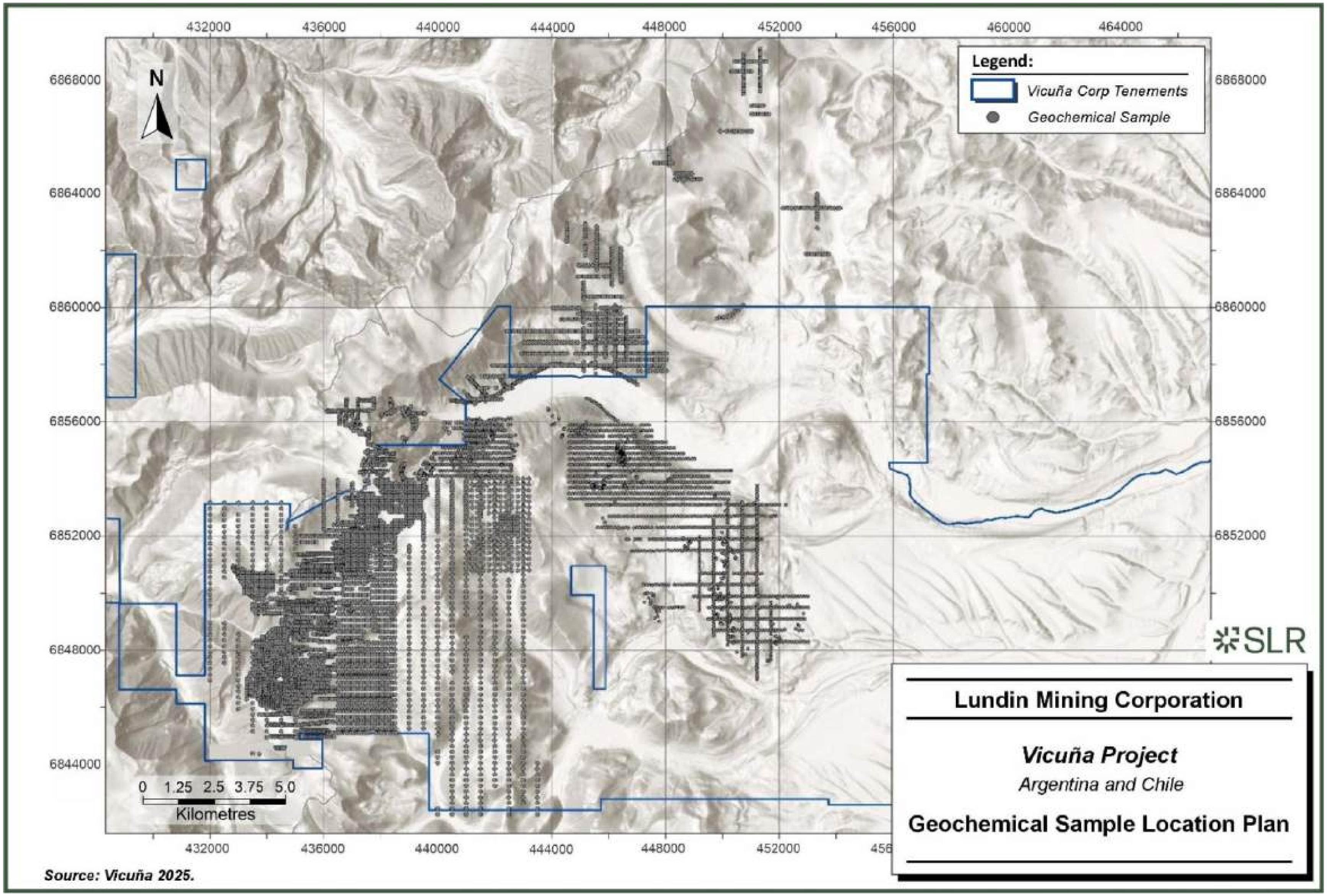
The Josemaría deposit was delineated by coincident talus and rock chip gold, copper, and molybdenum geochemical anomalies within a central feature, approximately 2.5 km in diameter. These anomalies encouraged continued exploration and drilling activities. In addition, the Batidero, Portones, and Cumbre Verde prospect areas returned anomalous copper and gold values.

Rock chip sampling was much more restricted in area than the talus fines sampling, covering mainly the Filo del Sol and Tamberías areas with a few samples at Maranceles. Several copper-gold-silver-arsenic anomalies were outlined from clusters of float samples and contiguous chip/channel samples along road cuts.

Table 9-1: Geochemical Samples

Sample Type	Number of Samples
Talus	8,207
Rock chip	2,296
Trench and roadcuts	3,729

Figure 9-1: Geochemical Sample Location Plan



Source: Vicuña 2025.

9.4 Pits and Trenches

Trenches were completed primarily following road cuts. Where possible, samples were taken over a three-metre interval; however, sampled lengths may not represent true lengths of mineralization identified in the samples. The results from the trench sampling were not used in the Mineral Resource estimate.

9.5 Geophysical Surveys

Geophysical surveys completed are summarized in Table 9-2. Outlines of the areas covered by each survey type are shown in Figure 9-2.

Clear geophysical responses can be linked to observed geological features.

The magnetic surveys delineated magnetic (high) anomalies corresponding closely to porphyry intrusive rocks while also highlighting the main structural features.

A high-conductivity IP anomaly associated with the Filo del Sol silver zone was identified between 7500N and 8400N on the 5,000 m elevation slice. This was interpreted to be related to the high pyrite content of the zone in this area. A second high-conductivity anomaly overlay the Filo del Sol–Aurora zone. However, several other similar anomalies have so far not been associated with deeper high-grade mineralization.

IP chargeability surveys returned a partial pyrite “halo” anomaly around the western and northern parts of the main Josemaría deposit. The response to the south and east appears to be masked by the post-mineral volcanic cover and chargeability is also generally low in that area.

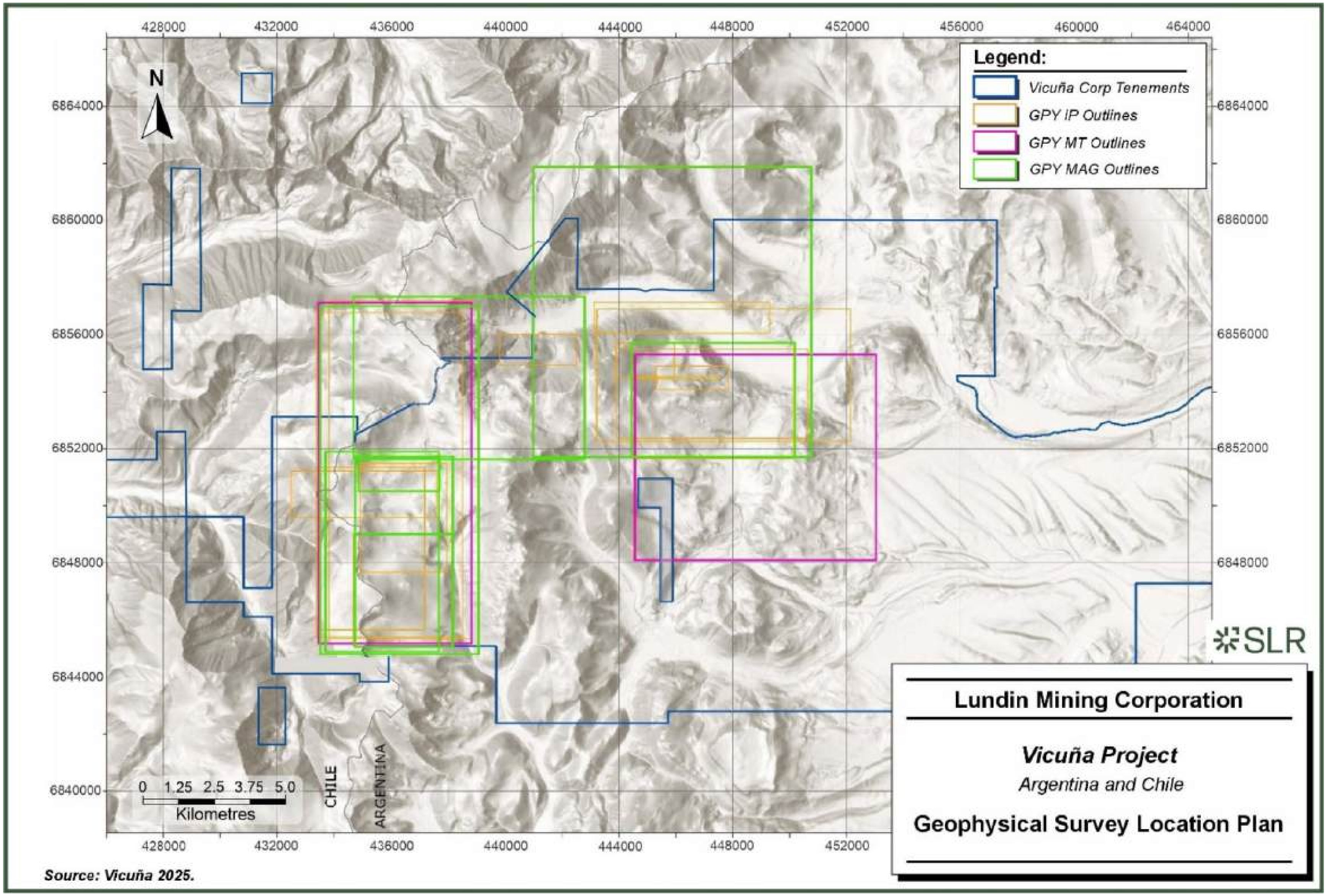
Magnetic data confirmed the north-northeasterly trend of structures and porphyries at Filo del Sol and highlighted the porphyry intrusions in the vicinity of Cerro Vicuña.

Table 9-2: Geophysical Surveys

Year	Survey Company	Survey Type	Comment
1999–2000	Zonge Ingeniería y Geofísica (Chile) S.A. (Zonge)	Ground magnetic, IP, and CSAMT	Completed 153 line-km magnetics, and 37.8 line-km IP-CSAMT surveys.
2000–2001	Quantec Geoscience Argentina SA (Quantec)	Magnetic	100 line-km
2003	Quantec	CSAMT	Josemaría deposit and the Batidero prospect adjacent to the southwest of the deposit.
2003–2007	Quantec	IP	Completed several pole-dipole IP, resistivity, and ground magnetic geophysical surveys over the same grid lines as used for the CSAMT survey. Also completed additional infill and extended grid lines.
2004–2005	Quantec	IP–resistivity	30.4 line-km
		Magnetic	29.4 line-km
2005-2006	Quantec	IP–resistivity	40.5 line-km
		Magnetic	39.1 line-km

Year	Survey Company	Survey Type	Comment
2007–2008	Quantec	IP–resistivity	30.0 line-km
		Magnetic	77.6 line-km
2008–2009	GRS Chile Ltda	Multi-channel IP and magnetotelluric data acquisition (MIMDAS) survey	Completed over three regional project sites: Josemaría, Los Helados (not within the Project area), and Filo del Sol, with a single 2.8 km line completed at Josemaría. This type of geophysical survey combines chargeability, resistivity and conductivity results together to a greater depth.
2009–2010	Zonge	IP	59 line-km of IP survey over the Josemaría deposit area.
2011–2012	Quantec	Pole–dipole IP	36.2 line-km
2014–2015	Quantec	Pole–dipole IP	23 line-km
2015–2016	Quantec	Pole–dipole IP	27.7 line-km
2019–2020	DIAS Geophysical Limited (DIAS)	3D IP	Covered 20.5 km^2. Designed to detect the electrical resistivity and chargeability signatures associated with potential targets of interest. Four receiver lines, spaced at 300 m; electrodes and injection sites at 150 m spacing along lines.
2018–2019; 2019–2020	Pioneer Aerial Surveys Ltd	Drone magnetic	Completed using a GEM Systems Canada GSMP-35UA potassium vapor sensor mounted on a Matrice 600 drone. Line spacing was 100 m over most of the surveyed area, with 50 m lines flown in a small area in the southeast corner. The total line-length flown was 292 km.
2021–2022	Quantec	Magneto-telluric (MT)	27 km^2 covered
2023	Expert Geophysics Ltd and MPX Geophysics Ltd	Helicopter supported airborne magnetic and electromagnetic (EM) geophysical survey	An AFMAG survey and very low frequency MobileMT natural-field EM survey covered an area approximately 15 km east–west by 30 km north–south on 100 m, 200 m, and 400 m spaced flight lines. Two overlapping grids were flown; 349 line-km (flown east–west and centred on Josemaría) and 1,149 line-km, flown north–south over the larger area
2024-2025	Quantec	MT	Extended the 2021-2022 survey to the east with an additional 330 5-component stations covering 27 km^2.
2025	Quantec	3D IP	Covered an area of 31.4 km^2. Designed to detect the electrical resistivity and chargeability signatures associated with potential targets of interest. Ten receiver lines, spaced at 200 m; electrodes and injection sites at 400 m spacing along lines.

Figure 9-2: Geophysical Survey Location Plan



Source: Vicuña 2025.

9.6 Petrographic Study

In December 2005, a petrographic (thin section) and total/relict sulphide study was completed by Tiddy & Cía, Ltda. (Tiddy), based in Argentina. A total of 29 samples were selected from drill cores.

Study results were used in discriminating between different rock types.

9.7 K–Ar Age Dating Study

In October 2007, SERNAGEOMIN, based in Santiago, Chile, completed a potassium–argon (K–Ar) age dating study on four surface samples in the Project district. Two samples taken from the Josemaría area returned ages of 27.5 Ma ±0.7 and 25.9 Ma ±1.1. Detailed information of this study was unavailable for review.

9.8 Geomorphology Study

In December 2006, Chisãnco SRL (Chisãnco), based in San Juan, completed a study of the geomorphology of the headwaters of the Rio Blanco (Blanco River) and completed a preliminary investigation of the glacier rocks. This preliminary investigation was used to determine areas that required more detailed evaluation in subsequent environmental studies.

9.9 Exploration Potential

9.9.1 Deposits

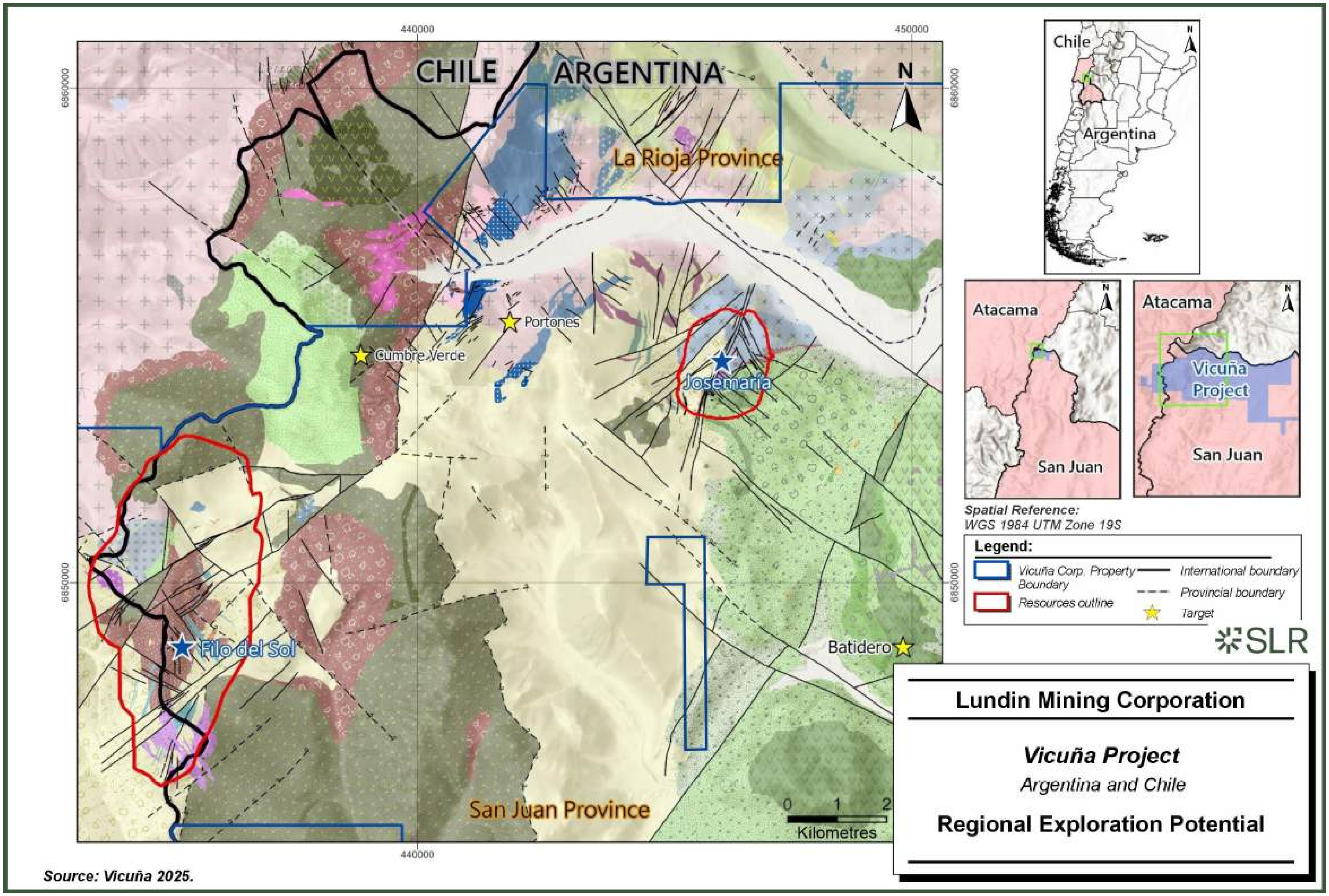
The Filo del Sol deposit remains open in almost all directions.

The Josemaría deposit remains open to the south, beneath a thickening cover of post-mineral volcanic rocks, and also at depth. Exploration potential also remains to extend the mineralization at depth within the tonalite unit.

9.9.2 Regional

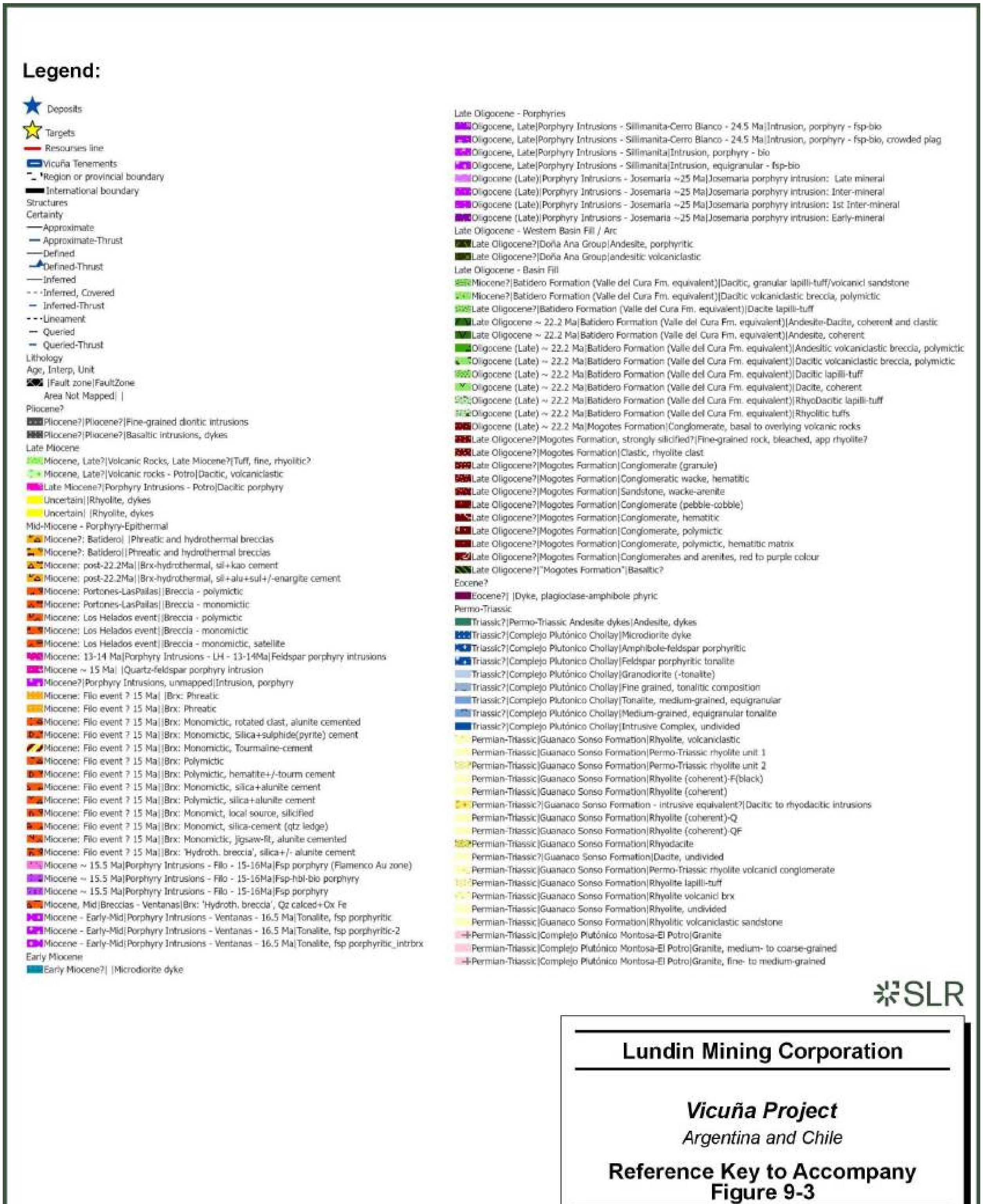
Figure 9-3 is a compilation map showing the areas that currently are considered to have exploration potential. Figure 9-4 is a legend key to accompany Figure 9-3.

Figure 9-3: Regional Exploration Potential



Source: Vicuña 2025.

Figure 9-4: Reference Key to Accompany Figure 9-3



Source: Vicuña 2025.

Given that porphyry deposits often occur in clusters, and that there are prospects identified in the vicinity of the Filo del Sol and Josemaría deposits, there is good exploration potential to identify additional porphyry-hosted copper-gold and copper–gold–silver epithermal systems.

Several high-potential target areas exist in the vicinity of the Filo del Sol deposit for the discovery of new mineralized centres, which could potentially be separate deposits themselves, or different parts of one very large deposit contiguous with what has already been delineated.

Prior to the discovery of the Josemaría, deposit, several prospects were being advanced in parallel, ultimately resulting in the initial drill program. These prospects included Portones, Batidero, and Cumbre Verde. Once the Josemaría deposit was discovered, exploration activities shifted to deposit definition drilling, and exploration on the other prospects was suspended.

One of these additional prospects includes a second major geochemical anomaly on the western side of the Project area, the Portones prospect, which shows similarities to the original anomaly over the Josemaría deposit and alteration features consistent with porphyry-style mineralization.

The prospective Cumbre Verde area is located to the west of the Josemaría deposit and to the northeast of the Filo del Sol deposit. This area is considered prospective in part because the mineralized trend that hosts the nearby Lunahuasi prospect, owned by NGEx, appears to trend southward into the Vicuña Project area in the Cumbre Verde area.

10.0 Drilling

10.1 Introduction

A total of 968 drill holes (336,871.59 m) had been completed in the Project area as of April 27, 2025. Drilling is on-going at Filo del Sol.

A drill summary table for the Project is provided in Table 10-1, and a Project-wide drill collar location plan is included as Figure 10-1. Drill holes specifically completed for exploration or infill drilling purposes are shown in Figure 10-2. Drilling is summarized in Table 10-2 for the Filo del Sol area and in Table 10-3 for the Josemaría area, with drill collar location plans provided in Figure 10-3 and Figure 10-4, respectively.

Table 10-1: Project Drill Summary Table

Operator	Year	Purpose	Number of Drill Holes	Metres Drilled
Cyprus-Amax	1998–1999	Exploration	16	2,519.00
Tenke	2000–2001	Exploration	19	3,112.00
	2002–2003	No drilling completed	—	—
	2003–2004	Exploration	14	4,645.00
	2004–2005	Exploration	31	11,989.75
	2005–2006	Exploration	10	3,816.45
	2006–2007	Exploration	18	6,816.00
Suramina	2007–2008	Exploration	10	2,896.00
	2008–2009	No drilling completed	—	—
NGEx	2009–2010	Exploration	7	2,253.25
	2010–2011	Exploration	9	2,574.50
	2011–2012	Exploration	46	21,086.60
	2012–2013	Exploration	23	9,060.80
	2013–2014	Exploration	40	15,517.65
	2014–2015	Exploration	19	5,683.90
	2015–2016	No drilling completed	—	—
Filo Mining	2016–2017	Exploration	41	8,617.00
	2017–2018	Exploration and hydrogeology	50	9,610.10
Filo Mining and NGEx	2018–2019	Exploration, infill, geotechnical, and hydrogeology	51	17,317.70
Filo Mining and Josemaría Resources	2019–2020	Exploration, condemnation, metallurgy, geotechnical, and hydrogeology	83	18,156.20

Operator	Year	Purpose	Number of Drill Holes	Metres Drilled
Filo Mining	2020–2021	Exploration	18	10,000.10
Filo Mining and Josemaría Resources	2021–2022	Exploration, infill, geotechnical, and hydrogeology	200	62,560.55
Filo Mining and Lundin Mining	2022–2023	Exploration, condemnation, geotechnical, and hydrogeology	71	44,288.34
Lundin Mining	2023–2024	Exploration, geotechnical and hydrogeology	68	8,240.50
	2024–2025	Exploration, geotechnical, and hydrogeology	63	6,617.60
Filo Corp.	2024	Exploration	40	42,423.00
Vicuña Corp.	2025	Exploration and infill	21	17,069.60
Totals			**968**	**336,871.59**

Figure 10-1: Project Drill Collar Location Map

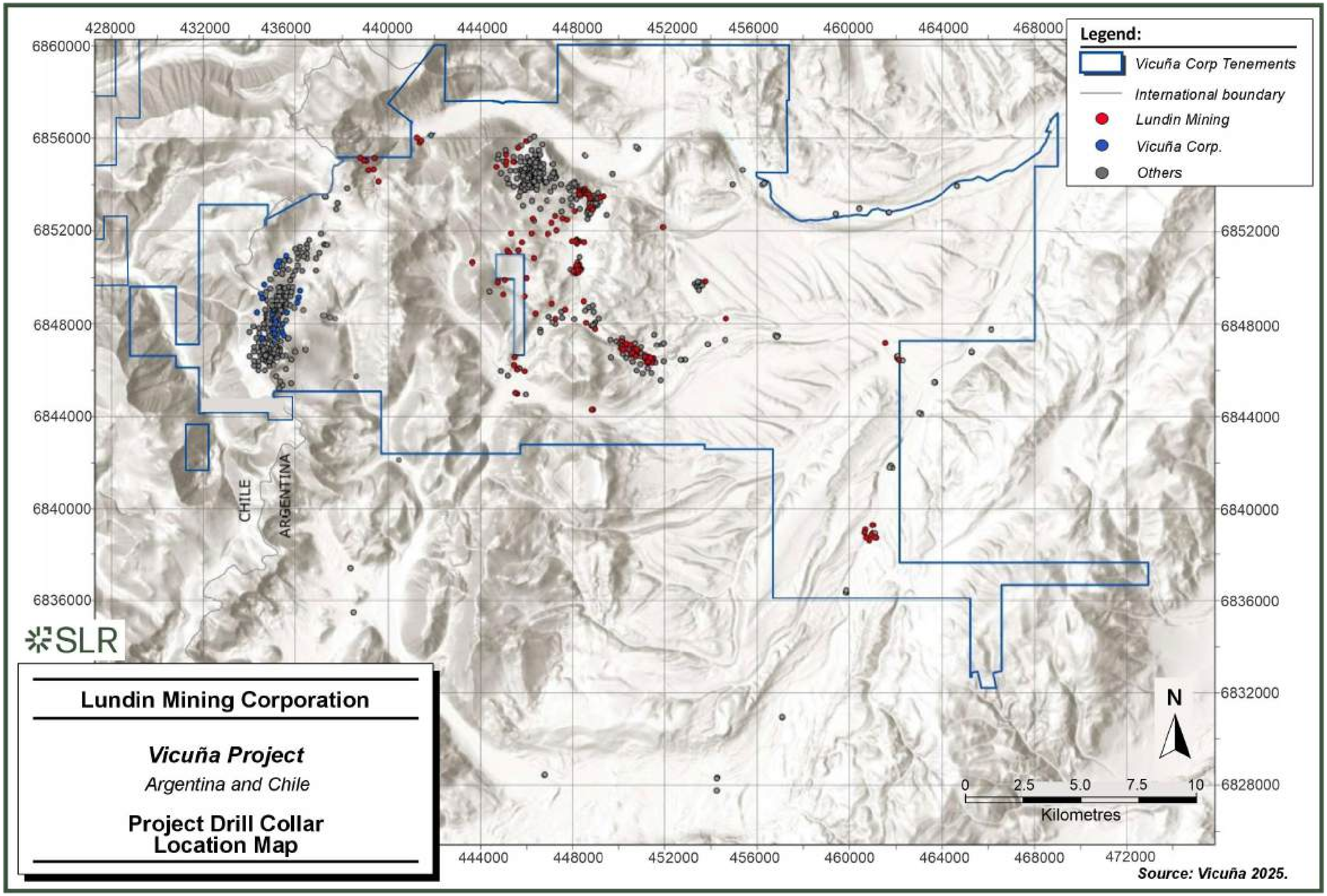


Figure 10-2: Exploration Drill Collar Location Map

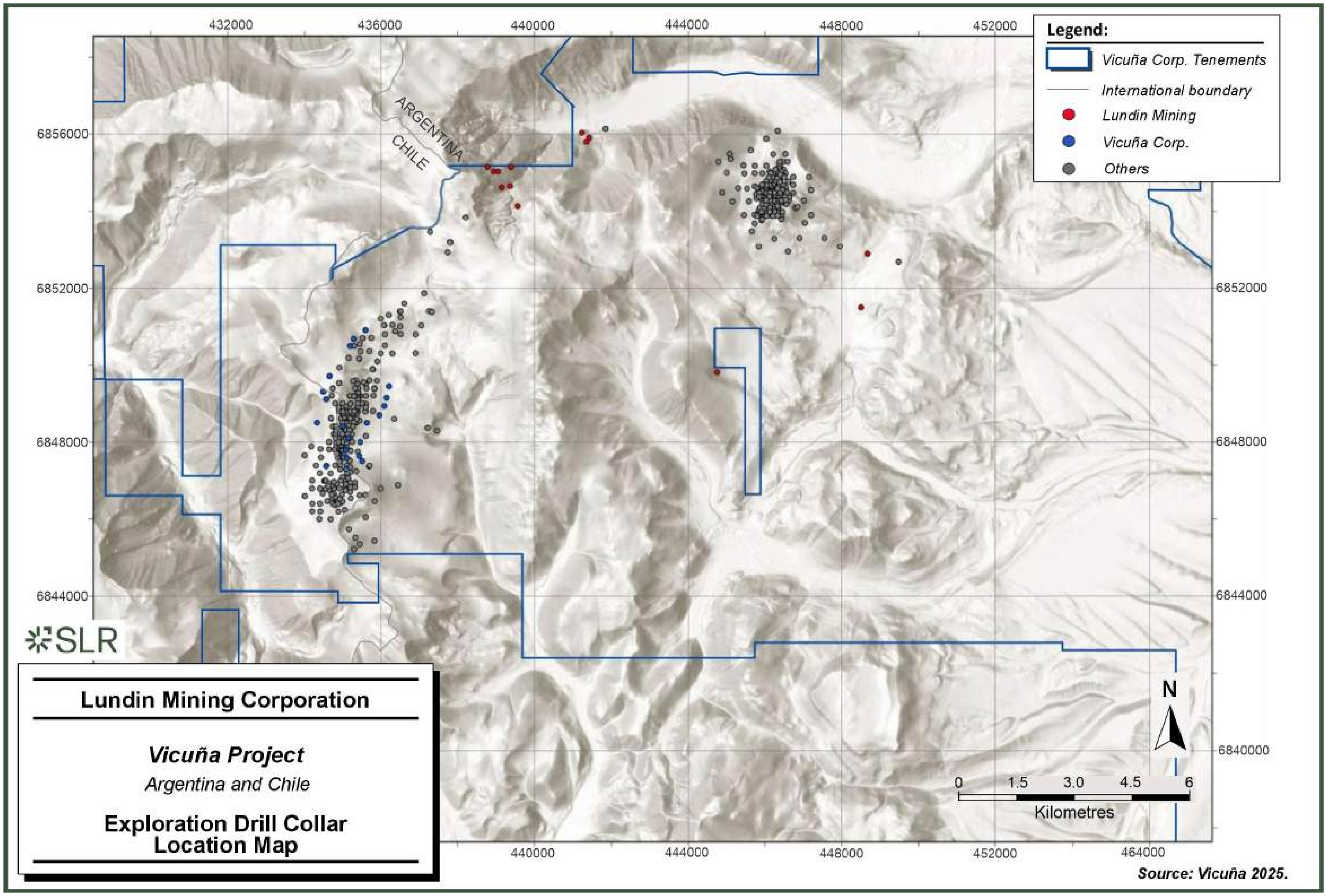


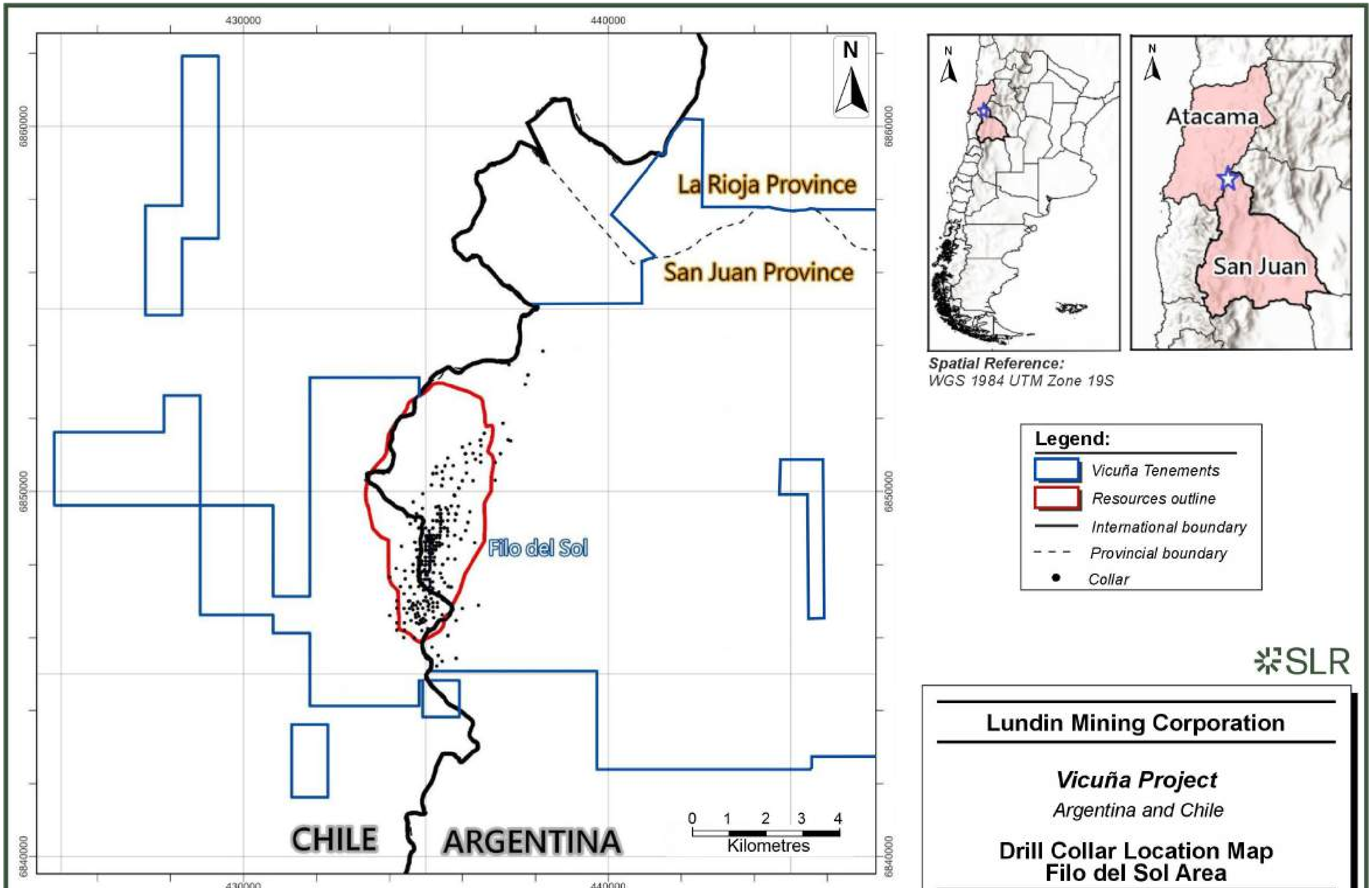
Table 10-2: Drill Summary Table, Filo del Sol Area

Operator	Year	Purpose	Number of Drill Holes	Metres Drilled
Cyprus-Amax	1998–1999	Exploration	16	2,519.00
Tenke	2000–2001	Exploration	19	3,112.00
	2002–2003	No drilling	—	—
	2003–2004	Exploration	4	1,170.00
	2004–2005	Exploration	5	1,762.00
	2005–2006	Exploration	6	1,658.45
	2006–2007	Exploration	1	578.00
Suramina	2007–2008	Exploration	10	2,896.00
	2008–2009	No drilling	—	—
NGEx	2009–2010	No drilling	—	—
	2010–2011	Exploration	1	155.50
	2011–2012	Exploration	7	1,850.90
	2012–2013	Exploration	5	819.50
	2013–2014	Exploration	26	8,208.05
	2014–2015	Exploration	19	5,683.90
	2015–2016	No drilling	—	—
Filo Mining	2016–2017	Exploration	41	8,617.00
	2017–2018	Exploration and hydrogeology	50	9,610.10
	2018–2019	Exploration	8	4,747.20
	2019–2020	Exploration	32	9,515.20
	2020–2021	Exploration	18	10,000.10
	2021–2022		23	15,874.60
	2022–2023	Exploration, hydrogeology and geotechnical	63	41,734.14
	2023–2024	No drilling	—	—
Filo Corp.	2024	Exploration	40	42,423.00
Vicuña Corp.	2025	Exploration and infill	21	17,069.60
Totals			**415**	**190,004.24**

Table 10-3: Drill Summary Table, Josemaría Area

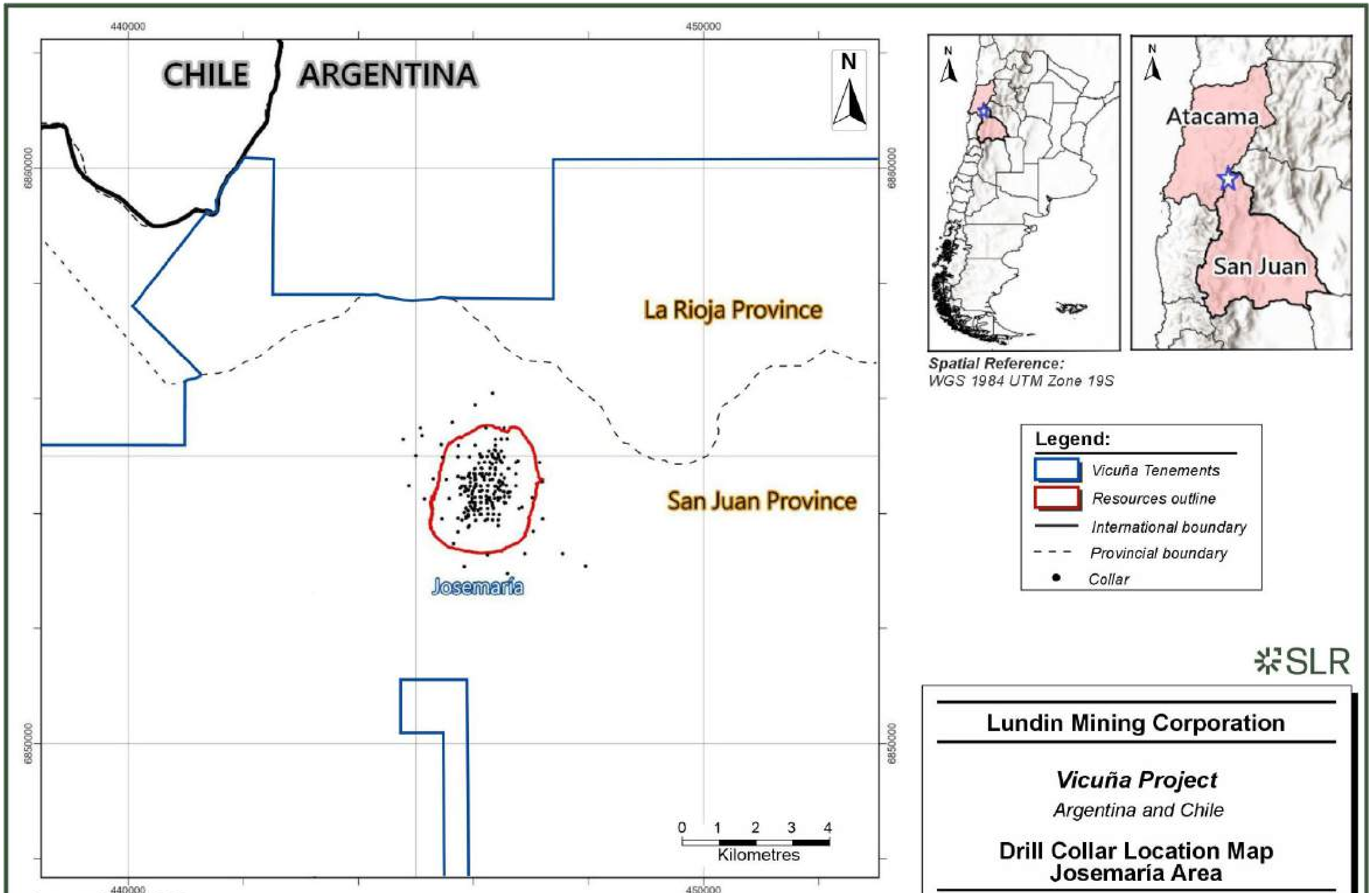
Operator	Year	Purpose	Number of Drill Holes	Metres Drilled
Tenke	2003–2004	Exploration	10	3,475.00
	2004–2005	Exploration	26	10,227.75
	2005–2006	Exploration	4	2,158.00
	2006–2007	Exploration	17	6,238.00
	2007–2008	No drilling	—	—
	2008–2009	No drilling	—	—
NGEx	2009–2010	Exploration	7	2,253.25
	2010–2011	Exploration	8	2,419.00
	2011–2012	Exploration	39	19,235.70
	2012–2013	Exploration	18	8,241.30
	2013–2014	Exploration	14	7,309.60
	2014–2015	No drilling	—	—
	2015–2016	No drilling	—	—
	2016–2017	No drilling	—	—
	2017–2018	No drilling	—	—
	2018–2019	Infill, geotechnical and hydrogeology	43	12,570.50
Josemaría Resources	2019–2020	Condemnation, metallurgy, geotechnical and hydrogeology	51	8,641.00
	2020–2021	No drilling	—	—
	2021–2022	Infill, geotechnical and hydrogeology	177	46,685.95
Lundin Mining	2022–2023	Exploration and condemnation	8	2,554.20
	2023–2024	Exploration, geotechnical and hydrogeology	68	8,240.50
	2024–2025	Exploration, geotechnical and hydrogeology	63	6,617.60
Totals			**553**	**146,867.35**

Figure 10-3: Drill Collar Location Map, Filo del Sol Area



Source: Vicuña 2025.

Figure 10-4: Drill Collar Location Map, Josemaría Area



Source: Vicuña 2025.

10.2 Drilling Supporting Mineral Resource Estimation

10.2.1 Filo del Sol

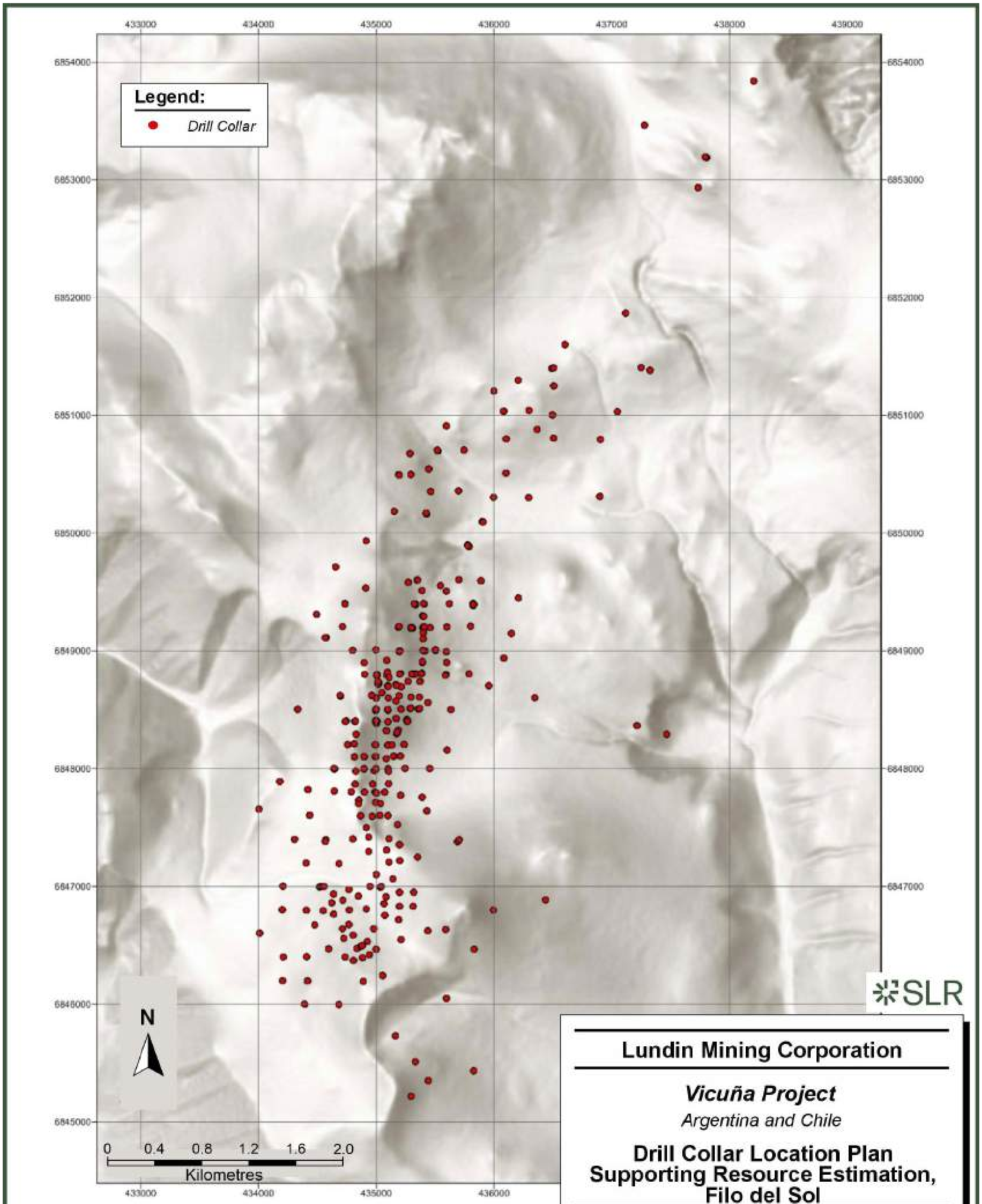
The Filo del Sol Mineral Resource estimate is supported by 204 core drill holes (152,995.2 m), and 196 RC drill holes (47,491 m). The drill hole cut-off date is April 9, 2025, and the last drill hole completed on the Filo del Sol deposit was FSDH146.

Table 10-4 summarizes the drilling supporting estimation. A drill collar location map showing the drill collar locations for these drill holes is included as Figure 10-5.

Table 10-4: Drill Summary Table Supporting Mineral Resource Estimation, Filo del Sol

Year	Number RC Holes	Total RC Metres (m)	Number Core Holes	Total Core Metres (m)
1998–1999	16	2,519	—	—
2000–2001	19	3,112	—	—
2003–2004	4	1,170	—	—
2004–2005	5	1,762	—	—
2005–2006	5	1,630	1	278.45
2006–2007	—	—	1	578
2007–2008	10	2,896	—	—
2010–2011	—	—	1	155.5
2011–2012	—	—	7	1,850.9
2012–2013	—	—	5	819.5
2013–2014	24	8,039	2	366.05
2014–2015	22	7,114	2	204.9
2016–2017	41	8,617	—	—
2017–2018	34	6,877	12	2,532.6
2018–2019	—	—	8	4,747.2
2019–2020	13	2,785	14	5,820.65
2020–2021	—	—	19	11,098.55
2021–2022	3	970	19	15,863.1
2022–2023	—	—	57	46,185.49
2023–2024	—	—	39	43,042
2024–2025	—	—	17	19,452.3
Total	**196**	**47,491**	**204**	**152,995.2**

Figure 10-5: Drill Collar Location Plan Supporting Resource Estimation, Filo del Sol



Source: Vicuña 2025.

10.2.2 Josemaría

Drilling used to support the estimation of Mineral Resources consists of 195 core (89,966.2 m) and 48 RC (17,538.0 m) drill holes. The drilling database used in support of the current Mineral Resource estimate was closed as of December 31, 2022.

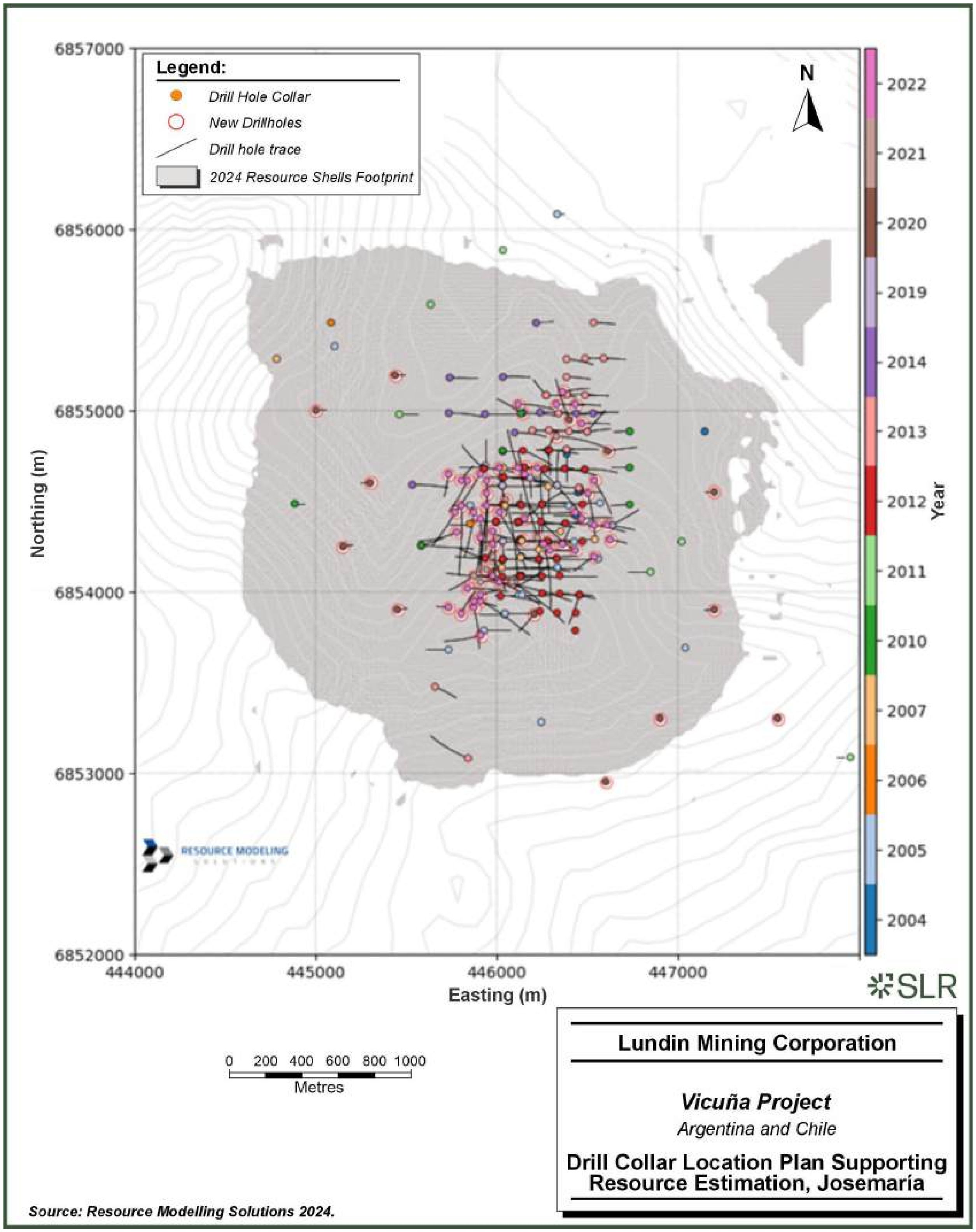
Table 10-5 summarizes the drilling used to support resource estimation at Josemaría. Figure 10-6 presents drill collar locations for those drill holes used to support resource estimation at Josemaría.

Table 10-5: Drill Summary Table Supporting Mineral Resource Estimation, Josemaría

Year	Operator	RC Drilling		Core Drilling		Comments
		No. of Drill Holes	Metres (m)	No. of Drill Holes	Metres (m)	
2003–2004	NGEx	10	3,475.0	—	—	
2004–2005	NGEx	21	7,822.0	5	2,405.9	
2005–2006	NGEx	—	—	2	1,700.0	
2006–2007	NGEx	17	6,241.0	—	—	
2009–2010	NGEx	—	—	7	2,253.5	
2010–2011	NGEx	—	—	6	2,217.3	JMDH015 (158 m) and JMDH016 (44 m) not included (removed from database)
2011–2012	NGEx	—	—	39	19,231.5	
2012–2013	NGEx	—	—	18	8,227.63	JMDH074 (13.7 m) not included (removed from database)
2013–2014	NGEx	—	—	14	7,309.7	includes 2 geotechnical drill holes
2018–2019	JMR	—	—	29	10,619.7	includes 7 geotechnical drill holes
2019–2020	JMR	—	—	18	5,321.0	includes 4 geotechnical drill holes and 11 condemnation drill holes
2020–2021	JMR	—	—	3	2,223.0	
2021–2022	JMR	—	—	54	27,457.1	includes 1 geotechnical drill hole
Totals		**48**	**17,538.0**	**195**	**89,966.2**	

Note: JMR - Josemaría Resources

Figure 10-6: Drill Collar Location Plan Supporting Resource Estimation, Josemaría



Source: Resource Modelling Solutions 2024.

10.3 Drill Methods

Where known, drill contractors have included Patagonia Drilling SRL (Patagonia), based in Mendoza, Argentina; Adviser Drilling (Adviser), now Foraco International SA, based in Santiago, Chile; Major Drilling Argentina (Major), based in Mendoza; AGV Falcon Drilling (Falcon), based in Salta; Goland Mining Service SRL (Goland), based in San Juan; and EcoMinera Mining Services (EcoMinera), based in San Juan.

RC drill holes were typically drilled at 10.2 cm (4 in.) diameter. Core sizes included PQ (83.5 mm core diameter), HQ (63.5 mm), HQ3 (61.1 mm), and NQ (47.6 mm) drill core.

Drilling conditions at Filo del Sol are challenging due to the deep weathering profile and thick zone of leached and steam-heated alteration. Core drilling, in particular, has experienced difficulties with completing holes and high costs related to lost equipment. Recent programs have used a triple-tube system, which allowed for very good core recovery and a good final sample; however, drilling continues to be challenging, particularly in the steam-heated and oxidized zones, due to poor ground conditions and expansion of the sulphate-rich rocks.

10.4 Logging

10.4.1 Filo del Sol

10.4.1.1 RC Chip Logging

RC chips were logged on paper logs and were then copied digitally into spreadsheets. Representative chip samples were retained as a geological witness record of the RC drill holes.

10.4.1.2 Core Logging

Drill core was transported from the drill sites to the logging facility in use at the time, either by the drillers or company personnel. Logging facility locations varied over time, and included facilities in the town of Papiote, near Copiapó, Chile, and facilities in the town of Rodeo, and the suburbs of Chimbas and San Lucia in the City of San Juan in Argentina.

At the on-site logging facility, the core was photographed and logged for rock quality designation (RQD) and recovery, and a quick log of the key geological features was completed by company personnel. All drill core was then transferred to the main core shack, where it was logged in detail by company geologists. Prior to 2018, logging was completed using a spreadsheet, with the information transferred to Excel files. Between 2018 and 2022, the Excel files were uploaded into an MS Access database. MX Deposit software from Sequent was used from 2022 to early 2024 to record data and upload those data to the MS Access database. From early 2024 onward, the preferred software for logging and database storage is acQuire.

Standardized logging procedures and software are used to record geological and geotechnical information including lithology, alteration, structures, description of mineralization and percentage sulphide content, mineralogy, spectrometry (ASD), X-ray fluorescence (XRF), susceptibility and conductivity, core photography, RQD, recovery, and specific gravity.

Core was photographed wet.

10.4.2 Josemaría

10.4.2.1 RC Chip Logging

During the three RC drill programs, between 2003 and 2007, the entire length of the hole was logged on systematic two-metre core intervals at the drill site. RC chip samples were collected at the drill in large sacks weighing approximately 40 kg each. The samples were transported to the Batidero camp where they were weighed and run through a quartering and homogenizing process using riffle splitters. A riffle split sample, of approximately 5 kg, was then sent off for analysis.

RC chips were logged on paper logs and were then copied digitally into spreadsheets.

Representative chip samples were retained as a geological witness record of the RC drill hole and available at the San Juan facility.

10.4.2.2 Core Logging

During the different drill programs, from 2004 onward, drill core was transported from the drill sites to the logging facility located near the Batidero camp, either by the drillers or company personnel.

At the logging facility, the core was photographed and logged for RQD and recovery, and a quick log of the key geological features was completed by company personnel. All drill core was logged on paper logs in detail by company geologists. Drill core logs were then copied digitally on spreadsheets and drill hole database.

During the initial two drill programs, in 2004–2005 and 2005–2006, the seven core drill holes were systematically sampled on one-metre intervals. For all subsequent drill programs, from 2009 to the effective date of this Technical Report, all drill holes were sampled on nominally two-metre intervals.

Sample tags are stapled into the core box, at nominally every two metres, with only the drill hole number at the end of the sample intervals.

Drill core was sawn in halves, with one half placed in the core box, and the other half placed in a numbered sample bag, sealed and sent to the laboratories for analysis. Core boxes were then sent to the San Juan facility for storage.

Starting during the 2021–2022 drill program, drill core was cut into quarters to preserve additional core for potential future use.

Standardized logging procedures and software are used to record geological and geotechnical information including lithology, alteration, structures, description of mineralization and percentage sulphide content, mineralogy, XRF, core photography, RQD, recovery, and specific gravity.

Core was photographed wet.

10.5 Hyper-Spectral Scanning

10.5.1 Filo del Sol

Two core holes were scanned using CoreScan, based in Ascot, Australia, and operated from Santiago, Chile.

From the end of 2023, a GeologicAI scanning unit has been operated from the Batidero camp, and scans of all drill cores from that time period onward have been completed, with 50 drill holes (46,4230.83 m) scanned as at April 17, 2025. The scans collect high-resolution red–green–blue (RGB) colour photography, short-wave infrared (SWIR), very-near infrared (VNIR), and X-ray fusion data. The unit uses artificial intelligence for lithology and alteration autologging.

10.5.2 Josemaría

During the 2021–2022 drill program, Josemaría Resources contracted CoreScan to complete a hyper-spectral scanning program on selected drill core from 75 drill holes. The drill core was processed through a CoreScan HCI 4.1 hyper-spectral scanner to collect high-resolution RGB colour photography; and SWIR and VNIR data for mineralogical purposes. The method identified various oxide and sulphide minerals, as well as alteration clay minerals.

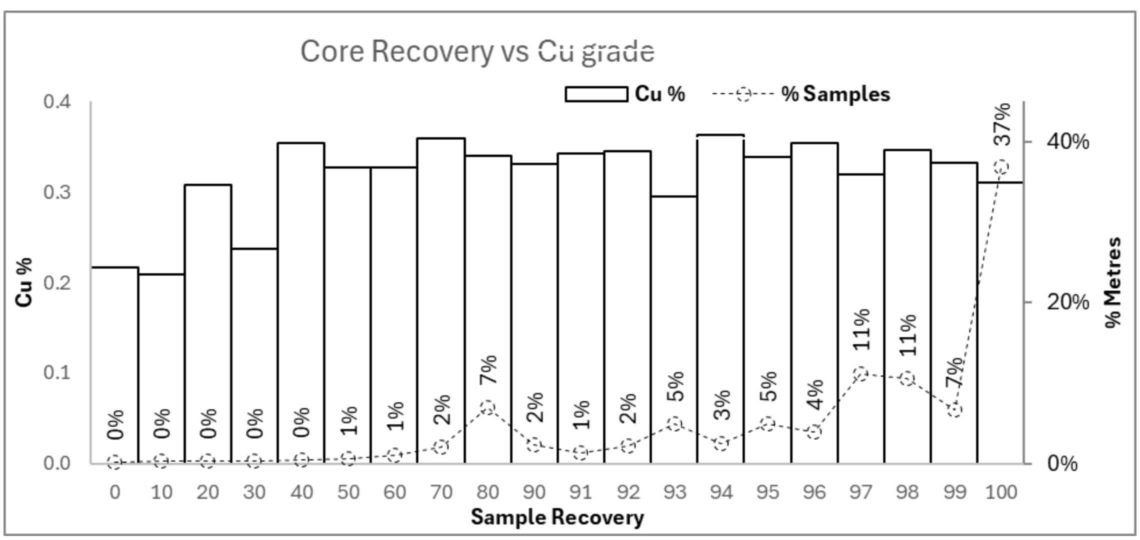
10.6 Recovery

10.6.1 Core Recovery

Recovery was measured with a tape measure between drill core marks, annotated, and the percentage recovery calculated. RQD was calculated as the total length of recovered core (measured from pieces) that exceeded or equaled 10 cm.

The overall average core recovery for the core holes at Filo del Sol was 95%. Sample recovery varies according to the level of oxidation from 91% in oxide and 95% in sulphur. Data analysis showed no correlation between recovery and copper or gold grade. Silver grades show a correlation with sample recovery.

Figure 10-7: Filo del Sol Core Recovery vs. Copper Grade



Drill core from the Josemaría deposit is generally very competent. Core recoveries varied only slightly between drill programs, averaging from 94% to 95%.

10.7 Collar Surveys

Drill collars in the Filo del Sol and Josemaría deposit areas were surveyed by company personnel using differential global positioning system (GPS) instruments.

Drill holes completed in prospects away from the main deposit areas were generally surveyed by company personnel using hand-held GPS instruments.

Drill platforms are easily visible on the orthorectified World View 3 satellite images and provide good confirmation of the accuracy of the collar surveys.

10.8 Downhole Surveys

10.8.1 Filo del Sol

Downhole survey instrumentation has varied over time, and includes Reflex multi-shot, Surface Recording Gyro (SRG) gyroscope, and Champ Navigator instruments. The majority of the surveys were recorded using the SRG-gyroscope.

Survey depth intervals also varied by program. Reflex multi-shot surveys were typically at 50 m intervals down hole. Champ Navigator survey measurements were collected at 10 m intervals. At Filo del Sol, the SRG-gyroscope surveys were taken at 10 m intervals from 2018 onward; prior to 2018, surveys were on 25 m intervals.

Downhole surveys were not completed on drill holes prior to the 2013–2014 drill campaign.

10.8.2 Josemaría

Prior to 2009, RC and core holes were not surveyed for downhole deflection. Hole deflection is typically less than 0.001° per metre in dip and 0.01° per metre in azimuth. Given the low deflection of the holes and the continuous, disseminated nature of the mineralization, the lack of survey data from the RC holes is not considered to be a significant issue.

From 2009 to 2012, downhole surveys were carried out using a Reflex multi-shot instrument at (average) 50 m intervals within the hole by the drilling company themselves, for example, Adviser, Major, and Falcon.

From 2012 to the effective date of this Technical Report, downhole surveys were completed by a Construcción & Minería SA (CyM), based in Mendoza. For all drill programs between 2012 and 2022, an SRG-gyroscope survey was completed for each drill hole, with measurements collected at 30 m intervals down the hole.

The exception to this was a number of drill holes during the 2020–2021 drill program, JMDH112 to JMDH118, that used a Champ Navigator tool, with measurements collected at 10 m intervals.

10.9 Metallurgical Programs

Metallurgical test work programs typically used samples selected from drill core that had been conducted for exploration or infill drill purposes.

Three metallurgical-specific drill holes were completed at the Josemaría deposit. These drill holes were sampled and used in Mineral Resource estimation.

10.10 Geotechnical and Hydrogeological Programs

10.10.1 Filo del Sol

To support the historical pre-feasibility study (PFS) technical report for Filo del Sol (Devine et al., 2019), 2,158 m of diamond drill core from the 2018 drilling program was logged for geotechnical purposes. Data collected included: core recovery, RQD, fracture intensity, discontinuity type and condition, roughness and infill, and point load testing results. A subsequent laboratory test program comprised eight unconfined compressive strength tests with deformation moduli, eight direct shear tests, and 16 indirect tensile tests on samples of drill core.

10.10.2 Josemaría

There have been six site investigation programs completed in the vicinity of the Josemaría deposit. Geotechnical drilling of sites contemplated for tailings and waste rock storage, plant, primary crusher, and truck shop locations in previous mining studies was completed in five of these programs.

The sixth program consisted of 14 drill holes within the area of the conceptual open pit. These drill holes were logged, sampled, and assayed on two-metre intervals, and used in Mineral Resource estimation.

Hydrogeological drilling has been completed at four different locations, with 89 wells drilled since 2019, for a total drill length of 11,203 m.

10.11 Condemnation and Waste Rock Characterization Drilling

10.11.1 Filo del Sol

No condemnation-specific drilling was completed at Filo del Sol.

10.11.2 Josemaría

There have been 11 condemnation drill holes completed at the Josemaría deposit. Each of these drill holes were drilled on the periphery of the mineralization and in areas that could potentially host mine infrastructure.

10.12 Sample Length/True Thickness

The Filo del Sol deposit consists of several different zones, typically with different origins and different geometries. Copper tends to occur either disseminated throughout or in flat-lying higher-grade zones likely due to supergene enrichment. Silver occurs primarily as a shallow-dipping zone of high-grade mineralization. Drilled widths for both of these metals are essentially true widths, as the steep to vertical drill holes pierce the zones at close to perpendicular. The distribution of gold is more complex, and includes disseminated, sub-horizontal zones and suspected steep structurally controlled zones. The drilled width of the disseminated and sub-horizontal zones are essentially true widths, as with copper and silver. The drilled width of the structurally controlled zones is likely to be greater than the true width. More work is required before the geometry of these structures is understood and the relationship between their drilled and true widths can be established.

Josemaría is a porphyry deposit that contains disseminated mineralization. Reported and described interval thicknesses are considered to be true thicknesses.

Examples of the mineralization in relation to the orientation of the drill holes were provided in Figure 7-6, Figure 7-7, Figure 7-8, and Figure 7-9 (Filo del Sol) and Figure 7-11, Figure 7-13, and Figure 7-14 (Josemaría).

10.13 Drilling Completed Since Database Close-out Date

Since the database close-out date of April 9, 2025, an additional nine drill holes were completed, or were in progress at the Filo del Sol deposit to April 27, 2025. Although a few of the post-resource drill holes may contribute to localized changes in resource grade estimation, the drill holes that are situated within the existing model should, in the QP's view, have no material effect on the overall tonnages and average grade of the current Mineral Resource estimate.

Since the database close-out date of December 31, 2022, there has been no additional drilling at the Josemaría deposit.

10.14 QP Comments on Drilling

In the QPs' opinion, the quantity and quality of the lithological, geotechnical, collar, and downhole survey data collected in the exploration and infill drill programs from 2003 to 2025 (Filo del Sol) and 2003 to 2023 (Josemaría) are sufficient to support Mineral Resource estimation.

In the QPs' opinion, there are no known sampling or recovery factors with these programs that could materially impact the accuracy and reliability of the results.

11.0 Sample Preparation, Analyses, and Security

11.1 Sampling

11.1.1 Geochemical Samples

Talus samples were typically collected at a depth below the iron-cemented horizon. Talus samples were composited from 10 stations located within five metres along a 100 m-long line. Talus lines were oriented either north–south or east–west. Sampled material was finer than #10 mesh. All samples were labelled and identified before being shipped for geochemical analyses.

Rock samples involved collecting approximately one to three kilograms of representative chips from outcrops or trenches. Chip sampling followed conventional methods of following as close to the centreline of the sample as practicable, with sample widths kept constant within each trench as much as practicable.

The sample length as well as a geological description was recorded and entered into the database. The sample location was annotated on the sample booklet and the geologist's GPS.

11.1.2 Reverse Circulation Samples

A one-metre 30 kg to 40 kg sample was collected at the drill rig during the Filo del Sol drill campaigns. The sample was spilt and two consecutive metres were combined into one approximately 5 kg sample to be submitted for geochemical analysis.

A two-metre 40 kg sample was collected at the drill rig during the Josemaría drill campaigns. The sample was spilt and an approximately 5 kg sample was submitted for geochemical analysis.

11.1.3 Core Samples

Sampling methods for drill core varied over time at Filo del Sol. Core was initially halved; however, from 2019 onward, core was quarter split to allow ¾ of the core to be available for metallurgical test work. Initially splitting was completed using a circular, water-cooled rock saw. From 2013 to 2017, core was split using a manual core splitter under dry conditions as to minimize the soluble sulphate dissolution. From 2017 onward, core from only the oxide copper-gold (CuAuOx) and M zones was split using this method. From 2017 onward, all other zones with no soluble copper were cut with a rock saw to better preserve the core. Typically, core was sampled continuously on two-metre intervals from the beginning of recovery to the end of the hole.

The core intervals sampled at the Josemaría deposit were halved using a core saw, with one half submitted for assay. For the 2021 program, core was quartered for analysis, with the remaining core retained for metallurgical test work purposes. Samples were taken on one-metre intervals (pre-2009) or two-metre intervals (2009–Technical Report effective date), and did not respect geological changes.

Core holes completed in prospect areas or for regional exploration purposes were sampled either following the same protocol as deposit drilling, with samples taken every two metres, or sampled selectively around structures in areas with dominant vein-type mineralization.

11.2 Sample Preparation and Analytical Laboratories

Sample preparation, analytical, and check laboratories varied over time (Table 11-1).

Table 11-1: Sample Preparation, Analytical and Check Laboratories

Laboratory	Years Used	Purpose	Accreditation	Independent
ALS Chemex laboratory in Mendoza, Argentina (ALS Mendoza)	2019–Technical Report effective date	Sample preparation	ISO 9000:2001	Yes
ALS Chemex laboratory in La Serena, Chile (ALS La Serena)		Primary analysis		Yes
ACME Laboratory in Copiapó (ACME Copiapó)	2011–2019	Sample preparation	ISO 9001:2000	Yes
ACME Laboratory in Mendoza (ACME Mendoza)	2010–2015	Sample preparation	ISO 9001:2000 ISO 9002 ISO 17025	Yes
ACME Laboratory in Santiago, Chile (ACME Chile)	2010–2015	Primary analysis	ISO 9001:2000 ISO 9002 ISO 17025	Yes
ALS Chemex laboratory in Chile	Pre-2009; 2016–2019	Primary analysis		Yes
ALS Global laboratory in Lima, Peru (ALS Lima)	2019–Technical Report effective date	Primary analysis	ISO 9001-2008 ISO 17025	Yes
ALS Global laboratory in Santiago, Chile (ALS Santiago)	2019–Technical Report effective date	Primary analysis	ISO 9001-2008 ISO 17025	Yes
SGS laboratory in the City of San Juan (SGS San Juan)	2012–2013	Sample preparation		Yes
SGS laboratory in Callao, Peru (SGS Peru)	2012–2013	Check samples		Yes

11.3 Sample Preparation Methods

Sample preparation for the early geochemical and drill exploration programs is poorly documented in the existing reports.

Where known, sample preparation methods are summarized in Table 11-2.

11.4 Analytical Methods

Analytical methods for the early geochemical and drill exploration programs are poorly documented in the existing reports.

Where known, analytical methods are summarized in Table 11-3.

11.5 Quality Assurance and Quality Control Programs

11.5.1 Geochemical Programs

No quality control programs were used during the geochemical sampling programs.

Table 11-2: Sample Preparation Methods

<table>
<tr><th>Laboratory</th><th>Area</th><th>Sample Type</th><th>Sample Preparation Method</th></tr>
<tr><td rowspan="4">ALS Mendoza</td><td>Josemaría</td><td>Talus, rock chip, channel</td><td>Drying, crushing to >70% passing -2 mm mesh, pulverizing to >85% passing -75 µm screen (ALS code: PREP 31).</td></tr>
<tr><td>Josemaría</td><td>RC, core</td><td>Drying, crushing to >70% passing -2 mm mesh, pulverizing to >85% passing -75 µm screen (ALS code: PREP 31). Sample preparation method updated in 2018 to drying, crushing to better than 85% passing 10 mesh, pulverizing to 95% passing 200 mesh, screening to pass 200 mesh (ALS code: PREP 31)</td></tr>
<tr><td>Filo del Sol</td><td>Talus, rock chip, channel</td><td></td></tr>
<tr><td>Filo del Sol</td><td>RC, core</td><td>Drying, crushing to better than 85% passing 10 mesh, pulverizing to 95% passing 200 mesh, screening to pass 200 mesh (ALS code: PREP 31)</td></tr>
<tr><td>Acme Mendoza</td><td>Josemaría</td><td>Core</td><td>Drying, crushing to better than 85% passing 10 mesh and pulverizing to 85% passing 200 mesh (ACME code: R20 and P200).</td></tr>
<tr><td>ACME Copiapo</td><td>Filo del Sol</td><td>Core</td><td>Drying, crushing to better than 85% passing 10 mesh, pulverizing to 95% passing 200 mesh, screen to pass 200 mesh</td></tr>
<tr><td>SGS San Juan</td><td>Josemaría</td><td>Core</td><td></td></tr>
</table>

Table 11-3: Analytical Methods

<table>
<tr><th>Laboratory</th><th>Area</th><th>Sample Type</th><th>Analytical Method</th></tr>
<tr><td rowspan="4">ALS Lima,
ALS Santiago,
ALS Chile,
ALS La Serena</td><td>Filo del Sol</td><td rowspan="2">Talus, rock chip, channel</td><td>27-element four-acid inductively coupled plasma (ICP) atomic emission spectroscopy (AES), gold by fire assay atomic absorption (AA), finish and trace mercury by cold vapour/AA.</td></tr>
<tr><td>Josemaría</td><td>Gold was determined using fire assay and an atomic absorption spectroscopy (AAS) finish on a 50 g sample. The detection limit and the upper range of this method were 0.005 ppm Au and 10 ppm Au, respectively (ALS code: Au-AA24). A multi-element analysis of 27 elements used four acid digestion and HCl leach with an ICP–AES finish (ALS code: ME-ICP61). Mercury was determined using an aqua regia digestion and cold vapour AAS.</td></tr>
<tr><td>Filo del Sol</td><td rowspan="2">RC, core</td><td>Initially 36-element four-acid ICP atomic emission spectroscopy (AES), gold by fire assay with an AA finish, and trace mercury by cold vapour/AA. Subsequently changed in 2011 to include copper and silver by AAS as well as by ICP, with a multi-acid digestion. Copper was also analyzed by sequential leach for ICP assays >500 ppm Cu. Mercury analyses were discontinued from drill samples in 2011.</td></tr>
<tr><td>Josemaría</td><td>Gold was determined using fire assay and an AAS finish on a 50 g sample. The detection limit and the upper range of this method were 0.005 ppm Au and 10 ppm Au, respectively (ALS code: Au-AA24). A</td></tr>
</table>

Laboratory	Area	Sample Type	Analytical Method
			multi-element analysis of 27 elements used four acid digestion and HCl leach with an ICP–AES finish (ALS code: ME-ICP61). Mercury was determined using an aqua regia digestion and cold vapour AAS. From 2018 onward, gold was determined using fire assay and an AAS finish on a 30 g sample (ALS code: Au-AAS). Copper and silver were determined individually by four acid digestion and finished with AAS (ALS codes: Cu-AA62, Ag-AA62, respectively). For a short period in 2019–2020, zinc was also individually analyzed using the same method (ALS code: Zn-AA62). A multi-element suite of 34 elements, including copper, was determined using a four-acid digestion and finished by ICP–AES analyses (ALS code: ME-MS61). Beginning in 2021 to 2023, the multi-element ICP-AES suite was expanded to 48 elements to include immobile and trace elements. Beginning in 2019, core samples were analyzed at ALS Santiago for acid-soluble and cyanide-soluble copper using a sequential copper analysis (ALS codes: CuCN-AN06, CuS-AN06 and CuR-AN06). Water-soluble copper analysis was added for the 2021–2022 program (ALS code: CuSOL–LIO2).
ACME Chile	Filo del Sol	Talus, rock chip, channel	35-element four-acid or aqua regia digestion ICP–AES, gold by fire assay AA finish. Trace mercury by cold vapour/AA.
	Filo del Sol	RC, core	Initially 37-element four-acid ICP-AES, gold by fire assay with an AA finish, and trace mercury by cold vapour/AA. Subsequently changed in 2011 to include copper and silver by AAS as well as by ICP, with a multi-acid digestion. Copper was also analyzed by sequential leach for ICP assays >500 ppm Cu. Mercury analyses were discontinued from drill samples in 2011.
	Josemaría	Core	Gold was determined using fire assay and an AAS finish on a 30 g sample (ACME code: G6). A multi-element suite of 36 elements, including copper, was determined using four acid digestion and finished by ICP–AES analysis (ACME code: 1E). Samples analyzed before the 2010–2011 campaign had copper re-assayed by AAS only if the ICP result exceeded the upper detection limit of 10,000 ppm (ACME code: 8TD). Beginning in 2010, all samples with copper grades >5,000 ppm Cu were re-assayed by AAS. Starting in 2012, copper determinations in all samples were done by both ICP and AAS.
SGS Peru	Josemaría	Core	Gold was determined using fire assay and an AAS finish on a 30 g sample (SGS code: FAA313). A multi-element suite of 36 elements, including copper, was determined using four acid digestion and finished by ICP–AES analysis (SGS code: ICP40B). Copper values were also determined by four-acid digestion and an AAS finish (SGS code: AAS42C).

11.5.2 Drill Programs

The quality assurance and quality control (QA/QC) programs varied over time and by deposit area (Table 11-4).

At various times, blanks could include:

- Material sourced from a barren andesite outcrop (AND1) a few kilometres from the Josemaría deposit;
- Coarse-ground quartz material (BLN or BLK) sourced from a variety of providers.

Standards, either standard reference materials or certified reference materials, were created from site materials and subsequently assayed, or commercially purchased from ORE Research and Exploration Pty Ltd (OREAS), based in Perth, Australia.

Standards used for the Filo del Sol deposit area could include:

- Low-grade standard: copper values around the expected cut-off grade for the Filo del Sol deposit;
- Medium-grade standard: copper values around the average grade for the Filo del Sol deposit;
- High-grade standard: copper values higher than the expected cut-off grade for the Filo del Sol deposit.

Standards used for the Josemaría deposit area could include:

- Standard purchased from SGS San Juan;
- Site-specific standard created from coarse rejects from drilling of the nearby Los Helados (not part of the Project);
- Standards purchased from OREAS. The standards were chosen to represent different copper and gold grade ranges:
    - Low-grade standard: copper values approximately equating to the cut-off grade used in estimation;
    - Medium-grade standard: copper values around the average grade for the Josemaría deposit;
    - High-grade standard: copper values approximately equal to the 90^{th} percentile copper grades.

Duplicates could include the following:

- Field duplicate (¼ of the second half core or half of the ¼ core);
- Preparation duplicate (second pulp);
- Assay duplicate (second assay).

Table 11-4: QA/QC Programs

Program	Year	Area	Quality Assurance and Quality Control Measures	Comment
Cyprus-Amax	1998–1999	Filo del Sol	One field duplicate inserted every 20 samples. No blank or standard material was used in the sampling program.	Results were considered acceptable for all elements.
Tenke	2000–2001	Filo del Sol	Same-laboratory (ALS) reject assaying and second laboratory (ACME) rig duplicates.	19 RC drill holes.
	2003–2008	Filo del Sol	Field duplicates only.	Gold, silver, copper, and molybdenum duplicate samples show good correlation factors.
NGEx	2009–2011	Josemaría	Blanks, three standards, and three duplicates.	Results were considered acceptable for copper and gold.
	2011–2014	Josemaría	Blanks, five standards, and three duplicates.	Results were considered acceptable for copper and gold.
Suramina, NGEX Filo Mining Filo Corp	2013–2025	Filo del Sol	Blanks, duplicates, and standards inserted in the sampling sequence as well as second-laboratory analyses of a sub-set of samples. A total of 16 control samples were inserted every 174 submitted (9.1%).	Results were considered acceptable for all elements. A very good correlation in copper, gold, and silver was noted between ALS and ACME analyses. No bias between laboratories was observed, and results provided by both companies appeared to be similar.
Josemaría Resources Lundin Mining	2018–2025	Josemaría	Blanks, three standards, and three duplicates.	Results were considered acceptable for copper and gold.

11.6 Databases

11.6.1 Filo del Sol

The Filo del Sol database is maintained within an acQuire cloud-based database and is managed by a database manager under supervision of the Exploration Manager. Data stored within the database includes, collar information, downhole surveys, geology interval items such as lithology, alteration, mineralization, assay data, recovery, RQD, metallurgical sampling, and magnetic susceptibility.

Data is subject to regular backups including off-site storage of backed up data.

11.6.2 Josemaría

The Josemaría database is maintained within MX Deposit cloud-based database and is managed by a database manager under supervision of the Exploration Manager. Josemaría data stored for each drill hole includes collar information, downhole surveys, codes and comments for lithology, alteration and mineralization, assays, specific gravity, magnetic susceptibility, recovery, RQD, and metallurgical sample information. Interval data from CoreScan is also stored in the drill hole database.

Data is subject to regular backups including off-site storage of backed up data.

11.7 Sample Security

The sampling and logging facilities have security measures in place, with only authorized personnel access.

Samples were under the control of employees of the project operator at the time, from the time the samples were dispatched until the arrival at the sample preparation facility.

A walled compound for Josemaria serves as exploration offices, as well as core logging and sampling facilities for the Project and exploration targets. Some drill core for the Josemaría deposit area is stored in the secure warehouse at the facility or in a second nearby warehouse that is also locked and secured. The facility and core storage warehouses are locked after hours and manned by security personnel.

11.8 Sample Storage

The on-site logging facilities are used to quick-log drill core, take basic geotechnical measurements, and complete core scanning.

There are two main core shacks, and logging and sampling facilities. The core shacks used for the Josemaría drill programs are located in Chimbas, San Juan Province, approximately 400 km southeast of the Batidero camp. The Filo del Sol core shack is located in Rodeo, Iglesia, San Juan Province, approximately 365 km southeast of the Batidero camp.

A portion of the core has been completely consumed in metallurgical test work. The remaining core is well organized and stored in racks.

Laboratories return the pulps and coarse rejects for each sample sent for analysis. These are retained on a permanent basis at the core storage facilities.

11.9 QP Comments

The QPs note the following:

- Sample collection, preparation, analysis and security for RC and core drill programs are in line with industry-standard methods for porphyry deposits;
- Specific gravity data are collected using industry-standard methods. There are sufficient estimates to support tonnage estimates for the various lithologies;
- Drill programs included insertion of blank, duplicate and standard reference material samples;
- QA/QC program results do not indicate any problems with the analytical programs;
- The quality of the copper, gold, and silver analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories.

12.0 Data Verification

Five QPs are responsible for the geology, metallurgical, and environmental data discussed in this report for Filo del Sol and Josemaría. In addition to the data verification work discussed below, a significant amount of data verification work has been completed by past QPs and company personnel.

12.1 Data Verification Performed by the QPs

12.1.1 Mr. Luke Evans

Mr. Evans is the QP responsible for the Filo del Sol resource related data and Mineral Resource estimate. Mr. Evans was assisted by SLR Principal Resource Geologist Benjamin Sanfurgo and by SLR Project Geologist Maria Campos.

Mr. Evans visited the Filo del Sol property and drilling camp on September 20, 2023 (Figure 12-1). There was still some snow in areas locally but the roads were clear. Some small patches of copper oxide mineralization were seen next to the road (Figure 12-2).

SLR was given full access to data relevant to the Filo del Sol Mineral Resource estimate and conducted interviews with Filo Corp. and Vicuña Corp. personnel to obtain information on exploration work and to understand the procedures used to collect, record, store, and analyze historical and current exploration data.

All aspects that could materially impact the integrity of the data informing the Filo del Sol Mineral Resource estimate for the Project were reviewed by SLR, including outcrop inspection, core logging, sampling methods and security, analytical and QA/QC procedures, and database management.

Under Mr. Evans' supervision, Mr. Benjamin Sanfurgo visited the core logging facility and the exploration office in Guañizuil, San Juan, Argentina, on May 26 to May 28, 2024. He held discussions with site personnel, and he also visited the Filo del Sol pulp and reject sample storage facility in San Juan Capital on May 29, 2024.

Mr. Sanfurgo reviewed the core for four drill holes (FSDH 076, FSDH094, FSDH103, and FSDH112), examined the core sampling equipment (diamond saw for most core and hydraulic splitter for core with copper sulphate mineralization), the water immersion density apparatus, and the core photography setup. The drilling, surveying, core logging, core photographing, core density measurements, core sampling, analytical, QA/QC, and security procedures were reviewed with the geology team during the site visit.

The Filo del Sol core logging and storage facilities are shown in Figure 12-3 and Figure 12-4, respectively.

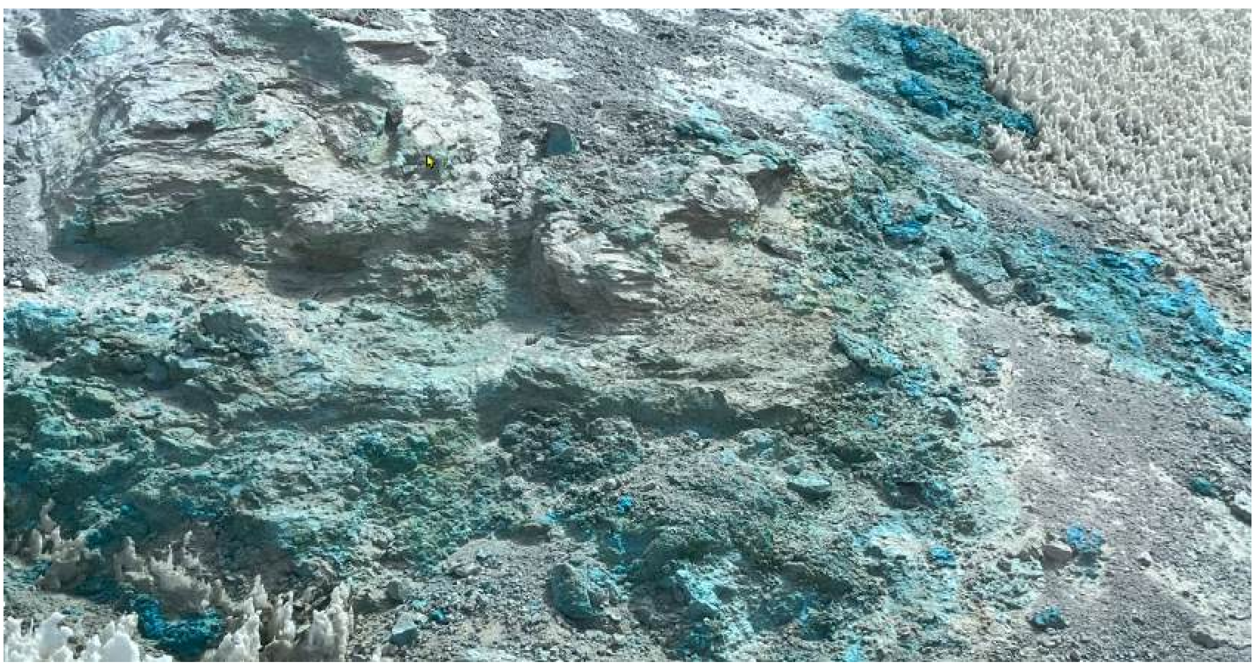
Overall, SLR found that the Filo del Sol geology team had a very good understanding of the lithology, alteration, and mineralization and the drilling, surveying, core logging, core photographing, core density measurements, core sampling, analytical, QA/QC, and security procedures met standard industry practices with the following minor exceptions:

1. No pulp samples had been sent to an external umpire laboratory at the time of the site visit.
2. The core duplicates were selected from crushed quarter core samples.
3. Zip ties without number were used to seal each sample.

Figure 12-1: Filo del Sol Drilling Camp and Drill Roads on the Deposit

Source: SLR 2023.

Figure 12-2: Filo del Sol Oxide Mineralization Exposed on Surface Outcrop



Source: SLR 2023.

Figure 12-3: Filo del Sol Core Logging Facility

Source: SLR 2024.

Figure 12-4: Filo del Sol Core Storage

Source: SLR 2024.

12.1.1.1 SLR Audit of Filo del Sol Assay Database

The SLR QP supervised a comprehensive review of the Filo del Sol sample database, which included 94,367 samples up to February 20, 2025. Verification was performed on 61,000 samples, representing 65% of the database, and included data from 179 out of 390 drill holes and 1,340 assay certificates spanning the years 2017 to 2025. The review identified one silver discrepancy in the data prior to 2023. During the 2023-2024 season, no discrepancies were detected. However, in the 2024-2025 season, two discrepancies for gold and seven for copper were found, representing 0.004% of the cross-checked samples, see detail in Table 12-1. These discrepancies were attributed to preliminary assay values being used instead of finalized certificates.

No material observations were noted during the audit and the minor discrepancies detected do not adversely impact the Mineral Resource Estimate.

Table 12-1: Summary Table of Samples Compared and Discrepancies

Period	N Total	N Samples Compared	Discrepancies Au	Discrepancies Ag	Discrepancies Cu	% Discrepancies
2017-2023	53,094	24,828	0	1	0	0
2023-2024	29,898	29,898	0	0	0	0
2024-2025	11,375	6,274	2	0	7	0.004

Period	N Total	N Samples Compared	Discrepancies Au	Discrepancies Ag	Discrepancies Cu	% Discrepancies
Total	**94,367**	**61,000**	**2**	**1**	**7**	**0.004**

12.1.1.2 SLR QP Conclusions for Filo del Sol

Overall, SLR found that the Filo del Sol drilling, surveying, core logging, core photographing, core density measurements, core sampling, analytical, QA/QC, and security procedures met standard industry practices. SLR checked approximately 65% of the assays in the drill hole database and found a very small number of errors indicating that the assay database is very reliable.

The SLR QP for Filo del Sol concludes that the geology and resource related data is reasonable and acceptable to support the Mineral Resource estimate.

12.1.2 Mr. Paul Daigle

Mr. Daigle completed a site inspection in May 2023 (refer to Section 2.4).

12.1.2.1 Exploration Offices, Core Storage Facilities, San Juan

The City of San Juan exploration offices and warehouse facilities are situated in the suburb of Chimbas, beside Ruta Nacional 40 (National Route 40). This walled compound serves as exploration offices, as well as core logging and sampling facilities for the Project and exploration targets. Some drill core for the Josemaría deposit area is stored in the secure warehouse at the facility or in a second nearby warehouse that is also locked and secured. The facility and core storage warehouses are locked after hours and manned by security personnel.

The City of San Juan logging and sampling facility for exploration drilling is equipped with core saws, standards, and blanks for insertion in the sample stream as control samples. The facility is kept clean and orderly.

Lundin Mining moved to this location in Chimbas in early 2023 from the previous offices, situated in the suburb of Santa Lucia, in the eastern part of the City of San Juan. This facility is the principal administration and engineering offices for Deprominsa and the Project.

Figure 12-5 shows the warehouse and exploration offices in Chimbas (City of San Juan). Figure 12-6 shows the interior of the core storage facility. Figure 12-7 and Figure 12-8 show interior and exterior views, respectively, of the core logging facility in San Juan.

Figure 12-5: Drill Core Logging and Sampling Facility (background), Exploration Offices (foreground); City of San Juan

Source: AGP 2023.

Figure 12-6: Drill Core Storage Facility (interior); City of San Juan

Source: AGP 2023.

Figure 12-7: Drill Core Logging and Sampling Facility (interior); City of San Juan

Source: AGP 2023.

Figure 12-8: Drill Logging Tables (exterior); City of San Juan

Source: AGP 2023.

12.1.2.2 Drill Hole Log and Drill Core Review

A review of the drill core and drill core logs was made on selected drill core intervals in the Josemaría deposit. The lithology descriptions and sample intervals in the drill logs were compared and found to be consistent with examined drill core. All sample tag numbers in the reviewed core boxes match with the intervals in the database.

Table 12-2 lists the selected drill core intervals examined during the site visit.

Table 12-2: Core Holes Examined During Josemaría Site Visit

Drill Hole ID	From (m)	To (m)	Interval (m)	Lithology	Core Boxes (from–to)
JMDH001	73.00	84.00	11.00	Rhyolite	28–31
JMDH057	79.45	88.70	9.25	Rhyolite	30–32
JMDH091	83.20	93.90	10.70	Porphyry	33–36
JMDH091	148.03	162.40	14.37	Tonalite	56–63
JMDH102	231.65	246.25	14.60	Tonalite	103–106
JMDH111	46.84	60.40	13.56	Tonalite	21–25
JMDH125	347.50	370.05	22.55	Rhyolite	113–120
JMDH125	819.64	842.50	22.86	Tonalite	278–284
JMDH127b	451.00	474.26	23.26	Tonalite	159–166
JMDH128	168.33	190.60	22.27	Rhyolite	62–69
JMDH130	66.00	88.00	22.00	Tonalite	22–29
JMDH130	435.20	457.78	22.58	Tonalite	157–164
JMDH134	66.00	88.00	22.00	Tonalite	22–29
JMDH135	35.47	58.25	22.78	Rhyolite	11–18
JMDH135	199.60	222.55	22.95	Rhyolite	70–77
JMDH136	25.20	43.00	17.80	Tonalite	16–26
JMDH137	149.15	180.45	31.30	Rhyolite	54–64
JMDH142	59.30	91.07	31.77	Rhyolite	23–34
JMDH145	69.60	83.20	13.60	Tonalite	24–28
JMDH155	154.37	177.10	22.73	Tonalite	54–61
JMDH170	175.95	195.60	19.65	Tonalite	79–85
JMDH171	149.85	163.80	13.95	Tonalite	54–58

12.1.2.3 Independent Samples

The collection of independent samples is meant to demonstrate the presence of mineralization on the property in similar ranges as reported by the issuer. These samples are not intended to act as duplicate samples. The QP collected four samples selected from the available drill core during the site visit. The sample intervals were selected from four drill holes within the deposit. The independent samples were collected from the same intervals as he original samples for a direct comparison.

The QP supervised the quartering of the selected samples by rock saw and each sample was placed in a marked sample bag, sealed with a zip tie. The QP placed a sample tag in the core box at the location of the original sample. Collected samples were sent directly to ALS Mendoza for analysis.

Once received at ALS, samples were prepared by crushing the sample to 70% passing 2mm and then a split of 250 g was pulverized to 85% passing 75 µm (ALS code: PREP31). Samples were analyzed for 51 elements by four acid digestion and ICP mass spectrometry (ICP-MS) method (ALS code ME-MS61). Gold was analyzed separately by fire assay and AA (ALS Code AuICP21-30g). The list of independent samples is shown in Table 12-3 and a comparison of results is presented in Table 12-4.

Table 12-3: Summary of Independent Samples, Josemaría

AGP Sample No.	AGP Sample No.	Drill Hole ID	Sample Interval (m)
A1047861	710117	JMDH135	210–212
A1047862	700193	JMDH125	368–370
A1047863	711065	JMDH155	170–172
A1047864	704253	JMDH127b	470–472

Table 12-4: Independent Sample Results and Comparison, Josemaría

Sample No.	Drill Hole ID	Cu (%)	Au (g/t)	Ag (g/t)
AGP				
A1047861	JMDH135	0.695	0.378	3.5
A1047862	JMDH125	0.406	0.365	0.6
A1047863	JMDH155	0.647	0.111	0.8
A1047864	JMDH127b	0.444	0.121	1.0
Vicuña Corp.				
710117	JMDH135	0.718	0.404	5.0
700193	JMDH125	0.484	0.435	0.5
711065	JMDH155	0.546	0.094	1.0
704253	JMDH127b	0.426	0.131	1.0
Difference				
	JMDH135	0.023	0.026	1.5
	JMDH125	0.078	0.070	-0.1
	JMDH155	-0.101	-0.017	0.2
	JMDH127b	-0.018	0.010	0.0

The QP interprets the differences of gold grades of the independent samples to be due to the degree of variability of the gold mineralization within the drill core. AGP considers the grade ranges of the samples to be acceptable, demonstrating the presence of mineralization.

12.1.2.4 Batidero Camp, Josemaría Deposit Area

The Batidero camp is the main accommodations camp located approximately 10 km southeast of the Josemaría deposit, and is situated at approximately 4,000 MASL. The Batidero camp is modular group of buildings with accommodation for approximately 1,068 personnel and is equipped, but not limited to, cafeteria, common room, and medical clinic as well as offices for administration, geology, engineering, and service personnel. All modular structures are connected by a covered and insulated main hallway.

The geology/exploration buildings, as well as the on-site logging and sampling facilities, are located approximately 400 m southeast of the main accommodations at the Batidero camp. Figure 12-9 shows the Batidero camp.

Figure 12-9: Batidero Camp, Josemaría Area

Source: AGP. 2023. Photograph looks west.

12.1.2.5 Drill Hole Collar Locations

Several drill hole collar coordinates were verified by the QP. The locations of the drill hole collars were measured in the field using a hand-held GPS device (Garmin GPS map 62s) using WGS84 datum (Zone 19J), the same datum used by Vicuña Corp. Given the accuracy of the device, the drill hole coordinates fell within an acceptable tolerance of the original measurements.

Table 12-5 presents a comparison of the AGP and Vicuña Corp. drill hole coordinates in the Josemaría deposit.

Table 12-5: Comparison of Drill Hole Collar Coordinates, Josemaría Deposit Area

Drill Holes	Vicuña Corp. Easting (m UTM)	Vicuña Corp. Northing (m UTM)	AGP Easting (m UTM)	AGP Northing (m UTM)	Δ Easting (m)	Δ Northing (m)
JMRC008	446331.4	6854587.6	446328.2	6854595.8	3.2	-8.2
JMRC034	446025.4	6854630.5	446025.0	6854633.8	0.4	-3.3
JMRC038	446025.4	6854630.5	446025.0	6854633.8	0.4	-3.3
JMRC045	445925.1	6854688.2	445925.1	6854690.7	0.0	-2.5
JMDH032	446378.6	6854377.1	446389.0	6854376.7	-10.5	0.4

Drill Holes	Vicuña Corp. Easting (m UTM)	Vicuña Corp. Northing (m UTM)	AGP Easting (m UTM)	AGP Northing (m UTM)	Δ Easting (m)	Δ Northing (m)
JMDH068	446588.3	6855287.2	446588.9	6855285.3	-0.6	1.9
JMDH102	446332.3	6854587.6	446337.1	6854594.0	-4.8	-6.4
JMDH110	446031.0	6854778.0	446028.3	6854779.0	2.7	-1.0
JMDH127B	445907.5	6854052.5	445902.4	6854052.6	5.1	-0.1
JMDH128	446047.5	6854507.5	446050.2	6854515.7	-2.7	-8.2
JMDH130	446432.5	6854227.5	446428.9	6854225.1	3.6	2.4
JMDH132	445942.5	6854612.5	445944.4	6854613.4	-1.9	-0.9
JMDH133	446012.5	6854437.5	446010.8	6854440.5	1.7	-3.0
JMDH134	446222.5	6854682.5	446221.8	6854681.7	0.8	0.8
JMDH138	445942.5	6854472.5	445939.9	6854478.6	2.6	-6.1
JMDH139	445942.5	6854542.5	445941.1	6854542.6	1.4	-0.1
JMDH141	445907.5	6854297.5	445904.2	6854297.4	3.3	0.1
JMDH143	446012.5	6854683.0	446009.9	6854690.2	2.6	-7.2
JMDH146	446152.5	6854402.5	446148.9	6854401.8	3.6	0.7
JMDH153	445837.5	6854017.5	445833.8	6854020.9	3.7	-3.4
JMDH157B	445977.0	6854087.0	445971.0	6854085.9	6.0	1.1
JMDH165	445802.5	6854612.5	445796.6	6854615.9	5.9	-3.4
JMDH177	446362.5	6854262.5	446348.6	6854264.5	13.9	-2.0
Note: UTM datum WGS84						

Drill hole collars are generally marked by 4 in. polyvinyl chloride (PVC) pipe, capped by a PVC cap. The drill hole number is written in marker, or laminated paper tag, on the cap. For some drill holes, PVC pipes are secured in place by cement, where others use rubble to build a cairn around the drill hole PVC pipe. Early drill holes, e.g., JMDH032, are marked with a steel rod, with an attached laminated tag that shows the drill hole number. Not many of the early drill holes are evident as the more recent infill drilling required access roads which have covered the older drill pads. Some of the geotechnical drill holes still have the steel casing in place, along with the PVC pipe.

Figure 12-10 shows drill hole collars for JMDH032, JMDH132, JMDH134, and JMDH165. Figure 12-11 shows the drill pads.

Figure 12-10: Drill Hole Collars: JMDH032, JMDH132, JMDH134, JMDH165

Source: AGP 2023.

Figure 12-11: Josemaría Deposit Drill Pads and Access Roads (foreground)

Source: AGP 2023. Photograph looks east.

12.1.2.6 AGP QP Conclusions

In Mr. Daigle's opinion, the geological and geochemical data presented in this report is an adequate and accurate reflection of the geology of the Josemaría deposit. The QP is also of the opinion the database is representative and adequate to support the Mineral Resource estimate for the Josemaría deposit. The QP is also of the opinion the core descriptions, sampling procedures, and data entries were conducted in accordance with industry standards.

The QP also verified approximately 7% of the copper, gold, and silver assays in the database to the laboratory certificates, that is, approximately 3,500 samples out of 51,736 samples. No issues were encountered.

12.1.3 Mr. Sean D. Horan

Mr. Horan validated the Josemaría Mineral Resource estimate using standard validation techniques. Mr. Horan's work included reviewing the sequential cyanide-soluble (CuCN) and acid-soluble (CuAS) copper analyses and the density data for Josemaría.

Given the overall validation results, the QP is of the opinion that the relevant data is adequate and accurate to support the Mineral Resource estimate and that the Josemaría Mineral Resource estimate is acceptable.

12.1.3.1 Cyanide- and Acid-Soluble Copper Assays

At Josemaría, sequential cyanide-soluble (CuCN) and acid-soluble (CuAS) copper analyses were completed between 2019 and 2020 by ALS Santiago. Analyses during 2021–2022 were completed by ALS Lima. Both laboratories used sequential copper analysis with the following analytical codes:

- ALS Santiago: method codes Cu-AA06s and CuS-AN06;
- ALS Lima: digestion codes ASY-CuSE01 and AN-CUSEQ06.

Bivariate statistical analysis shows that ALS Santiago systemically reported higher CuAS and CuCN copper results.

Cross-validation of the CuAS, CuCN, total copper (CuT), arsenic, gold, and silver assays from ALS Lima and estimation of these variables at the sample locations analyzed by ALS Santiago using ALS Lima data further confirmed the bias. There were higher differences in the mean for CuAS data (47%), CuCN data (31%), arsenic data (-21%), and silver data (-45%).

Given the potential impacts on copper recovery and the NSR, a decision was made to exclude CuAS and CuCN assays if those data had been analyzed by ALS Santiago.

12.1.3.2 Density Analysis

At Josemaría, density determinations were typically taken using the water immersion method on unsealed samples. During 2021 and 2022, a plastic film was used to wrap the samples prior to measurement. However, as a result of trapped air bubbles, a bias in the density measurements was noted and the practice of using a plastic film was discontinued.

Out of a total 23,666 density measurements, 7,023 density measurements were impacted by the practice. Cross validation results suggest that the difference could be in the order of 16%. Due to the bias introduced by this measurement practice, the impacted density measurements collected during 2021 and 2022 which included up to drill hole 149B, were excluded from use in the Josemaría Mineral Resource estimate.

12.1.4 Mr. Jeffrey Austin

Mr. Austin performed reviews of the available metallurgical test work data and the amenability of the mineralization tested to the assumed process route for the purposes of assessing reasonable prospects of eventual economic extraction.

As a result of the data verification, Mr. Austin considers the forecast metallurgical recovery averages to be acceptable for use in Mineral Resource estimation, and that mineralization is amenable to the conceptual process route.

12.1.5 Mr. Bruno Borntraeger

A number of mining and technical studies have been completed on the Filo del Sol and Josemaría deposits, results of which are now superseded. As part of these studies, the QP reviewed planned site layouts, and reviewed data collections programs such as weather stations, soil sampling, stream flow monitoring stations, and monitoring wells. The QP discussed aspects of environmental planning, permit acquisition, and stakeholder consultation with company staff.

While the mining studies themselves are considered superseded, the underlying data remain current, and in the QP’s opinion, are adequate for use to support the Mineral Resource estimates in this Technical Report.

13.0 Mineral Processing and Metallurgical Testing

13.1 Introduction

Both the Josemaría and Filo del Sol deposits have been under development over the last 15 years as separate large-scale copper projects. The Vicuña Corp. partnership has brought the two projects together under one management group, with the intent of increasing the value of the two projects through synergy. This report section provides a summary of metallurgical results to date for both deposits, as well as recommending a path forward with further development. The Josemaría copper-gold deposit is more advanced than the Filo del Sol copper-gold-silver deposit. There has been no test work completed using combined materials for the two deposits.

The Josemaría deposit is a large tonnage copper-gold porphyry deposit with a small oxide copper zone and a much larger hypogene zone, nearly all value in the deposit is contained in the hypogene ore zone. The Filo del Sol deposit is significantly larger than the Josemaría deposit and contains several distinct metallurgical zones which will complicate the process selection process. The Filo del Sol deposit has a significant oxide zone containing a gold oxide zone and a copper oxide zone, as well as high-arsenic hypogene zone and a low-arsenic hypogene zone.

The Josemaría deposit has completed substantial metallurgical test work, all of it focused on using traditional grinding and flotation processes to produce a marketable copper concentrate, suitable for sale to copper smelters.

The Filo del Sol deposit has less metallurgical test work completed than the Josemaría deposit. The Filo del Sol deposit is also complicated by the fact that substantial resources of very different mineralogy and lithology exist. Each of the separate Filo del Sol zones are large enough to be considered stand-alone projects. A substantial near-surface deposit of oxidized copper and gold mineralization exists at the Filo del Sol project and overlays un-oxidized sulphides. The underlying sulphides are further characterized into a high-arsenic resource and a low-arsenic resource.

The Filo del Sol and Josemaría deposits are both expected to employ traditional grinding and flotation processes for the recovery and upgrading of copper and precious metals when treating the hypogene zones of the respective deposits. The Filo del Sol deposit will employ heap leaching for the processing of oxide materials. Hypogene mineralization at both Josemaría and Filo del Sol are considered amenable to conventional milling and flotation to produce copper concentrates. Design criteria for the two deposits are modestly different, with finer grinding required to process the Filo del Sol materials compared to the Josemaría materials. Enough similarities in design criteria exist to suggest that a single process facility could process co-mingled Filo del Sol and Josemaría materials.

Copper recoveries for the Filo del Sol hypogene materials were observed to be in the range of 80 to 87 percent in a recent test work program involving 28 separate samples. Gold and silver were expected to reach payable levels in the copper concentrate at good recoveries. Oxide mineralization at Filo del Sol was shown to be amenable to heap leaching for the recovery of copper using traditional acid leaching for the potential production of cathode copper. Heap leach testing also demonstrated the use of cyanide leaching for the recovery of gold and silver.

Metallurgical results for the Josemaría deposit have been good for all test work programs and copper recoveries have ranged from 83 to 86 percent to a good quality concentrate. Precious metal recoveries to final concentrates are well understood for the Josemaría deposit and gold and silver values are payable in copper concentrates. Engineering studies have advanced for the Josemaría deposit based on the metallurgical test work to date.

Test work has been completed at Novatech S.A. of Santiago, Chile (Novatech), SGS Minerals in Lakefield, Ontario (SGS Lakefield), Dundee Sustainable Technologies, Montreal, Quebec (Dundee Sustainable), SGS Chile; ALS Metallurgy, Kamloops, BC (ALS Kamloops); FLS Laboratories, Salt Lake City, Utah (FLS); Base Metallurgical Laboratories Ltd. (Base Met Labs), Kamloops, British Columbia, and Terra, Peterborough, Ontario.

13.2 Test Work Filo del Sol

Table 13-1 outlines the various test work programs completed on the Filo del Sol deposit. Flotation test work was begun in 2018, and only heap leach test work was completed prior to 2018.

Table 13-1: Test Work Programs, Filo del Sol

Test Work Program	Laboratory or Facility	Years	Notes
Phase I	Novatech	2001	Bottle rolls and diagnostic leaches, on 20 RC chip samples
Phase II	SGS Lakefield	2016	Bottle roll tests on three composite samples created from RC chips. Composites identified as oxide copper–gold (CuAuOx), oxide gold (AuOx), and silver (M)
Phase III	SGS Lakefield	2017	Column leach and bottle roll tests completed on four composite samples created from RC chips and surface/trench exposure bulk samples. Composites identified as gold oxide zone (AuOx; two surface samples from Filo del Sol, two surface samples from Tamberías, five RC samples from Filo del Sol, and five RC samples from Tamberías), copper–gold oxide zone (CuAuOx; two surface samples from Filo del Sol, two surface samples from Tamberías and four RC samples from Filo del Sol), copper-rich “M” zone (FDS M-Cu) and silver-rich “M zone” (FDS M-Ag).
Phase IV	SGS Lakefield	2018	Comminution tests (Bond low energy impact test (SGS Vancouver laboratory), Bond rod mill index (RWI), Bond Ball mill index (BWI), abrasion index (Ai), and JK drop-weight test (SMC tests)), detailed mineralogical characterization, bottle roll tests, cyanide column and sequential column leaching tests, trial grinding-agitation leach (cyanide leaching for the AuOx mineralization or sequential acid-cyanide leaching for the CuAuOx mineralization), trial washing-scrubbing for the acid leaching of the CuAuOx mineralization, testing of downstream extraction processes (copper solvent extraction, SART). Composites tested created from RC chips, surface/trench exposure bulk samples and drill core. Three composites, gold oxide zone (AuOx), copper–gold oxide zone (CuAuOx), silver-rich “M zone” (M-Ag). One-sub composite created from CuAuOx mineralization (FDS CuCN) to characterize material with a high cyanide-soluble copper component.
Phase V	SGS Lakefield Dundee Sustainable	2020–2022	Preliminary scoping flotation tests using three composite samples. Flotation tests, intensive cyanide leaching tests, comminution tests (BWI) were completed.
Phase VI	Base Met Labs	2023-2024	Detailed flotation and comminution test work using 28 distinct variability samples of hypogene materials.

13.2.1 Filo del Sol - Heap Leach Test Work

13.2.1.1 Phase I to III

Preliminary leaching test work was carried out during Phase I (2001) using bottle roll tests to determine leach kinetics and leach chemistry requirements. The average copper extraction in this test work was 76 percent. It was also noted during this test work that many of the test samples generated acid and could be leached with water only.

During Phase II (2016) and III (2017), test work was completed to evaluate the merit of leaching precious metal values from oxide ores. Oxide samples which were high in copper and precious metals were leached in a two-stage process to first recover acid soluble copper followed by leaching for the recovery of precious metals using cyanide. After copper leaching, a test was conducted to cyanide leach the gold in the copper leach residue (after thorough washing and neutralization). This sequential leach process recovered 87% of the gold from the copper leach tailings sample.

A limited number of column leach tests were also carried out in 2018 to evaluate the response of an overall copper composite to heap leaching.

Copper Blend #2 Composite is a fair representation of the proportions of each mineralization type in the Filo del Sol deposit, as it was understood in 2018. Results for these two samples are shown in Table 13-2.

Table 13-2: Copper Blends – Bottle Roll Test Results – 2018

		Head Assay			Weight	Extraction			Reagent Consumption		
Sample	Test No.	Cu (%)	Au (g/t)	Ag (g/t)	Loss (%)	Cu (%)	Au (%)	Ag (%)	H_2SO_4 (kg/t)	NaCN (kg/t)	CaO (kg/t)
Copper Blend #1	LC-59	0.91	0.29	9.4	15.0	81.6	-	-	-9.2	-	-
	LC-64	0.91	0.29	9.4			-	-	-3.6	-	-
Copper Blend #2	LC-69	0.68	0.32	10.3	16.7	90.9	76.0	85.5	-13.4	1.32	3.01
	LC-70*	0.68	0.32	10.3	17.3	92.3	75.8	81.5	-11.6	2.07	2.57

Note: 10 kg/t acid used to cure the sample prior to copper leach.

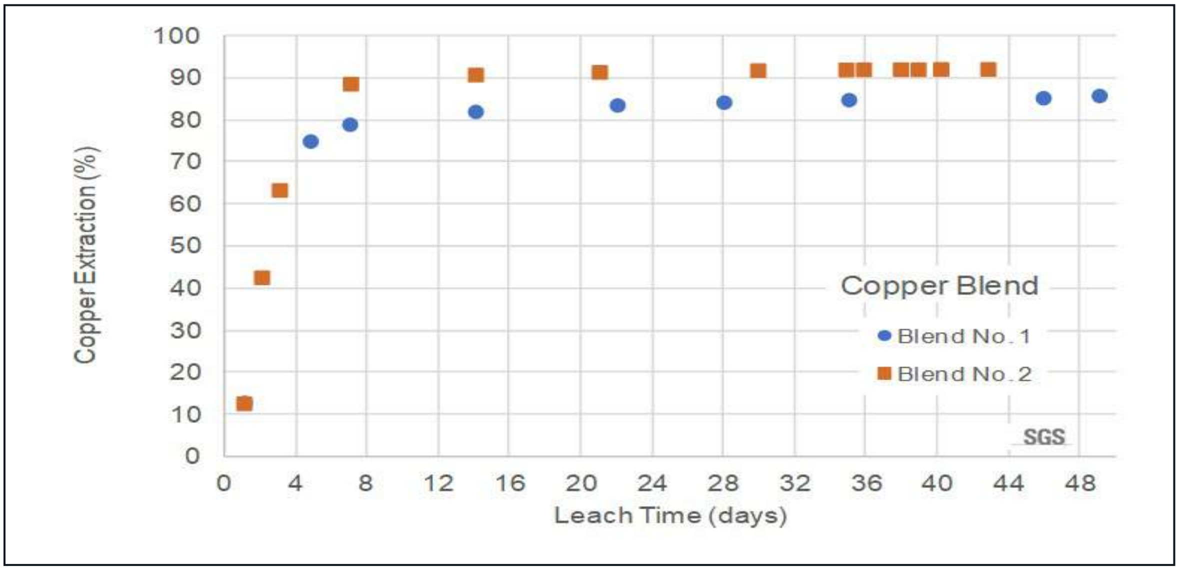
One sequential column leach (acid leaching followed by cyanide leaching) test was completed on each of Copper Blend #1 and Copper Blend #2 samples and these results are shown in. Table 13-3. Conditions for both column tests were identical, crush size 1.5 inch, column diameter 15 cm, 10 kg/t acid curing, irrigation rate 10 $L/h/m^2$, pH of approximately1.8 (acid leach) or 10.5 (cyanide leach), sodium cyanide concentration 1 g/L and no cement additions.

As with the bottle roll tests, copper extractions from Copper Blend #2 were significantly higher than that from Copper Blend #1 (92% vs. 86%). Kinetics for copper are presented in Figure 13-1. Again, the rates of copper dissolution were very rapid with copper extraction nearing completion after only two to three weeks.

Table 13-3: Copper Blend Column Test Results

			Extraction			Reagent Consumption		
Sample	**Test #**	**Weight Loss (%)**	**Cu (%)**	**Au (%)**	**Ag (%)**	**H_2SO_4 (kg/t)**	**NaCN (kg/t)**	**CaO (kg/t)**
Copper Blend #1	C-33	14.8	86.3	64.4	59.8	3.3	2.06	2.6
Copper Blend #2	C-34	20.8	92.0	67.5	55.7	-9.4	1.52	2.6

Figure 13-1: Copper Extraction for Copper Blends



Source: Ausenco 2019.

Sulphidization–acidification–recycling–thickening test work (SART), indicated that large portion of the cyanide complexed during leaching could be recycled, while the associated copper could be recovered from solution, forming a copper sulphide precipitate, assaying approximately 65% Cu.

The Filo del Sol AuOx samples tested in the Phase III program responded well to cyanide leaching. Bottle roll testes performed on material crushed to -10 mesh (1.7 mm) resulted in gold extractions in the range of 89–98%.

Column leach tests were performed on a AuOx sample from the Filo del Sol deposit to assess its amenability to heap leaching for the extraction of the contained gold. The ultimate gold extraction was similar to that obtained in the bottle roll leach tests, at 93%. Gold leach kinetics were relatively rapid, with the leach essentially being complete after 14 days.

Sequential column leach tests were performed on the CuAuOx samples from Filo del Sol and Tamberias. Copper extraction from the Filo del Sol sample was 81–83% after 19 days of leaching. Copper extraction from the Tamberias sample was 75% on a sample that had the fine fraction (-150 mesh) removed. When the entire sample was acid-cured using 24 kg/t H_2SO_4, the copper extraction was 91% after 31 days of leaching. The leach kinetics were rapid, with an estimate of 87% extraction after eight days of leaching.

13.2.1.2 Phase IV

Comminution test work indicated oxide materials had soft to very soft resistance to impact breakage in SAG milling (A x b). Samples were moderately soft in terms of the crusher work index (CWI), ranged from soft to medium in terms of RWI, ranged from medium soft to hard/borderline very hard in terms of RWI, and fell in the moderately abrasive range of samples in the SGS Lakefield database.

Column leach test work results indicated a much better extraction of gold from the FDS AuOx composite than for the TMB AuOx composite. This result corresponded with mineralogical examination that indicated that the gold particles at Tamberías were encapsulated by silica relative to Filo del Sol mineralization. Further confirmation of this was provided by the grinding/tank leach tests, which showed increased gold recoveries from TMB AuOx mineralization with increased grinding and associated increased gold particle liberation.

A total of 16 sequential column tests were carried out on the two main copper-gold composites and two more on the copper blend samples. Copper extractions from the two copper zones ranged from 86.7% (Tamberías) to 95.3% (Filo del Sol), with rapid leach kinetics. This was particularly so for the Filo del Sol zone. Due to the mineralogy of the copper in the Filo del Sol zone, copper is mostly present as water soluble sulphates of copper, the composite actually generates acid during leaching. Gold extraction from the main zones ranged from 55.8% (TMB CuAuOx) to 75.8% (FDS CuAuOx), while silver extraction ranged from 36.8% (TMB CuAuOx) to 89.6% (FDS CuAuOx). The two copper blends were prepared using varying proportions of the copper zones. Copper Blend #2 represents the overall oxide deposit as it is presently known. Extractions from Copper Blend #2 were 92.0%, 67.5% and 55.7% for copper, gold and silver, respectively. Because of the presence of large amounts of water-soluble sulphates (Cu, Fe, Al) in the copper zones, a significant weight loss was observed in the columns after the copper acid leach, ranging from 8% (TMB CuAuOx) to 19% (FDS CuAuOx) and 21% (Copper Blend #2).

Copper solvent extraction results confirmed a selective extraction of copper from the leach solutions. Two SART tests were carried out on cyanide solutions produced during the test program. For both tests weakly acid dissociable cyanide (CNWAD) regeneration was >95%, and copper recovery by precipitation was >96%, resulting in copper grades in the precipitate ranging from 51% to 65% Cu.

Preliminary comminution testing indicated that the composite samples reflected a moderate hardness, with an indicated BWI of 14–15 kWh/t.

13.2.2 Filo del Sol - Flotation Test Work

A detailed program of flotation test work was completed at Base Met Labs using 28 distinct samples of Filo del Sol sulphide samples. This test work program builds on the previous preliminary test work and best represents the expected performance of the Filo del Sol sulphide materials. This test work program had the following goals:

1 Characterize the mineralogy and test the metallurgical response of the two primary types of mineralization seen within the deposit – arsenical high-sulphidation (HS) and low-arsenic porphyry (POR) mineralization;

2 Provide characterization of 28 significant feed samples in terms of head grade, process mineralogy and comminution characteristics; and

3 Use a standardized grinding and flotation regime to provide detailed recovery estimates and concentrate quality for each of the 28 samples.

Overall, the metallurgical response of the Filo del Sol materials to recovery and upgrading by flotation is considered in-line with ore grade values and mineralogical constraints. Copper values are readily recovered to a copper concentrate and copper recoveries ranged from 63.5% to 91.0% for the 28 samples and copper recovery averaged 85.7% for the entire sample set. Copper concentrate grades were variable within the test results and ranged from 21.4% to 34.0% with an average copper concentrate grade of 26.8% copper for the entire data set. Filo del Sol copper minerals have finer than average liberation requirements and are finer grained than the Josemaría materials.

The Filo del Sol materials demonstrate a need to use a primary grind in the range of 100 to 120 microns to provide suitable liberation of copper minerals to support the flotation process. Copper mineral liberation at this primary grind is considered at the lower limit of typical mineral liberation, but flotation response has been shown to be good, perhaps due to high overall sulphur mineral recovery in rougher flotation. Relatively fine re-grinding is required to support the upgrading of copper values in the flotation process and re-grind targets of 10 to 15 microns are needed to produce copper concentrates in the range of 26% to 28% copper. Final concentrates from the high sulphide zone samples were observed to contain significant arsenic grades with arsenic being almost exclusively contained within enargite, a copper-arsenic sulphide mineral. In contrast, final concentrates from the porphyry zone mineralization contain little arsenic and would be readily saleable. Copper and arsenic recovery are positively correlated in the high sulphide zone mineralization and negatively correlated in the porphyry mineralization.

Copper concentrate quality is impacted by liberation issues, which impacts concentrate grades; the concentrates contain significant contamination of gangue, mainly pyrite. Arsenic grades seen in the HS copper concentrates will impact the ability to market these concentrates.

Gold and silver recovery to a flotation concentrate averaged 62.0% and 61.7% respectively for the samples tested in this program. Precious metals are expected to be payable given the gold and silver grades of the final copper concentrates.

Metallurgical test samples were selected by Filo Corp. to provide a range of spatial sampling within the deposit for the Base Met Labs test work program. The sampling was wide-spaced and diverse, encompassing two main ore types. These ore types can be referred to as high-arsenic material (HS) and low-arsenic material (POR). High-arsenic material has been defined as material that contains more than 100 ppm arsenic and the two zones are spatially separate within the Filo del Sol deposit.

Detailed chemical analysis of the 28 samples is summarized in Table 13-4 and shows a range of copper, gold, silver, sulphur and arsenic grades. Generally, the higher grade copper and gold samples correspond to higher sulphur grades and also corresponds to higher arsenic content in the feed samples. The two sample types correspond to defined zones within the resource and, although no mine plan yet exists, it is reasonable to assume that they can be mined and processed separately.

Table 13-4: Summary of Composite Sample Feed Grades, Filo del Sol

Sample	Head Assays										
	Cu (%)	Ag (g/t)	As (g/t)	Sb (g/t)	Fe (%)	Au (g/t)	S (%)	CuOX (%)	CuCN (%)	SO_4 (%)	S_2- (%)
Met_MC01	0.28	54.3	130	2	3.3	0.26	4.0	0.01	0.15	0.9	3.0
Met_MC02	0.34	3.0	1,143	8	4.2	0.36	6.5	0.01	0.27	1.4	5.1

Sample	Head Assays										
	Cu (%)	Ag (g/t)	As (g/t)	Sb (g/t)	Fe (%)	Au (g/t)	S (%)	CuOX (%)	CuCN (%)	SO_4 (%)	S_{2}- (%)
Met_MC03	0.27	1.3	9	1	2.2	0.24	2.8	0.01	0.07	1.4	1.3
Met_MC04	0.34	1.5	853	2	2.0	0.38	5.6	0.02	0.31	1.5	4.1
Met_MC05	0.43	1.0	25	2	2.3	0.30	3.5	0.02	0.16	0.9	2.6
Met_MC06	0.64	5.2	758	10	3.6	0.39	7.9	0.04	0.49	1.6	6.3
Met_MC07	0.57	12.6	1,271	12	2.1	0.35	6.0	0.03	0.41	1.4	4.6
Met_MC08	0.58	3.2	1,217	6	1.6	0.40	5.9	0.04	0.40	1.4	4.5
Met_MC09	0.69	6.6	1,905	14	2.9	0.66	8.6	0.03	0.56	1.8	6.8
Met_MC10	1.18	90.8	4,335	118	8.6	1.22	12.3	0.06	1.05	0.7	11.8
Met_MC11	0.53	1.0	20	3	1.8	0.33	3.0	0.03	0.13	1.6	1.4
Met_MC12	0.44	1.0	26	2	3.5	0.26	3.4	0.02	0.10	1.1	2.3
Met_MC13	0.64	5.5	1,783	13	1.8	0.62	6.1	0.03	0.53	1.3	4.7
Met_MC14	0.54	1.6	32	1	2.2	0.28	3.8	0.03	0.33	1.7	2.1
Met_MC15	0.50	1.6	17	1	3.1	0.38	3.5	0.03	0.13	1.6	2.0
Met_MC16	0.70	3.9	267	8	2.8	0.33	3.7	0.03	0.36	0.8	2.8
Met_MC17	0.46	7.8	564	7	4.6	0.21	8.3	0.03	0.29	1.5	6.9
Met_MC18	0.62	20.4	1,572	41	3.3	0.36	9.4	0.03	0.49	1.0	8.4
Met_MC19	0.87	13.0	1,720	22	3.2	0.60	7.0	0.06	0.59	1.1	5.7
Met_MC20	3.58	222.4	14438	185	5.2	2.78	9.6	0.13	2.48	1.0	8.6
Met_MC21	0.25	0.9	107	4	5.5	0.11	6.5	0.01	0.03	2.4	4.1
Met_MC22	0.82	1.7	7	1	5.4	0.55	2.9	0.02	0.10	1.0	2.0
Met_MC23	0.22	1.1	16	2	2.5	0.11	2.4	0.01	0.04	1.2	1.2
Met_MC24	0.30	2.7	130	3	2.5	0.18	2.9	0.02	0.11	1.0	1.9
Met_MC25	0.88	38.1	3353	33	3.0	0.71	5.9	0.04	0.50	1.5	4.7
Met_MC26	0.41	4.4	756	3	2.4	0.24	5.2	0.03	0.26	1.0	4.2
Met_MC27	0.35	1.2	38	1	2.1	0.25	3.3	0.02	0.18	1.1	2.2
Met_MC28	0.34	6.4	639	7	2.5	0.23	5.3	0.04	0.23	0.8	4.5
Method	FAAS	ICP	ICP	ICP	FAAS	ICP	LECO	FAAS	FAAS	GRAV	by diff*
Note: S(t) by LECO, S04- by GRAV, and S2- by difference											

13.2.3 Comminution Test Results

Each of the Base Met Labs composite samples was subject to a Bond Ball mill work index determination and the results are summarized in Table 13-5.

Table 13-5: Summary of Bond Work Index Data, Filo del Sol

Sample ID	Bond Ball Mill Work Index					
	% of Fd passing CSS	CSS µm	F_{80} µm	P_{80} µm	Gpr	WiBM (kWhr/tonne)
MET_MC03	27.2	106	1556	80	1.08	18.1
MET_MC06	26.4	106	1511	80	1.23	16.4
MET_MC17	31.0	106	1429	77	1.28	15.6
MET_MC20	25.1	106	1538	81	0.90	21.3
MET_MC25	27.8	106	1565	77	0.98	19.1
MET_MC01	32.6	106	1382	77	1.20	16.6
MET_MC02	29.6	106	1459	77	1.12	17.4
MET_MC04	27.3	106	1547	77	1.15	16.9
MET_MC05	27.5	106	1549	80	1.28	15.8
MET_MC07	28.8	106	1498	79	1.48	14.1
MET_MC09	25.0	106	1503	81	1.27	16.2
MET_MC10	43.3	106	991	78	1.75	13.0
MET_MC11	37.0	106	1208	78	1.14	17.8
MET_MC12	32.4	106	1297	81	1.20	17.3
MET_MC13	24.3	106	1584	82	1.11	18.1
MET_MC14	31.3	106	1448	80	1.20	16.9
MET_MC15	30.2	106	1376	81	1.19	17.4
MET_MC16	31.7	106	1404	80	1.16	17.5
MET_MC18	28.0	106	1549	79	1.28	15.8
MET_MC19	29.5	106	1460	81	1.19	17.1
MET_MC21	34.0	106	1454	70	1.02	17.7
MET_MC22	33.3	106	1318	79	1.27	16.2
MET_MC23	28.6	106	1461	79	1.20	16.8
MET_MC24	29.1	106	1425	79	1.22	16.6
MET_MC26	29.7	106	1606	77	1.71	12.2
MET_MC27	28.4	106	1624	78	1.21	16.1
MET_MC28	28.8	106	1526	77	1.39	14.5
MET_MC08	23.7	106	1521	81	1.17	17.3
					Average	16.6 kWhr/t
					Minimum	12.2 kWhr/t
					Maximum	21.3 kWhr/t

The test work program at Base Met Labs comprised both open-circuit flotation tests and locked cycle flotation tests. The open circuit testing was used to provide some optimization of reagents and re-grind targets, but key metallurgical parameters were standardized across the test work program.

A typical set of laboratory test conditions is shown in Table 13-6 and has been standardized for all of the locked cycle test conditions discussed in this report. A primary grind target of 120 microns was used and re-grind targets were in the 10 to 15 micron range. Common xanthate collectors were used for copper flotation and lime was used to control pH targets, typically 10.5 in the roughers and over 11.0 in the flotation cleaning stages.

Table 13-6: Typical Laboratory Test Conditions for Locked Cycle Testing

Test No:	BL1320-131		
Date:	20-Aug-24		
Test Type:	Standard Locked Cycle Test		
Test Objective:	LCT using conditions from 129		
Sample:	5x2 kg of Met_MC10		
Nominal Sizing:	120µm K_{80}	Bulk Regrind Discharge:	9µm K_{80}

Stage	Reagents (g/t)					Time - minutes		Electrochemistry	
	Lime	SIPX	A208		MIBC	Condition	Float	pH	Eh - mV
Primary Grind	5000					6		10.2	86
Rougher 1	50	30			-	1	2	10.5	60
Rougher 2	45	20			7	1	2	10.5	45
Rougher 3	30	5			7	1	2	10.5	52
Rougher 4	35	3			-	1	2	10.5	54
Rougher 5	45	2			7	1	2	10.5	53
Regrind	1500					12		10.5	65
Cleaner 1	675	145			21	1	15	11.3	-10
Cleaner 2	260	25			14	1	12	11.3	-8
Cleaner 3	250	15			14	1	8	11.3	-2
Cleaner Scav	670	20			7	1	3	11.3	-4

The overall results of the locked cycle tests for all 28 samples are summarized in Table 13-7. The flowsheet used in the Filo del Sol test work is shown in Figure 13-2 and is considered a very traditional copper flotation process.

The variable nature of the test results reflect the variable nature of the feed samples and generally the metallurgical results can be related to the mineralogical characteristics of the samples. The final concentrates have high levels of sulphur relative to the copper content, which is indicative of pyrite contamination of these concentrates. Detailed mineralogical evaluation of the concentrates tends to show poor liberation of copper sulphides from pyrite in the re-grind sizes used in this test work program.

Additional flotation test work is recommended to further optimize the Filo del Sol flotation process.

Figure 13-2: Filo del Sol Flotation Flowsheet

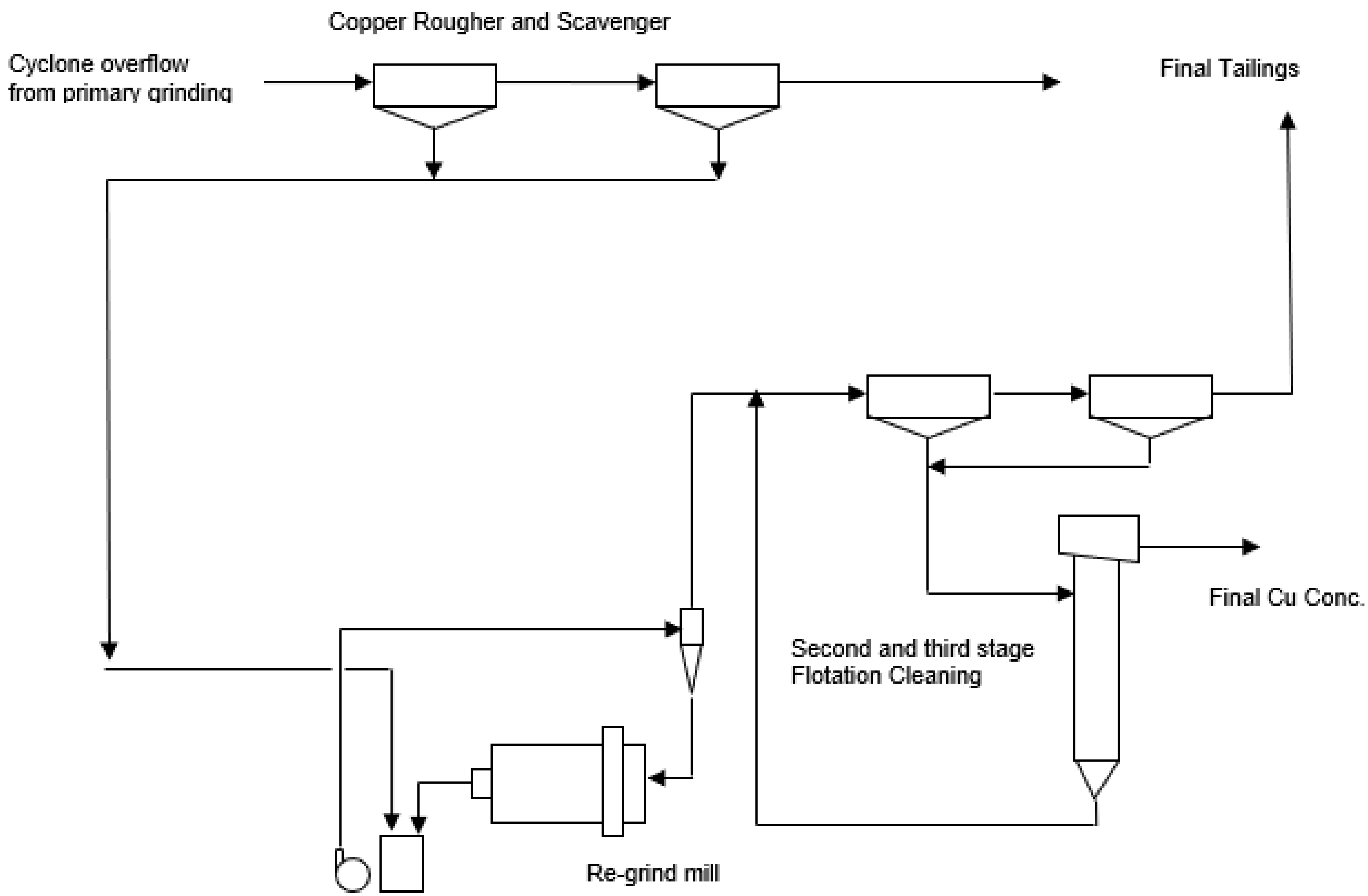


Table 13-7: Summary of Locked Cycle Test Results – Filo del Sol

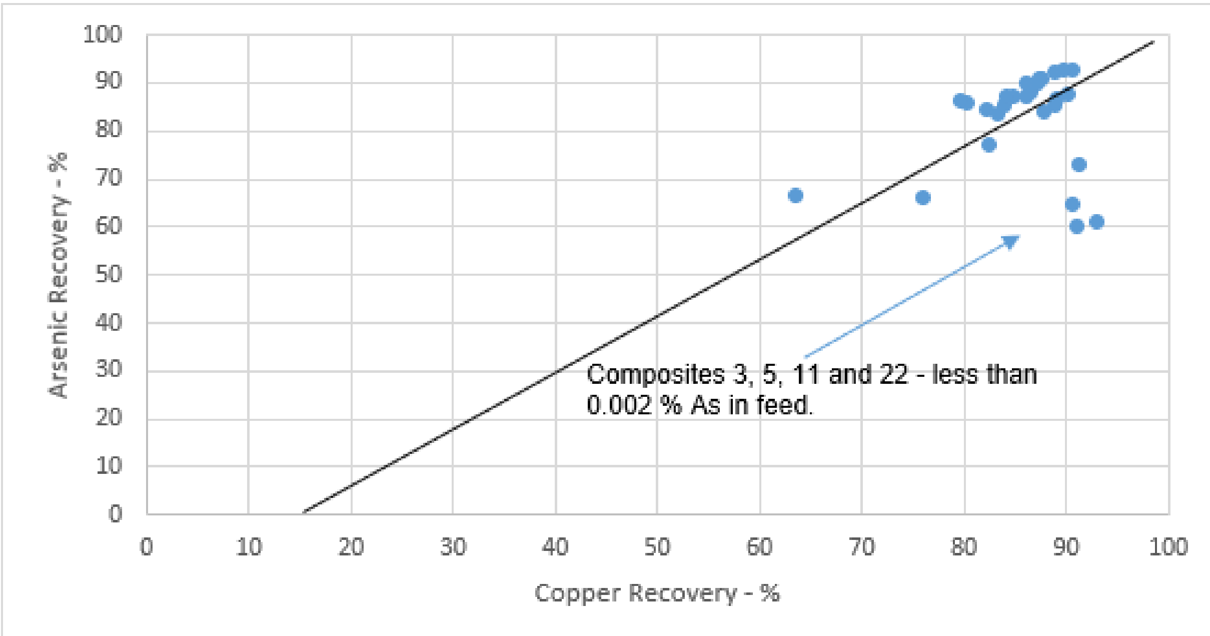
Test No.	Sample	Product	Conc Mass	Cu Conc. Assay - percent or g/t							Recovery to Cu Conc.						
				Cu (%)	Fe (%)	Au (g/t)	Ag (g/t)	As (%)	Sb (g/t)	S (%)	Cu (%)	Fe (%)	Au (%)	Ag (%)	As (%)	Sb (%)	S (%)
LCT-106	MC01	Cu Con	1.10	23.4	22.4	14.6	3,175	0.95	0.0	33.5	83.8	6.7	61.6	65.3	85.5	72.0	9.9
LCT-127	MC02	Cu Con	0.97	24.7	10.6	18.4	111	8.40	0.0	30.7	63.5	2.4	49.4	38.0	66.7	48.6	4.9
LCT-94	MC03	Cu Con	0.77	31.3	25.8	15.6	106	0.06	0.0	34.9	91.0	10.9	63.9	67.8	60.0	59.0	11.2
LCT-97	MC04	Cu Con	1.10	26.4	13.8	21.2	71	6.98	0.0	33.9	82.2	8.3	59.5	64.6	84.5	65.8	6.9
LCT-95	MC05	Cu Con	1.41	29.9	24.4	17.1	50	0.09	0.0	35.4	90.7	14.1	71.4	67.7	64.8	93.8	15.8
LCT-119	MC06	Cu Con	1.95	27.5	8.3	10.4	113	3.34	0.0	30.3	83.4	5.5	52.9	43.2	83.4	54.5	7.4
LCT-96	MC07	Cu Con	2.09	25.8	12.4	12.0	354	7.91	0.1	30.9	88.9	12.2	68.8	59.1	92.3	88.9	11.4
LCT-118	MC08	Cu Con	1.83	22.2	6.6	9.3	57	6.27	0.0	27.5	80.3	7.8	48.1	37.5	85.8	37.5	8.7
LCT-123	MC09	Cu Con	2.36	27.7	9.3	13.1	175	7.21	0.1	31.9	87.5	7.1	56.9	64.8	91.0	68.6	8.8
LCT-131	MC10	Cu Con	4.72	24.0	14.6	14.8	1,321	8.98	0.3	34.5	84.8	8.0	59.0	57.6	87.1	73.8	13.3
LCT-82	MC11	Cu Con	1.57	29.0	26.4	18.6	66	0.05	0.0	35.4	91.3	23.4	76.6	80.7	73.1	29.7	20.8
LCT-83	MC12	Cu Con	1.37	27.2	28.4	14.5	46	0.12	0.0	39.1	87.9	11.2	66.0	68.6	83.8	11.9	17.2
LCT-53	MC13	Cu Con	2.05	26.1	9.3	16.6	133	9.54	0.0	30.7	86.1	10.2	58.1	49.0	89.8	53.8	10.0
LCT-84	MC14	Cu Con	1.69	31.0	21.9	11.9	77	0.21	0.0	33.0	90.1	18.7	73.5	77.2	87.5	23.9	17.1
LCT-90	MC15	Cu Con	1.80	26.6	28.4	15.2	59	0.10	0.0	37.8	89.0	18.2	73.4	78.9	86.9	47.2	21.7
LCT-103	MC16	Cu Con	2.31	28.9	23.1	10.8	136	1.42	0.0	37.5	90.7	20.5	73.3	78.9	92.5	93.3	25.9
LCT-113	MC17	Cu Con	1.23	21.4	14.2	6.5	141	1.84	0.0	29.0	75.9	4.0	46.9	29.0	66.2	49.6	4.4
LCT-54	MC18	Cu Con	2.07	25.1	11.9	8.4	483	7.51	0.2	32.5	84.1	7.6	58.2	50.4	87.0	64.5	9.3
LCT-100	MC19	Cu Con	3.08	26.7	16.6	10.2	199	5.77	0.1	35.4	87.3	16.7	55.5	50.0	90.8	87.0	16.7
LCT-101	MC20	Cu Con	10.31	30.6	11.5	15.4	1,241	11.30	0.2	35.2	89.7	27.4	57.5	62.4	92.8	88.5	38.8
LCT-135	MC21	Cu Con	0.76	24.7	26.0	6.1	57	1.42	0.0	37.0	82.5	3.6	70.2	56.7	77.1	52.3	4.8
LCT-47	MC22	Cu Con	2.72	28.6	29.4	20.6	59	0.02	0.0	38.1	93.0	14.8	85.6	81.1	61.3	20.1	37.8
LCT-91	MC23	Cu Con	0.79	27.5	23.9	11.6	115	0.21	0.0	35.6	88.8	6.9	45.2	71.6	85.2	57.7	12.8

Test No.	Sample	Product	Conc Mass	Cu Conc. Assay - percent or g/t							Recovery to Cu Conc.						
				Cu (%)	Fe (%)	Au (g/t)	Ag (g/t)	As (%)	Sb (g/t)	S (%)	Cu (%)	Fe (%)	Au (%)	Ag (%)	As (%)	Sb (%)	S (%)
LCT-92	MC24	Cu Con	1.09	24.6	28.0	10.2	150	1.23	0.0	38.9	86.5	11.5	65.8	62.4	87.9	49.5	16.8
LCT-102	MC25	Cu Con	3.31	25.0	17.7	16.2	665	8.26	0.1	37.3	86.8	22.5	66.6	66.3	89.5	88.5	21.0
LCT-124	MC26	Cu Con	1.21	27.3	10.4	8.0	219	5.59	0.0	31.2	86.1	4.9	63.5	67.3	87.3	41.1	7.6
LCT-93	MC27	Cu Con	1.02	34.0	23.2	9.4	73	0.36	0.0	37.9	87.1	10.7	53.8	73.7	90.0	23.0	13.2
LCT-120	MC28	Cu Con	1.10	23.4	18.0	5.7	290	4.64	0.0	36.9	79.5	7.9	53.6	58.5	86.5	66.0	8.3

The copper flotation concentrates produced from the high-sulphide zone materials will likely contain high levels of arsenic and this will impact concentrate salability.

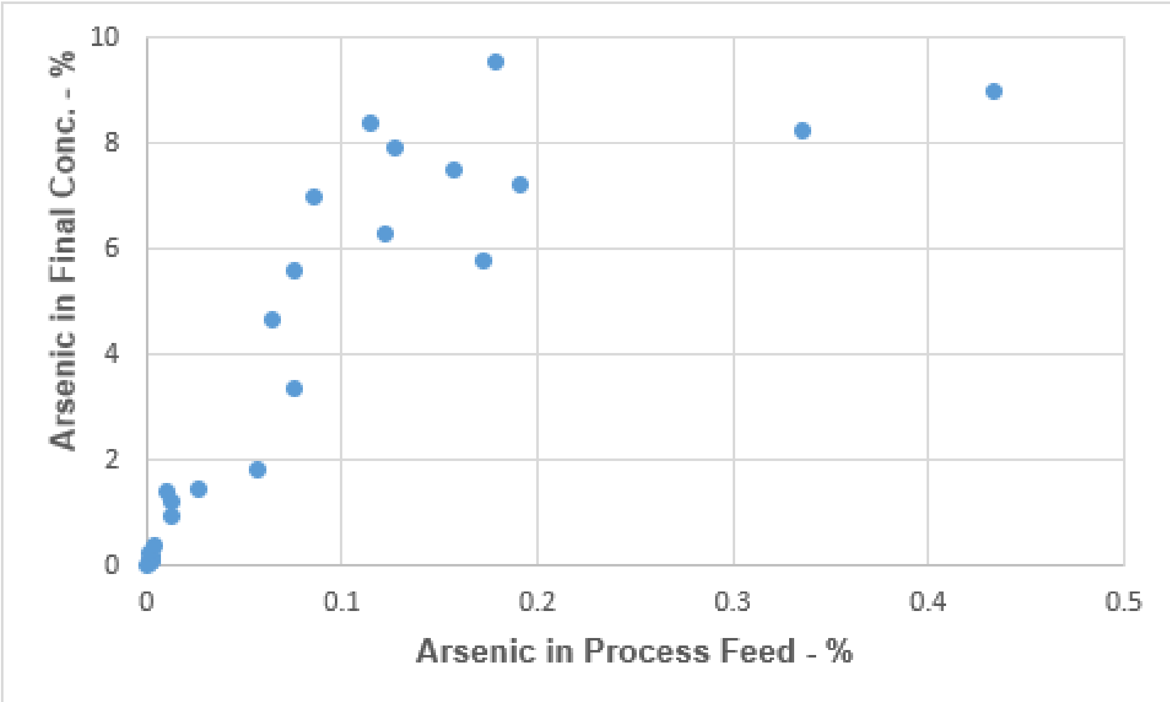
The recovery of arsenic is well correlated to the recovery of copper for the samples that were tested. This relationship is shown in Figure 13-3 and with the exception of four very low-grade arsenic samples, the arsenic recovery tracked copper recovery on a matching basis. This is due to nearly all arsenic occurring within enargite, a copper-arsenic mineral.

Figure 13-3: Arsenic Recovery Related to Copper Recovery, All Samples



The relationship between arsenic content of the copper concentrates and the feed grade of the flotation feed is well understood for the Filo del Sol deposit. This dataset confirms the relationship and it is shown in Figure 13-4. This data also tends to confirm that approximately 800 g/t As in the flotation feed will be the upper limit for maintaining an arsenic content of less than 2% in a flotation concentrate.

Figure 13-4: Arsenic in Final Copper Concentrates as a Function of Arsenic Feed Grades



A detailed mineralogical examination of final copper concentrates was completed for each of the 28 samples. Generally, the liberation seen for all concentrates is below that expected for final concentrates for all zones of the Filo del Sol deposit. Typical targets for liberation in a final concentrate is 85 percent or above, this liberation is provided by re-grinding. In this sample set, liberation above 85 percent is achieved for two of the low-arsenic samples, samples 11 and 22. Generally, the final concentrates which were composed of enargite, had liberation characteristics well below standard targets and the concentrate grades reflected this fact with lower copper contents.

The test work program recently completed at Base Met Labs has demonstrated that good copper recoveries can be expected from the Filo del Sol materials using standard grinding and flotation technology for the production of copper concentrates. This program saw an average of 85 percent copper recovery to an average copper concentrate of 26 percent copper.

The materials are variable and a wide range of arsenic values were seen in feed samples, which directly impacted the arsenic content of copper concentrates. The arsenic has been shown to be contained in a copper-arsenic mineral and flotation separation of copper and arsenic using flotation is not an option.

Based on the sampling of the deposit and the detailed process simulation, this data can be carried forward in a number of stages of project evaluation and will form an important dataset for the long term evaluation of the project.

Based upon the test work results obtained during 2020–2021, preliminary metallurgical testing of various treatment options for arsenic-bearing, copper–gold mineralized material was initiated and completed in 2022. The treatment options shown in Table 13-8 included:

- Alkaline sulphide leaching of concentrates to remove and stabilize arsenic and produce a saleable concentrate.
- Partial roasting of concentrates to remove and stabilize arsenic and produce a saleable concentrate.
- Pressure oxidation followed by conventional solvent extraction–electrowinning (SX/EW) technology.

Table 13-8: Treatment Options for Arsenic Removal from Concentrates

Test Work	Notes
Alkaline sulphide leaching of concentrates I	Performed on samples of the high arsenic (HiCN) concentrate produced by flotation using 40 g/L sodium hydroxide and 300-400 g/L sodium sulphide at 80°C for 2 hours. The results indicated that >98.5% of the arsenic was extracted, producing an upgraded concentrate containing 31-33% Cu and <1,000 g/t (0.1%) As. These results indicate the technical feasibility of extracting arsenic from the concentrates by alkaline sulphide leaching.
Partial roasting of concentrates	Completed on samples of the high arsenic (HiCN) concentrate produced by flotation by roasting at 650-703°C for between 25 and 60 minutes. The work was performed by Dundee Sustainable Technologies. The test completed at 703°C for 60 minutes indicated that approximately 96% of arsenic was volatilized and removed from the concentrate, producing an upgraded concentrate containing 38% Cu and 0.3% As. In addition, lead, zinc, antimony and mercury were also volatilized to varying extents. These results indicate the technical feasibility of extracting arsenic from the concentrates by partial roasting.
Pressure oxidation followed by SX/EW	The pressure oxidation step was performed in an autoclave at 220°C for 2 hours with a target oxygen over-pressure of 690 kPa (100 psi). The results indicated that approximately 93% copper extraction was achieved from high grade concentrate (27% Cu) and over 99% copper extraction was achieved from a lower grade concentrate (12% Cu). The better performance of the lower grade concentrate is attributable to the more favourable Fe:As ratio in the feed. No regrinding of the flotation concentrate was required. After separation and removal of solution containing copper, the pressure oxidation residue was neutralized and subjected to a hot lime boil procedure to break down silver jarosite. The resulting slurry was adjusted to pH 10.5-11 and 10% solids, and the slurry was leached using 1 g/L sodium cyanide for 48 hours. Under these conditions, 95-98% of the contained gold and 35-94% of the contained silver were extracted. The environmental stability of the cyanide leaching residues was examined by conducting standard US EPA TCLP tests (TCLP-1311 procedure). The results indicated that, pending optimization of the process flowsheet and conditions, the concentrations of arsenic and other elements in the test leach solution would meet the applicable standards.

Based on the preliminary testing results summarized in Table 13-8, all three options are considered technically viable approaches to the treatment of concentrates with elevated arsenic concentrations. Additional test work is warranted.

For the current level of study, it is believed that the metallurgical test samples are generally representative of the ore types and mineralization of the Filo del Sol deposit to the extent it is currently known. The major deleterious element present in the Filo del Sol deposit is arsenic, which is present in high concentrations in well-defined zones of the deposit. It is believed that a concentrate tertiary treatment process will be needed for a substantial part of the Filo del Sol mineralization to improve saleability.

13.3 Josemaría Deposit Test Work

The following test work programs were completed on hypogene materials from the Josemaría deposit. A majority of the test work was completed at ALS Metallurgy in Kamloops, British Columbia in the time period 2020 to 2024 and test work programs are summarized in Table 13-9.

Table 13-9: Test Work Programs Josemaría

Test Work Program	Laboratory or Facility	Years	Notes
SGS scoping	SGS Lakefield	2012	Confirmed the ability to recover copper and gold from the Josemaría deposit using a straightforward sulphide flotation approach. The SGS results informed the later work but were not carried forward in Project evaluation, as later test work is thought to be more representative and optimized in terms of metallurgical performance.
SGS 1	SGS Chile	2014	
SGS 2		2015	
ALS 1 (also referred to as ALS 2020)	ALS Kamloops	2018	Metallurgical test program to support the 2020 feasibility study. ALS 1 was no longer considered representative of the expected plant metallurgical response
ALS 2	ALS Kamloops	2020	Comminution and alternative flowsheet testing program. Focused on the ore stream for the initial five years of operations based on the 2020 feasibility study mine plan. ALS 2 informed the basis of the recovery equations used in the block model, mineral reserves and the economic analysis in the 2020 feasibility study.
FLS	FLS Salt Lake City	2020-2021	Pilot plant testing on a composite sample selected from the 2018–2019 drill season, which focused on the expected head grade and lithology distribution within the initial five years of the mine life, corresponding to the ALS-2 test program samples. Used to confirm future plant operating conditions including reagent dosing, pH targets and conditioning time.
ALS 3	ALS Kamloops	2023–2024	Expanded the locked cycle test (LCT) and ore hardness databases. A series of rock type composites, covering a wider range of head grades, was selected from core samples, with an emphasis on varying spatial location within the proposed pit, both in terms of area and depth. ALS 3 test work samples are more representative of the expected mine production and recovery equations are under development for use in subsequent analysis.

The Josemaría deposit was characterized based on rock type, comprising tonalite, rhyolite, and porphyry. A zone of supergene copper enrichment is also present within the Josemaría deposit.

The distribution of the rock types within the Josemaría Mineral Resource estimate area is dominated by tonalite and rhyolite, with lesser porphyry and a small quantity of supergene.

The division into lithological domains is valid for comminution purposes, as the four primary domains have discrete hardness properties. While two additional rock types are present in the deposit, Breccia (BX) and Dyke (DYKE), the tonnage contributions are too small to be deemed significant and they are not included in the analysis. The four main domains have been shown to respond well to a common flotation process to produce saleable copper concentrates.

There are also two minor oxide domains (one copper, one gold), which have not been a focus of metallurgical testing to date. Oxide minerals are also present in minor concentrations within the primary lithological domains identified above. Oxide copper content is measured in the sequential copper analysis process as the quantity of copper reporting as acid soluble (ASCu), based on a dilute sulphuric acid leach. This may slightly overestimate the actual oxide copper content as some secondary copper minerals may react with the acid.

Mineralogical examination included QEMSCAN analysis of all head samples, gold mineralogy in the master composite samples and various metallurgical test products.

The ALS 2 composites were found to be rich in quartz, mica and feldspar, as expected for a porphyry deposit. Clay minerals varied from <1% to >4%. All samples had a mix of chalcopyrite, bornite, chalcocite, covellite and the copper–arsenic minerals enargite and tennantite. Tonalite samples had a high chalcopyrite and bornite content and lower levels of pyrite. Rhyolite samples had an elevated covellite content, and high pyrite values. The supergene samples had a broad mix of copper sulphide minerals.

Arsenic was interpreted to occur primarily in enargite and tennantite and, when present in these forms, would readily report to the copper concentrate. Minor amounts of arsenic as arsenopyrite and cobaltite were not expected to report to concentrate.

A total of 53 grains of gold mineralization were found from the five ALS 2 master composites. The gold is predominantly native gold (two grains were electrum, seven grains were gold–silver–telluride). One large grain (54 µm) of liberated gold was identified. The non-liberated gold averaged 2 µm in diameter with only two grains being >5 µm in diameter, indicating that particulate gold is very fine. Given that approximately 63% of the gold contained in the Josemaría deposit can be recovered to a final copper concentrate, a substantial fraction of the contained gold likely occurs as solid-solution gold contained within the copper minerals and is not observable in mineralogical work.

At an 80% passing (K_{80} or P_{80}) 130 µm grind size, copper sulphide liberation ranged from 40% to 50% for the five composites. A minimum of 50% liberation is generally targeted for good rougher flotation response. There is relatively little association of pyrite with the copper sulphides. Most of the non-liberated copper sulphides were interlocked with non-sulphide gangue. Reducing the primary grind sizing to K_{80} of 100 µm would increase copper sulphide liberation to an average approaching 50%. Conversely, increasing the primary grind size would be expected to reduce copper sulphide liberation to under 40% for four of the composites. Optimal primary grind sizes were determined using flotation test results, evaluating actual copper losses and overall copper and gold recoveries.

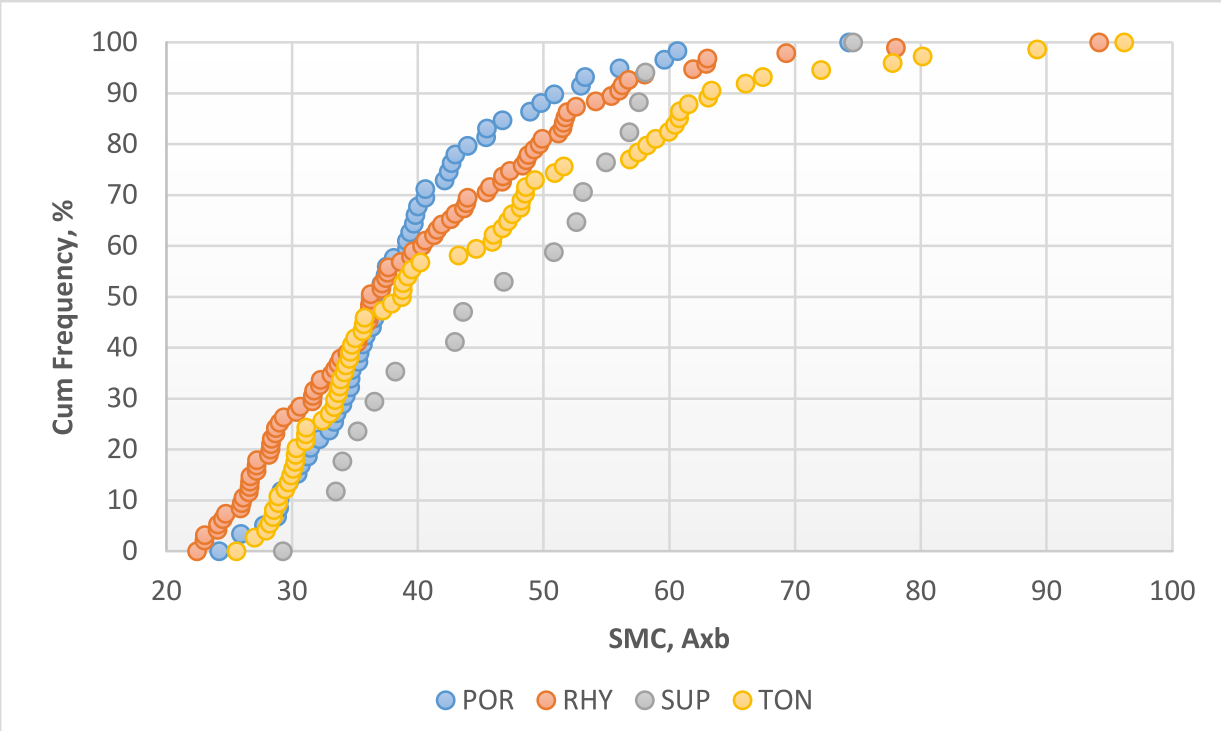
The degree of liberation achieved for the copper minerals at a K_{80} 160 µm primary grind ranged from 35% to 45%, as tested through the ALS 3 program at a grind target coarser than the retained 130 µm for plant design. Therefore, this would indicate that the flotation circuit performance during this test work relied on sufficient exposure of copper mineral surfaces from binary particles to still achieve a high copper rougher recovery.

13.3.1 Comminution

A total of 34 samples were tested during the ALS 2 program, consisting of 29 variability and five master composite samples. All samples were subjected to the SMC hardness testing methodology (19 mm to 22 mm size rock fragments), BWI (150 µm closing size) tests, while some samples were also subjected to RWI tests. An additional 200 comminution samples were evaluated in the ALS 3 test work program.

The SMC data for the ALS 3 program is shown in Figure 13-5.

Figure 13-5: SMC Axb Values by Lithology – Josemaría ALS 3 Data



Note: Figure prepared by ALS, 2024.

The SMC hardness tests (SAGability) indicate that rhyolite, tonalite and porphyry have a very similar SAG hardness profile over most of their distribution, except for approximately 30% where tonalite becomes softer. Supergene is the softest lithology up to approximately 75% of the harder end of the distribution, likely related to the degree of weathering. It still has a broad hardness distribution, as it can be found overprinting any of the lithologies. It is likely that the highest (e.g. softest) Axb values came from oxide material.

BWI results indicated that tonalite and porphyry were the hardest lithologies and were similar over their full distributions, while rhyolite and supergene were also similar, but softer. The average BWI value for the entire dataset from the ALS 3 program is 12.7kWhr/t

RWI values for the porphyry, rhyolite and tonalite lithologies were very similar over most of their frequency distributions, while supergene material was markedly softer. The average RWI value for the entire dataset from the ALS 3 program is 13.7kWhr/t.

13.3.2 Locked Cycle Test work

Extensive flotation test work has been completed in all of the test work programs, the most representative results are associated with the ALS 3 program. All of the Josemaría materials are found to be sensitive to liberation and primary grind particle size distributions in terms of copper and gold recovery. The grind sensitivity data for the Rhyolite material is shown in Figure 13-6 and Figure 13-7 for both open circuit cleaning tests and associated locked cycle tests. The other Josemaría lithologies have similar copper recovery responses to changes in primary grind.

Figure 13-6: Rhyolite Open Circuit Copper Recovery vs Grind Size

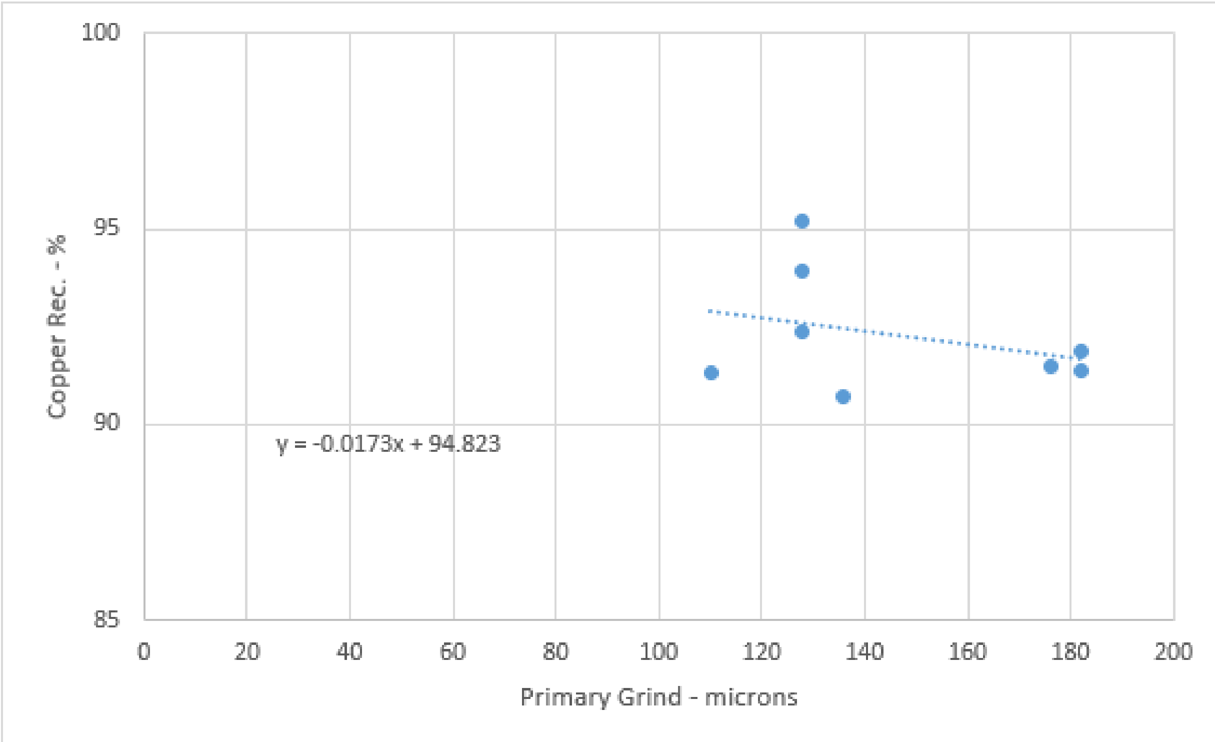
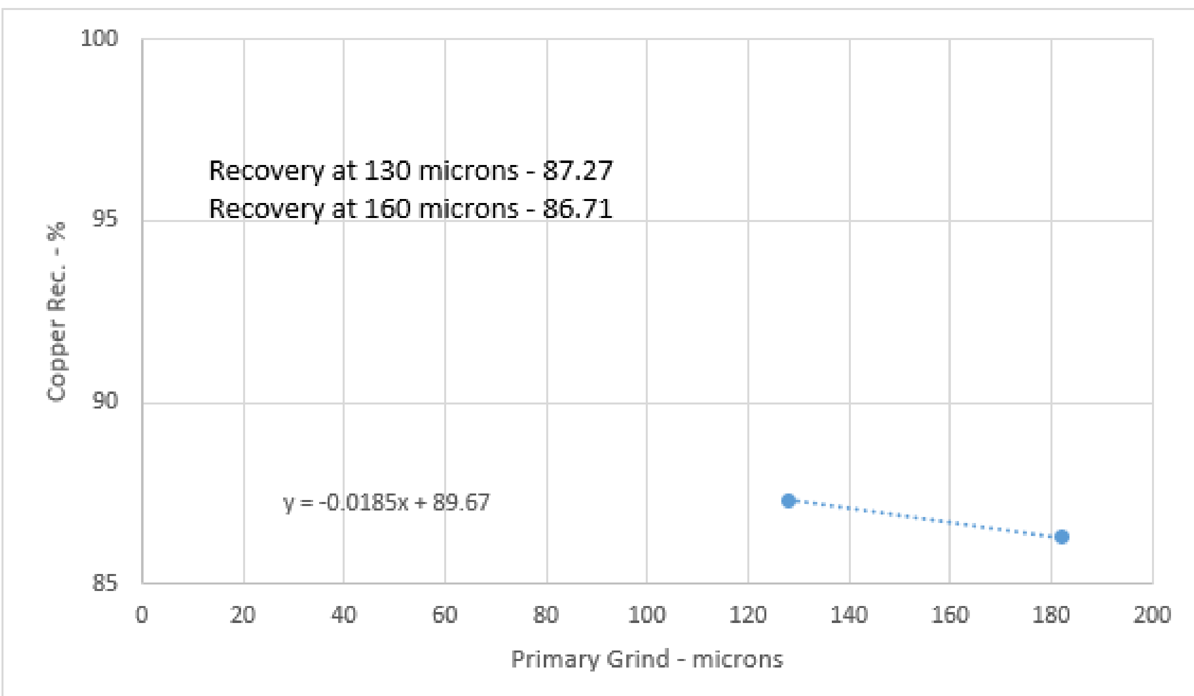


Figure 13-7: Rhyolite Locked Cycle Copper Recovery vs Grind Size



The ALS 3 test work program included variability testing under locked cycle test conditions for 27 different composites. All tests were performed at a primary grind target of P_{80} 160 µm and a regrind target P_{80} of 30 µm. The flowsheet used in locked cycle testing is shown in Figure 13-8 and this flowsheet incorporates a stage of flotation cleaning prior to re-grinding to reduce the mass sent to re-grinding. This flowsheet differs from the Filo del Sol flowsheet with the introduction of the cleaner stage prior to re-grinding and all of the rough flotation concentrate is re-ground in the Filo del Sol flowsheet.

Locked cycle test results for the ALS 3 test work program are summarized in Table 13-10.

Figure 13-8: Josemaría Flotation Flowsheet

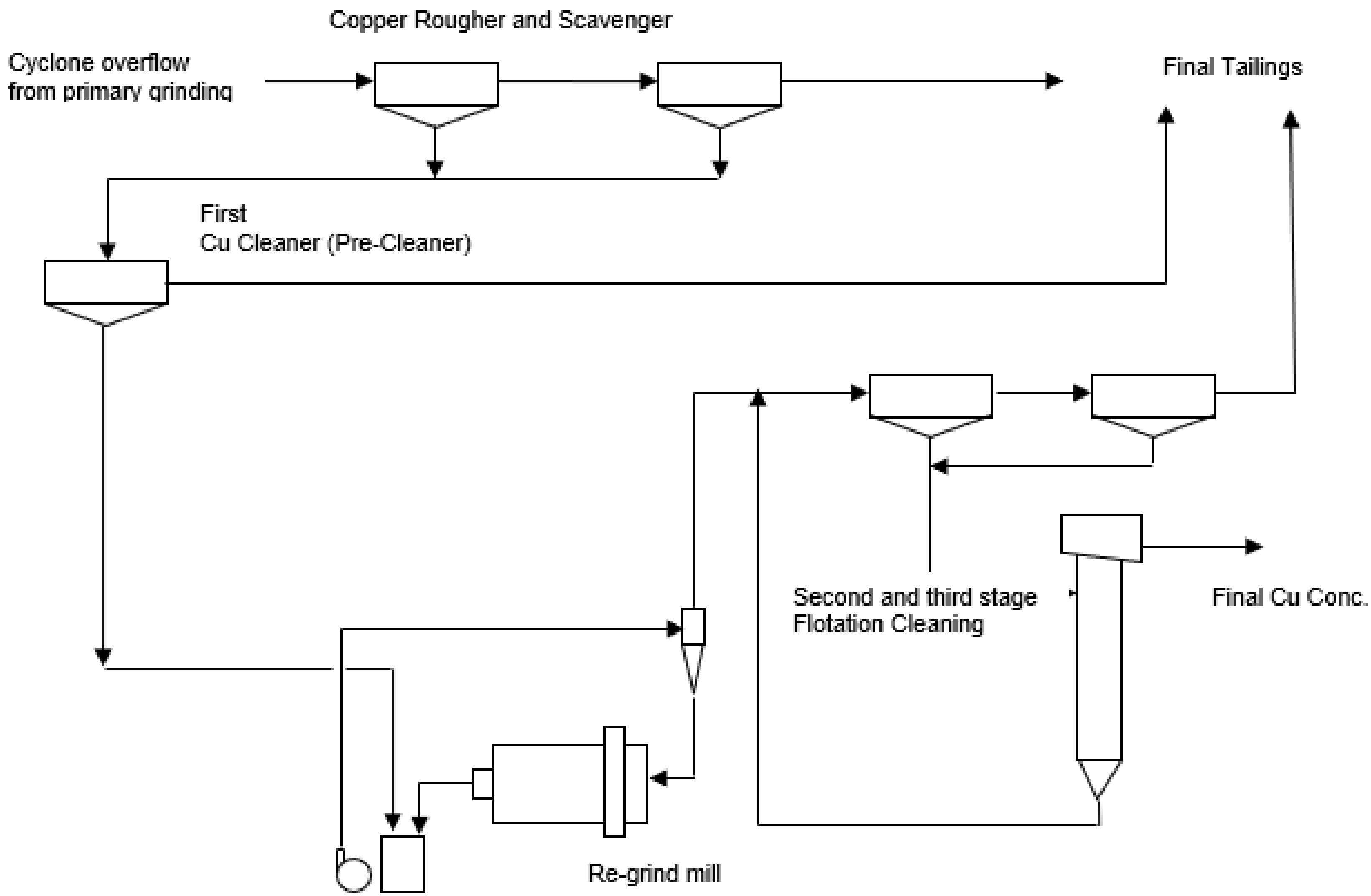


Table 13-10: Summary of Locked Cycle Test Results – Josemaría

Test ID	Sample	Product	Conc Mass	Cu Conc. Assay - percent or g/t						Recovery to Cu Conc.					
				Cu (%)	Fe (%)	Au (g/t)	Ag (g/t)	As (%)	S (%)	Cu (%)	Fe (%)	Au (%)	Ag (%)	As (%)	S (%)
125	301	Cu Con	1.10	24.7	18.9	6.82	28	1.352	33.7	64.8	1.6	16.9	19.6	33.1	1.9
143	302	Cu Con	0.97	23.3	28.5	17.2	39	0.042	36.0	86.7	9.5	70.7	52.1	44.7	24.8
145	303	Cu Con	0.77	26.7	25.5	12.4	56	0.036	34.1	83.3	10.4	65.7	62.5	44.7	36.8
19	304	Cu Con	1.10	23.6	23.5	15.5	35	0.072	31.1	88.5	9.5	55.4	59.6	48.1	13.9
244	305	Cu Con	1.41	19.7	28.8	11.7	30	0.265	38.8	82.1	14.9	53.3	65.6	70.7	16.7
165	306	Cu Con	1.95	35.0	22.0	19.1	63	0.02	32.9	73.1	7.0	67.1	49.2	11.8	51.0
217	307	Cu Con	2.09	18.8	31.2	14.0	30	0.06	39.5	73.9	13.6	52.3	49.2	51.3	24.2
218	308	Cu Con	1.83	24.5	30.1	18.0	64	0.03	38.1	82.7	7.3	61.4	60.4	28.4	23.0
211	309	Cu Con	2.36	32.1	22.5	10.1	64	0.77	34.1	81.2	9.2	50.9	66.6	63.1	13.5
210	310	Cu Con	4.72	21.1	21.2	13.4	38	1.02	32.7	80.4	6.0	38.6	56.2	69.3	7.5
250	311	Cu Con	1.57	21.9	19.3	11.1	62	0.310	34.5	77.1	4.0	37.9	38.8	32.2	5.4
221	312	Cu Con	1.37	22.5	27.4	12.9	34	0.33	38.5	85.0	11.0	56.7	52.2	72.9	14.1
233	313	Cu Con	2.05	23.5	23.0	8.95	29	0.43	36.2	72.8	5.5	39.2	59.4	50.4	7.5
236	314	Cu Con	1.69	12.8	27.0	4.42	17	0.46	36.7	60.4	6.9	29.9	32.9	49.7	7.7
237	315	Cu Con	1.80	29.3	23.8	12.1	58	0.284	36.3	77.4	7.2	54.7	64.8	62.8	9.9
147	316	Cu Con	2.31	24.9	25.1	9.75	49	0.37	32.5	91.4	21.1	61.1	51.6	79.4	21.6
224	317	Cu Con	1.23	22.2	25.0	11.8	26	0.61	40.5	86.9	12.4	54.9	53.7	76.4	16.3
209	318	Cu Con	2.07	26.1	20.7	12.1	44	0.55	35.4	78.0	3.7	46.5	53.9	62.6	5.4
226	319	Cu Con	3.08	26.1	19.0	10.2	66	1.32	34.6	52.6	3.3	26.2	30.1	41.6	4.7
258	320	Cu Con	10.31	29.7	23.4	-	51	0.02	36.2	75.0	8.2	-	14.8	23.7	26.1
196	321	Cu Con	0.76	29.7	25.4	15.0	59	0.089	31.9	59.7	5.2	44.8	56.7	31.0	17.8
156	322	Cu Con	2.72	17.3	31.5	13.8	28	0.07	39.5	83.6	18.0	67.6	58.2	73.2	46.2
219	323	Cu Con	0.79	23.9	28.4	11.1	30	0.019	36.5	70.4	3.3	49.2	50.0	6.3	8.7

Test ID	Sample	Product	Conc Mass	Cu Conc. Assay - percent or g/t						Recovery to Cu Conc.					
				Cu (%)	Fe (%)	Au (g/t)	Ag (g/t)	As (%)	S (%)	Cu (%)	Fe (%)	Au (%)	Ag (%)	As (%)	S (%)
252	324	Cu Con	1.09	22.7	24.8	15.9	287	0.085	35.1	78.8	9.5	61.7	88.6	50.2	46.2
212	325	Cu Con	3.31	30.6	28.2	18.0	67	0.023	33.7	83.2	10.1	61.9	58.6	37.5	54.7
253	326	Cu Con	1.21	25.0	29.8	12.4	54	0.66	38.5	81.0	14.9	59.0	83.1	83.7	41.7
230	327	Cu Con	1.02	38.1	23.4	25.1		0.014	31.8	72.4	4.5	61.6	50.9	18.8	62.6

The post-regrind section of the cleaning circuit introduced additional losses ranging from 4.8% (porphyry) to 6.9% (supergene).

When combining the rougher and pre-cleaner stages prior to regrinding (and excluding losses associated with the ASCu fraction), the supergene material showed the best copper recovery potential, at 96.1%, while rhyolite, porphyry, and tonalite displayed recoveries of 93.2%, 92.3% and 91.4% respectively.

For gold, supergene samples performed well at 78% recovery, while porphyry, rhyolite and tonalite had recoveries of 74.3%, 68.8% and 68.2% respectively.

The test work data indicated a tendency for incremental non-ASCu recovery as the non-ASCu feed grade increased, with most of the variability in recovery aligned with the variations in ASCu contribution to CuT.

The Josemaría test samples cover all of the significant mineralization types associated with the Josemaría deposit, which is well understood at the time of this Technical Report. No major source of deleterious elements are present within the Josemaría deposit other than some varying level of arsenic, which is believed to be manageable within traditional concentrate marketing and production planning activities.

13.3.3 Copper Recoveries from Test Work

Most of the samples tested in SGS 2 and ALS 1 were widely dispersed and likely represent the bulk of the deposit. The samples in ALS 2 were generally from the initial five years of plant feed, near the oxide and at the supergene–hypogene boundary and hence were notably higher in Acid-soluble copper (ASCu) than the previous programs. The ASCu contents of the composites from ALS 3 are more varied than previous programs.

Optimization test work was conducted within the ALS 2 program to better understand the expected copper recovery over a range of primary grind sizes using locked cycle tests.

The porphyry, rhyolite and tonalite lithologies are considered grind sensitive to varying degrees in the range of analysis from K_{80} 130 µm to 180 µm. Tonalite is the most grind-sensitive of the three lithologies and appears to have higher copper losses at coarse grinds.

Cleaner circuit losses are typically about 5% of the overall copper contained in the feed samples, independent of lithology. This is higher than most copper projects, owing to a fraction of the copper mineralization occurring as very fine-grained sulphide inclusions in silicates, and not liberated even at the P_{80} of 25 µm to 30 µm re-grind sizes.

In early 2024, the primary grind size target was reassessed based on the additional comminution test work and data analysis conducted in 2023–2024, and throughput capacity of the grinding mills (SAG and ball mills) that have been purchased for the project and grind-recovery test-work results. Based on that assessment a new primary grind size target of P_{80} 130 µm was selected for the process plant design criteria.

13.3.4 Gold Recoveries From Test Work

Review of the gold recovery found that the rougher tailings were similar between SGS and the three ALS programs, and the difference was mostly in the cleaner losses.

To better determine the nature of gold losses, a series of diagnostic leach tests were conducted during the ALS 2 program. The testing found that, on average, 85% of the gold in the cleaner tailings was cyanide soluble with only a small percentage lost to the gangue.

Mineralogical examination of the gold losses in the cleaner tails of the pilot plant sample's locked cycle test and the actual pilot plant cleaner tailings found limited gold grains.

The conclusion of those examinations is that there was less liberated gold in the pilot plant tail sample than the laboratory tail sample. This suggests that the main difference in recovery (10% difference between the locked cycle test and pilot plant) is likely due to a better liberation of gold grains in the pilot plant than for the locked cycle test, even at similar overall P_{80} target grinds.

13.3.5 Concentrate Grade From Test Work

Regrinding intensity was found to be an important variable for optimizing copper concentrate grade. The general observation was that any time concentrate grade was an issue, finer re-grind product sizes had a beneficial impact. Changes to other variables such as pH, collector dosage or flotation time seldom had a similar impact on the concentrate grade.

The test work results indicate that the appropriate regrind product size targets for consistently achieving minimum saleable concentrate quality are in the range of K_{80} 20 µm to 25 µm.

A series of additional locked cycle tests were completed during the ALS 3 program to evaluate the benefits of regrinding the material to a finer size than originally considered for the cleaning flotation circuit. Using a selection of composites from the ALS-3 program, 17 locked cycle tests were completed while targeting a "fine" regrind P_{80} target of 15 µm, instead of the original "coarse" target of 30 µm, with all other parameters unchanged.

The finer regrind target provides an opportunity to increase the final concentrate grade in the order of 9% on an absolute basis (34% relative). This large grade increment would come at the expense of copper recovery (-1.9% absolute) but would carry the benefit of improved gold recovery (4.8% absolute).

A conceptual financial analysis of the finer regrind scenario indicated that the reduced costs associated with transport and smelting, plus a small increase in post-net smelter return revenues, were largely offset by higher capital and operating costs associated with a finer regrind target. The regrind target used as a design criterion was therefore left at 30 µm.

13.3.6 Concentrate Quality From Test Work

Test work indicated that a clean, globally marketable copper concentrate could be produced. The only element which could be problematic at times is arsenic, although levels are not expected to exceed the 0.5% As Chinese rejection limit for most concentrate shipments.

Concentrate quality is expected to be above minimum copper threshold levels for smelters. Due to the variable proportion of secondary copper mineralization, the copper grade of the concentrate will vary. The concentrate is expected to assay 10 g/t to 15 g/t Au and 50 g/t to 80 g/t Ag. Arsenic content will be highest in concentrate produced from rhyolite ore, and some of the potential smelter penalties can be mitigated through ore and/or concentrate blending strategies.

13.4 Metallurgical Recoveries

13.4.1 Filo del Sol Deposit

Metallurgical recovery data for the Filo del Sol project can be estimated from the flotation test results seen in the Base Met Labs test work program. Average copper recovery for all samples in this program was 85.3% to an average copper concentrate of 26.6% copper. This represents widely dispersed samples from several lithologies within the Filo Del Sol deposit and further sampling and testing is recommended before modelling recovery data to metallurgical inputs. Gold and silver recoveries averaged 61.9% and 61.7%, respectively.

13.4.2 Josemaría Deposit

13.4.2.1 Copper Recovery

Locked cycle tests in the ALS 3 program, produced a range of copper recoveries from 60.4% to 91.4%. The testing indicated that copper recovery correlates with sulphide copper head grade (CuS), defined as total copper (CuT) minus the ASCu content.

A copper recovery equation was developed as follows:

Eq 1: Cu Rec = 1.009 * (89.4 * (1- exp(-19.6 * (CuS)))+1) * (1 – %ASCu)

13.4.2.2 Gold Recovery

Gold recoveries in the ALS 3 program ranged from 29.9% to 67.6%. Gold recovery did not correlate well with gold head grade. Instead, a multi-variable regression approach was introduced, which considered head grade, the ratio of sulphur to total copper and the ratio of gold to sulphur, and yielded the best recovery predictive outcome.

The resulting equation is:

Eq. 2. Au Rec = 1.008 * (63.56 + 0.8 – 15.056 * (Au/S feed) + 35.924 * Au feed - 0.6315 * (S/CuS)).

13.4.2.3 Silver Recovery

Silver recoveries in the ALS 3 program ranged from 32.9% to 88.6%. There is no discernable correlation between silver head grade and silver recovery. The best correlation is shown between the silver recovery and the sulphur to total copper ratio, as shown by the following equation:

Eq. 3. Rec (Ag to Cu conc) = 67.52 – 0.906 * (S/CuT in feed).

13.4.2.4 Concentrate Grade

The ALS 3 program produced a range of copper concentrate grade of 21.1% to 38.1%.

The final concentrate copper grade, based on a regrind product P_{80} of 25 µm to 30 µm, and is correlated with the sulphur to total copper ratio in the mill feed.

The equation used to forecast the copper grade in the copper concentrate is:

Eq. 4. Copper Concentrate Cu Grade = 32.836 / [S / (ASCu)]^0.104.

A trade-off assessment of the potential benefits of a finer regrind target (15 µm) provided sufficient data points to indicate that a finer regrind target would shift the copper concentrate grade approximately 32% higher. As the selected regrind mills will have more than adequate power to achieve the current P_{80} target of 30 µm, it is likely that concentrate grade can be pushed beyond the values predicted by the equation by obtaining finer grinds than currently modelled.

13.5 Deleterious Elements

Arsenic content reporting to the Filo del Sol and Josemaría copper concentrate is considered as a potential penalty element at times. Some of the smelter penalties may be mitigated through mineralization and/or concentrate blending strategies.

14.0 Mineral Resource Estimates

14.1 Filo del Sol

14.1.1 Summary

This sub-section discloses the Mineral Resources for the Filo del Sol deposit reported using the CIM (2014) definitions. The constraining wireframes were created by SLR with input and assistance from Filo Corp. and (now) Vicuña Corp. geology personnel. The estimation of the variables was completed by Mr. Matt Batty, P.Geo., of Understood Mineral Resources Ltd., with regular meetings with Vicuña Corp. and SLR resource geologists. The QP responsible for the Mineral Resource estimates is Mr. Luke Evans, M.Sc., P.Eng., Global Technical Director, Geology Group Leader for SLR. Mr. Evans and SLR Principal Resource Geologist, Mr. Benjamin Sanfurgo, completed a detailed review of the resource block model.

The estimate effective date is April 15, 2025. The Mineral Resource estimates were prepared using interpreted geological wireframes for the Filo del Sol deposit.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate that are not discussed in this Report.

14.1.2 Resource Database

The drill holes used to support Mineral Resource estimation were provided in Table 10-4. The Mineral Resource estimate is supported by 204 core drill holes (152,995.2 m), and 196 RC drill holes (47,491 m). The drill hole cut-off date is April 9, 2025, and the last drill hole completed on the Filo del Sol deposit was FSDH146.

An export of the acQuire database, Leapfrog Geo wireframes, from Seequent Central, and a CSV-format block model were provided for review and validation.

14.1.3 Geological Interpretation and Domain Definition

Four geological models were interpreted by the Vicuña Corp. team and its consultants. Lithology, alteration, mineralization, and silver high-grade volumes were developed using Seequent's Leapfrog Geo software, based on logged codes, sectional interpretation, and assay results. Logged codes were simplified and grouped into the main geological units of interest. A total of 10 lithological units, five alteration units, seven mineralization units, and four high-grade silver units were modelled. The final estimation domains for copper, gold, silver, and arsenic are based on the various models together with assay grade distribution analysis, contact analysis, and relative proportions of CuAS, CuCN, and residual copper (CuRes) values.

The copper supergene domains were defined by the leach zone (CuLix), copper oxide zone (CuOx), and siliceous wireframes from the mineralization model. The copper hypogene domains were delineated based on lithological and alteration characteristics. The primary hydrothermal breccia (BXG) lithology unit was combined with the contemporaneously formed porphyry units (PD1 and PD2), and the resulting volume was sub-divided into alteration types, including quartz–alunite–clay alteration (BXG-QAC), phyllic alteration (BXG-PHY), and propylitic alteration (BXG-PRO).

The lithology domains of the micro-diorite dyke (MDD), micro-diorite sill (MDS), late-stage porphyry (PDB3), and the clast-dominated breccia of the primary hydrothermal breccia (BXG) and micro-diorite sill (BXB) define other copper estimation domains in the mineralized corridor of the hypogene zone. Rock mass located at the periphery or outside the mineralized corridor was grouped into a single domain termed "background" (BAKG), primarily comprising granite (GRN), rhyolite (RYO), volcaniclastic units (RCV), and other porphyry phases (PDA and PDB).

Estimation domains were based on a combination of alteration and lithology. The arsenic estimation domain was based on the mineralization zone. The silver estimation domain included the high-grade silver mineralized domain and the other domains.

Gold estimation domains mirror those used for copper to preserve the cross-correlation between these two metals. Silver domains also align with copper domains, with the inclusion of four additional high-grade silver domains. Arsenic domains, however, are delineated independently, based on the broader mineralization model.

Estimation domains are summarized in Table 14-1.

Table 14-1: Filo del Sol Estimation Domains

Estimation Domain	Cu (%)	Cu Ratio (AS-CN-Res)	Au (g/t)	Ag (g/t)	As (ppm)
Supergene					
CULIX	0.04	39-37-24	0.13	2.0	208
CUOX	0.34	66-25-09	0.27	2.4	700
SILIC	0.05	43-30-27	0.34	5.3	357
Hypogene					
BXB	0.40	12-65-23	0.40	3.2	N/A
BXG_QAC	0.66	09-75-16	0.43	5.2	N/A
BXG_PHY	0.49	09-54-37	0.19	1.9	N/A
BXG_POT	0.42	07-33-60	0.26	1.6	N/A
MDD	0.32	09-45-46	0.12	1.5	N/A
MDS	0.20	08-24-68	0.19	1.2	N/A
PDB3	0.36	08-45-47	0.20	2.3	N/A
BAKG	0.24	12-53-35	0.11	2.5	N/A
AG-HG N	N/A	N/A	N/A	66	N/A
AG-HG S	N/A	N/A	N/A	86	N/A
AG-HG FA	N/A	N/A	N/A	47	N/A
AG-HG FB	N/A	N/A	N/A	21	N/A
HYPO 1	N/A	N/A	N/A	N/A	1772
HYPO 2	N/A	N/A	N/A	N/A	438
HYPO 3	N/A	N/A	N/A	N/A	126
HYPO 4	N/A	N/A	N/A	N/A	64

Note: N/A = not applicable. AS = acid-soluble copper; CN = cyanide-soluble copper; Res = residual copper. AG-HG N = flat-lying silver high-grade domain near the supergene–hypogene contact; AG-HG S= flat-lying silver high-grade domain near the supergene–hypogene contact; AG-HG FA = near-vertical silver high-grade domain in the hypogene; AG-HG FB = near vertical silver high-grade domain in the hypogene.

14.1.4 Exploratory Data Analysis

Assay statistics and contact plots for copper, gold, silver, arsenic, iron, and sulphur assay data were examined within each geological model.

The drill hole database for the mineralized domains consists of 92,230 raw assay values for gold, copper, and silver. The assay values reported below detection limit were assigned half the detection limit for statistical analysis and grade estimation. Any missing values were assigned half the detection limit.

Boundary analysis was completed for copper, gold, silver, and arsenic.

In the supergene zone, copper exhibits a soft boundary between the CuLix and siliceous units, while a hard boundary is observed at the CuOx domain. Within the hypogene zone, the MDD and PDB3 domains are characterized by hard boundaries, whereas all other domains display soft boundaries. A hard boundary is present between the supergene and hypogene zones.

Gold follows the same boundary definitions as copper, with the exception that the supergene domains have soft boundaries. Silver adheres to the same boundary definitions as gold, but the silver-specific high-grade domains are defined by hard boundaries.

For arsenic, all boundaries are soft, except at the interface between the supergene and hypogene zones, where a hard boundary is defined.

14.1.5 Treatment of High-Grade Assays

Assays were examined in histograms and probability plots to determine levels at which values were considered to be outliers to the general population. The applied capping levels are summarized in Table 14-2.

Table 14-2: Copper, Gold, Silver, and Arsenic Capping Levels

Estimation Domain	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)
Supergene				
CULIX	1.25	4.50	50	5,000
CUOX	7.00	5.00	40	No Cap
SILIC	No cap	3.00	No cap	No cap
Hypogene				
BXB	No cap	7.00	70	N/A
BXG_QAC	6.00	6.00	100	N/A
BXG_PHY	No cap	1.50	20	N/A
BXG_POT	1.50	3.00	15	N/A
MDD	3.00	1.50	65	N/A
MDS	No cap	0.80	10	N/A
PDB3	1.25	No cap	23	N/A
BAKG	2.00	No cap	No cap	N/A
AG-HG N	N/A	N/A	1,000	N/A
AG-HG S	N/A	N/A	950	N/A

Estimation Domain	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)
AG-HG FA	N/A	N/A	750	N/A
AG-HG FB	N/A	N/A	300	N/A
HYPO 1	N/A	N/A	N/A	No cap
HYPO 2	N/A	N/A	N/A	No cap
HYPO 3	N/A	N/A	N/A	3,000
HYPO 4	N/A	N/A	N/A	2,000

In addition to capping, a high yield limit function was used during estimation to restrict the influence of samples above various grade threshold or specific samples in areas of sparse drilling.

14.1.6 Compositing

The assays were composited to a constant length of 8 m, top to bottom, from the collar to the end of the drill hole. This composite length was selected based on the assumed 15 m bench height.

14.1.7 Trend Analysis and Variography

Spatial continuity of composite data was analyzed using Maptek Vulcan software. Variogram models were fitted for each metal in each group of estimation domains.

Directions of continuity were determined from variogram maps. The nugget effect contribution was derived from downhole experimental variograms followed by final model fitting on directional variogram plots.

The variogram models were used to inform the ordinary kriging (OK) estimation technique for each variable and the associated search ranges.

14.1.8 Search Strategy and Grade Interpolation Parameters

A whole block approach was used for block coding whereby a block was assigned a numerical code based if the block centroid was located within the domain. The estimation domain code was used to control all interpolation passes and the implementation of hard or soft boundaries. Nearest neighbour (NN) interpolation was also run for validation purposes.

All grades were estimated by OK in either two or three passes. This included copper, gold, silver, arsenic, iron, and sulphur. Search pass one approximated the variogram range or, in some cases, the effective range of the variogram. Search passes two and three were double the variogram range, but there were some search ranges larger for this for a few, lesser informed domains with less economic impact. Search pass three did not impose a limit on samples per drill hole. A high-yield restriction was applied to control extreme values and outliers.

Interpolation parameters for the main economic metals are summarized in Table 14-3 to Table 14-6.

Table 14-3: Copper Interpolation Parameters

Domain	Rotation (°)	Search 1 (m)	Searches 2 & 3 (m)	Min/Max Composites*	Max per Drill Hole **	High Yield Threshold ***
CULIX	018/-02/00	450/400/160	900/800/320	3–7	2	0.4% Cu
CUOX	018/-02/00	128/92/140	384/276/420	3–7	2	3.0% Cu
SILIC	018/-02/00	450/400/160	900/800/320	3–7	2	0.4% Cu
BXB	018/-10/90	230/210/100	690/630/300	3–7	2	N/A
BXG_PHY	018/-10/90	230/210/100	690/630/300	3–7	2	1.0% Cu
BXG_POT	018/-10/90	230/210/100	690/630/300	3–7	2	1.0% Cu
BXG_QAC	018/-10/90	230/210/100	690/630/300	3–7	2	3.0% Cu
BAKG	018/-10/90	290/169/60	580/338/120	3–7	2	1.5% Cu
MDD	023/00/90	105/120/101	315/360/303	3–7	2	N/A
MDS	035/00/00	375/350/230	750/700/460	3–7	2	0.95% Cu
PDB3	020/00/-80	500/450/80	1,000/900/160	3–7	2	1.0% Cu

Notes: N/A = not applicable
* Runs 2 & 3 use 4–10 composites per estimate.
** Run 2 uses a maximum of 3 composites, run 3 removes the maximum per drill hole restriction.
*** High-yield limit ranges are 50% of search range 1.

Table 14-4: Gold Interpolation Parameters

Domain	Rotation (°)	Search 1 (m)	Searches 2 & 3 (m)	Min/Max Composites*	Max per Drill Hole **	High Yield Threshold ***
CULIX	018/-02/00	100/70/60	400/280/240	3–7	2	2.0 g/t Au
CUOX	018/-02/00	100/70/60	300/210/180	3–7	2	2.5 g/t Au
SILIC	018/-02/00	100/70/60	400/280/240	3–7	2	N/A
BXB	018/-10/90	225/195/70	675/585/210	3–7	2	1.5 g/t Au
BXG_PHY	018/-10/90	225/195/70	675/585/210	3–7	2	1.0 g/t Au
BXG_POT	018/-10/90	225/195/70	675/585/210	3–7	2	1.0 g/t Au
BXG_QAC	018/-10/90	225/195/70	675/585/210	3–7	2	3.0 g/t Au
BAKG	018/-10/90	300/60/60	600/180/180	3–7	2	1.0 g/t Au
MDD	023/00/90	105/120/101	315/360/303	3–7	2	0.4 g/t Au
MDS	035/00/00	375/350/230	750/700/460	3–7	2	1.0 g/t Au
PDB3	020/00/-80	500/300/80	1000/600/160	3–7	2	0.8 g/t Au

Notes: N/A = not applicable
* Runs 2 & 3 use 4–10 composites per estimate.
** Run 2 uses a maximum of 3 composites, run 3 removes the maximum per drill hole restriction.
*** High-yield limit ranges are 50% of search range 1.

Table 14-5: Silver Interpolation Parameters

Domain	Rotation (°)	Search 1 (m)	Searches 2 & 3 (m)	Min/Max Composites*	Max per Drill Hole **	High Yield Threshold ***
CULIX	018/-02/00	270/365/175	540/730/350	3–7	2	20 g/t Ag
CUOX	018/-02/00	270/365/175	540/730/350	3–7	2	20 g/t Ag
SILIC	018/-02/00	270/365/175	540/730/350	3–7	2	N/A
BXB	018/-10/90	110/120/75	330/360/225	3–7	2	35 g/t Ag
BXG_PHY	018/-10/90	110/120/75	330/360/225	3–7	2	10 g/t Ag
BXG_POT	018/-10/90	110/120/75	330/360/225	3–7	2	8 g/t Ag
BXG_QAC	018/-10/90	110/120/75	330/360/225	3–7	2	50 g/t Ag
BAKG	018/-10/90	110/120/75	330/360/225	3–7	2	30 g/t Ag
MDD	023/00/90	105/120/101	315/360/303	3–7	2	6 g/t Ag
MDS	035/00/00	375/350/230	750/700/460	3–7	2	8 g/t Ag
PDB3	020/00/-80	200/275/80	600/825/240	3–7	2	15 g/t Ag
HG N	012/-08/00	120/100/63	360/300/189	3–7	2	500 g/t Ag
HG S	012/-08/00	120/100/63	360/300/189	3–7	2	800 g/t Ag
HG FA	08/00/-80	90/50/75	270/150/225	3–7	2	400 g/t Ag
HF FB	08/00/-80	90/50/75	270/150/225	3–7	2	140 g/t Ag

Notes: N/A = not applicable
* Runs 2 & 3 use 4–10 composites per estimate.
** Run 2 uses maximum of 3 composites, run 3 removes the maximum per drill hole restriction.
*** High-yield limit ranges are 50% of search range 1.

Table 14-6: Arsenic Interpolation Parameters

Domain	Rotation (°)	Search 1 (m)	Searches 2 & 3 (m)	Min/Max Composites*	Max per Drill Hole **	High Yield Threshold ***
CUOX	018/-02/00	500/500/60	1000/1000/120	3–7	2	2,000 ppm As
CULIX	018/-02/00	250/85/120	500/170/240	3–7	2	6,000 ppm As
SILIC	018/-02/00	500/500/60	1000/1000/120	3–7	2	2,000 ppm As
HYPO1	018/-10/90	110/85/70	330/255/210	3–7	2	N/A
HYPO2	018/-10/90	150/60/85	450/180/255	3–7	2	3,000 ppm As
HYPO3	018/-10/90	275/57/60	825/171/180	3–7	2	1,250 ppm As
HYPO4	018/-10/90	130/50/30	650/250/150	3–7	2	800 ppm As

Notes: N/A = not applicable
* Runs 2 & 3 use 4–10 composites per estimate.
** Run 2 uses maximum of 3 composites, run 3 removes the maximum per drill hole restriction.
*** High-yield limit ranges are 50% of search range 1.

14.1.9 Bulk Density

Density was assigned by estimation domain, with the assignments as summarized in Table 14-7.

Table 14-7: Bulk Density Assignment, Filo del Sol

Estimation Domain	Density (t/m^3)
CULIX	2.50
CUOX	2.38
SILIC	2.27
BXB	2.51
AA*	2.23
BXG_QAC	2.51
BXG_PHY	2.63
BXG_POT	2.59
MDD	2.64
MDS	2.61
PDB3	2.57
BAKG	2.60

Note: *AA is advanced argillic alteration domain. This domain was not used for estimation, but only for density assignment.

14.1.10 Block Model

The block model for the Filo del Sol deposit was set up with a block matrix of 25 m long by 25 m wide by 15 m high and was built in Maptek Vulcan software. The block matrix was defined based on current drill hole spacing and on engineering considerations for an open pit operation and is considered suitable for this purpose. The block model coordinates are based on UTM coordinates in WGS84 datum and is not rotated. The block model is a whole block model where blocks are assigned a specific rock type code. Any block centroid within the mineralized domain wireframe was assigned that code.

14.1.11 Mineral Resource Classification

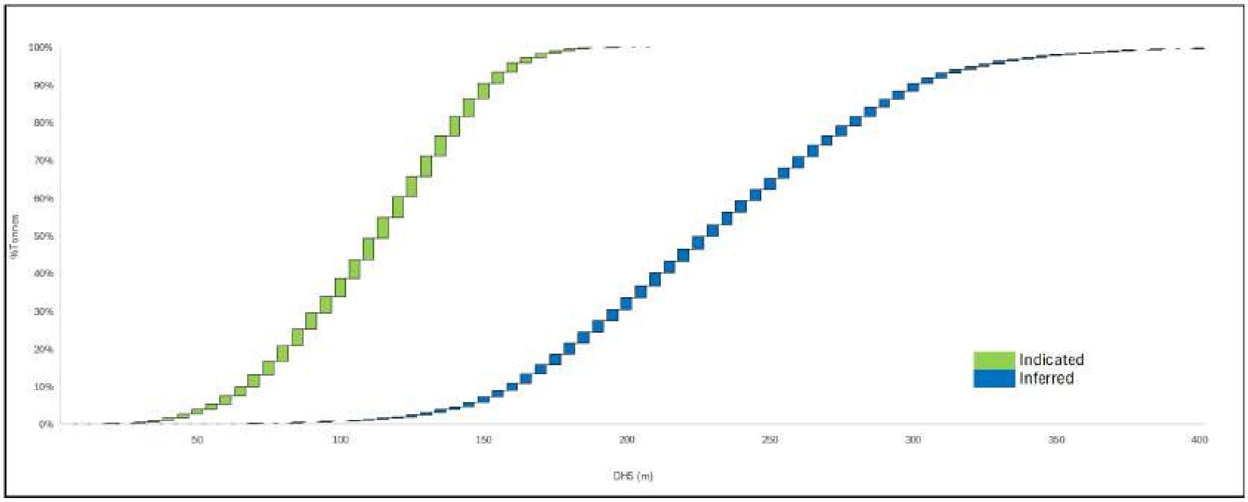
Each block was coded with the drill hole spacings (DHS) and post-processed for smoothing. Blocks within the resulting classification wireframes were checked to ensure that a high proportion of the blocks met the DHS classification criteria. The classification metrics are based on benchmarks from other large-scale porphyries and take into consideration the planned production volumes and the copper omni-directional variogram range.

The classification criteria are based primarily on DHS criteria:

- Measured: No blocks were classified as Measured
- Indicated: up to 150 m spacing (80% copper omni-directional variogram range)
- Inferred: 150 m to 300 m spacing (100% copper omni-directional variogram range)

The classification validation shows that more than 90% of the Indicated blocks are supported by drill hole spacings up to 150 m and approximately 90% of the Inferred blocks are supported by drill hole spacings up to 300 m (Figure 14-1).

Figure 14-1: Filo del Sol Percentage of Tonnes Versus DHS by Classification Category



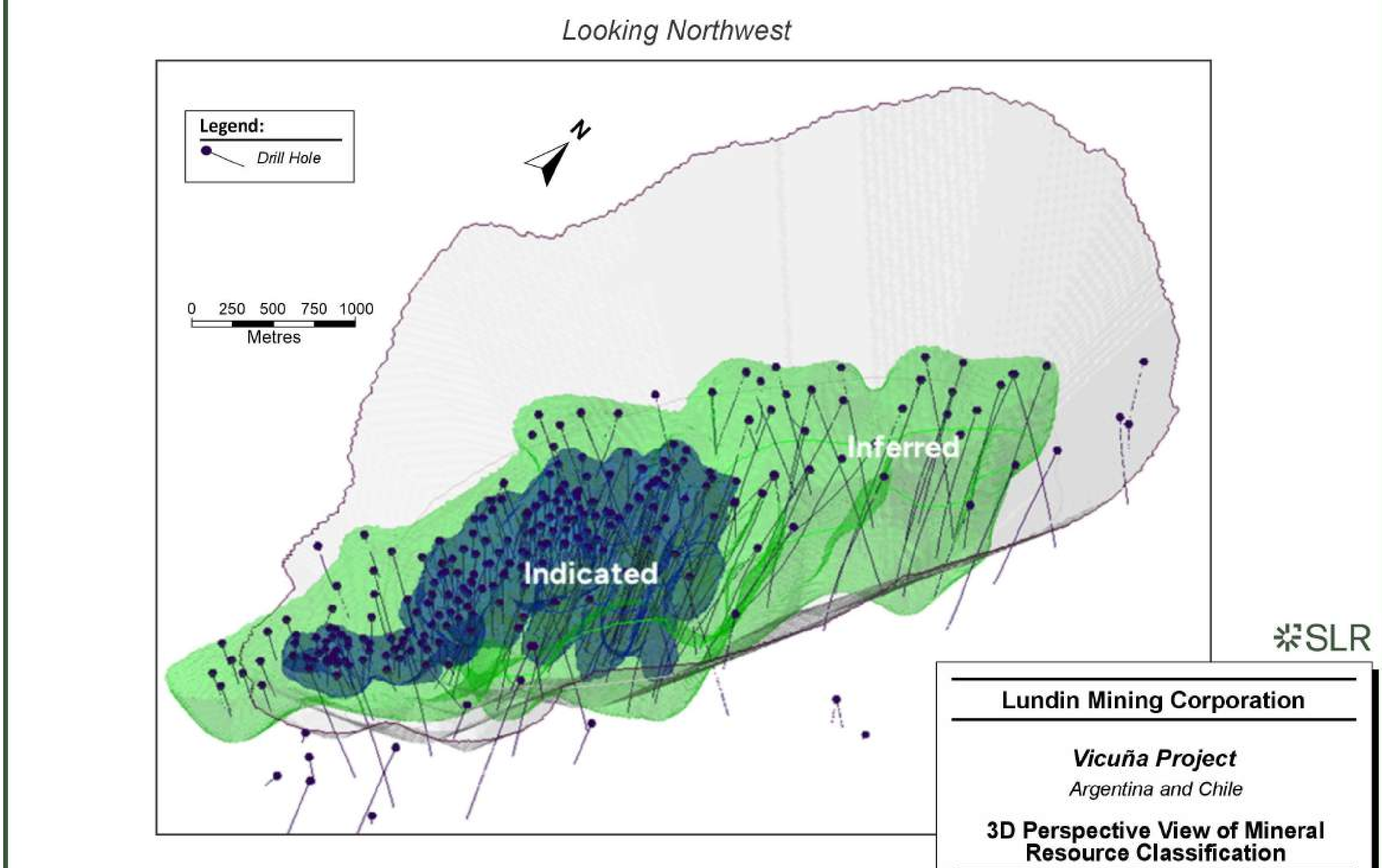
The Mineral Resource shape, drill hole location, and pit shell are shown in a 3D view in Figure 14-2.

In the SLR QP's opinion, this DHS classification is appropriate for Filo del Sol deposit type and it is supported by the omni-directional variography ranges observed. A post-processing classification solid was generated to remove isolated small patches and irregular shapes, yielding more realistic shapes from a mining perspective.

14.1.12 Cut-off Grade and Pit Input Parameters

To demonstrate reasonable prospects for eventual economic extraction, Mineral Resources were reported within an optimized open pit constraining shell which was generated using Deswik software. Pit optimization was based on a cut-off applied to a calculated NSR value incorporating various metallurgical recoveries, smelter terms, refining costs and Lundin Mining's long-term metal prices in addition to a 1.5% royalty cost to gross sales. Pit input parameters are summarized in Table 14-8.

Figure 14-2: 3D Perspective View of Mineral Resource Classification Looking Northwest



Source: SLR 2025.

Table 14-8: Metal Prices and Pit Parameters, Filo del Sol

Parameter	Unit	Gold Oxide			Copper Oxide			Silver Oxide			Sulphide
Min Zone Code		AuOx			CuAuOx			M zone			Hypo1,2,3,4
Destination		Au Bypass			Sequential			Sequential			Plant
Processing option		SX-EW	SART	MC	SX-EW	SART	MC	SX-EW	SART	MC	Concentrator
Slope angle	°	40°			40°			40°			40°
Mining costs											
Base cost	$/t mined	2.08			2.08			2.08			2.08
Rehandling	$/t	0.87			0.87			0.87			0.87
Rehandling/conveying costs	$/t processed	0.45			0.45			0.45			0.15
Processing	$/t processed	11.87			11.87			11.87			4.61
High arsenic	$/t processed	—			—			—			1.30
Additional water cost	$/t processed	—			—			—			2.00
General and Administrative costs											
Variable	$/t processed	2.28			2.28			2.28			1.35
Fixed	$M	68			68			68			135
Sustaining											
Mine	$/t moved	0.34			0.34			0.34			0.34
Tailing & mill	$/t processed	—			—			—			0.98
Leaching	$/t processed	0.99			0.99			0.99			0
Metallurgical recoveries											
CuAS	%	—	0.713	—	0.842	0.029	—	0.842	0.029	—	0
CuRes	%	—	—	—	—	—	—	—	—	—	0.85
CuCN	%	—	0.285	—	—	0.285	—	—	0.285	—	0.88
Gold	%	—	—	0.728	—	—	0.631	—	—	0.631	0.62
Silver	%	—	—	0.631	—	—	0.776	—	—	0.776	0.617
Selling costs (refining costs)											

Parameter	Unit	Gold Oxide			Copper Oxide			Silver Oxide			Sulphide
Copper	$/lb	0.08	0.11	—	0.08	0.11	—	0.08	0.11	—	—
Gold	$/oz	—	—	0.20	—	—	0.20	—	—	0.20	—
Silver	$/oz	—	—	0.20	—	—	0.20	—	—	0.20	—
Treatment charges											
Concentrate treatment charges	$/dmt	—	—	—	—	—	—	—	—	—	65.0
Refining costs											
Copper	$/lb	—	—	—	—	—	—	—	—	—	0.065
Gold	$/oz	—	—	—	—	—	—	—	—	—	5.0
Silver	$/oz	—	—	—	—	—	—	—	—	—	0.46
Concentrate logistics costs											
Transportation	$/wmt	—	—	—	—	—	—	—	—	—	96.24
Transit loss	%	—	—	—	—	—	—	—	—	—	0.30
NSR calculation											
Marginal NSR Cut-Off Value	$/t	10.23			15.59			15.59			10.39
Note: monetary units are US$. SX-EW = solvent extraction and electrowinning; SART = sulphidation–acidification–recycling–thickening; MC = Merrill-Crowe Circuit; CuAS = acid-soluble copper; CuRes = residual copper; CuCN = cyanide-soluble copper											

The NSR calculation includes a revenue deduction, which was applied when determining the gross revenue after accounting for deductions related to a recovered arsenic penalty.

Assumed mining costs include an uphill and downhill adjustment from a base elevation of 5,077.5 MASL.

Processing costs vary depending on the geometallurgical domain.

14.1.13 Block Model Validation

SLR's validation followed industry standard techniques and included:

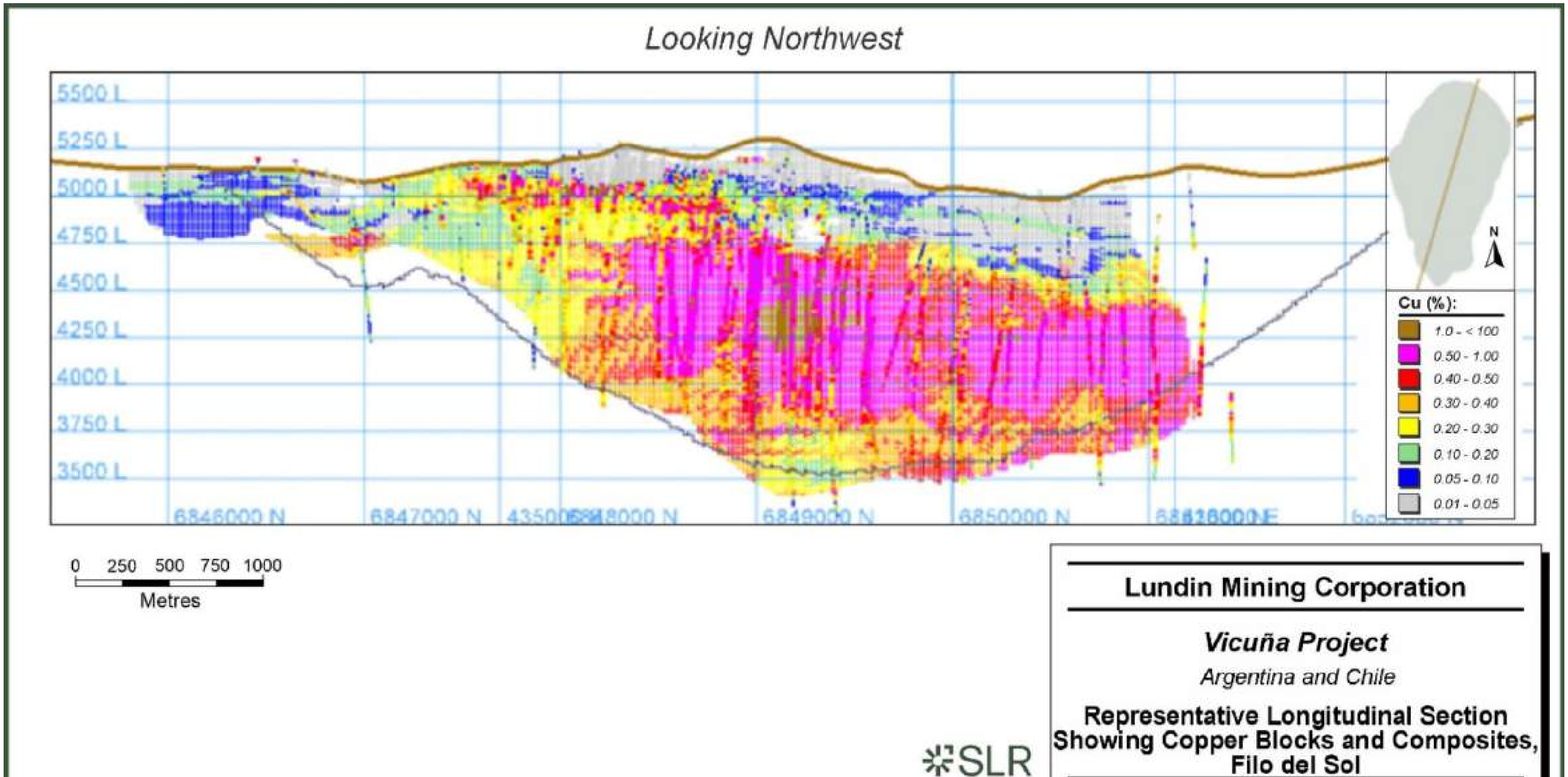
- Visual inspection of cross sections and plan views, viewing 15 m drill hole composites versus block estimates
- Comparison of the OK and NN estimation statistics
- Comparison of the OK and NN block estimates along northing, easting, and elevation directions (swath plots)
- Global statistics compared on a domain-by-domain basis

14.1.13.1 Visual Validation

Estimated grades for all elements were validated visually by comparing composites to block values in plan view and on cross-sections. There was good visual correlation between composite and estimated block grades for all modelled elements. Example longitudinal sections looking to the northwest with copper, gold, silver, and arsenic grades are shown in Figure 14-3 to Figure 14-6, respectively.

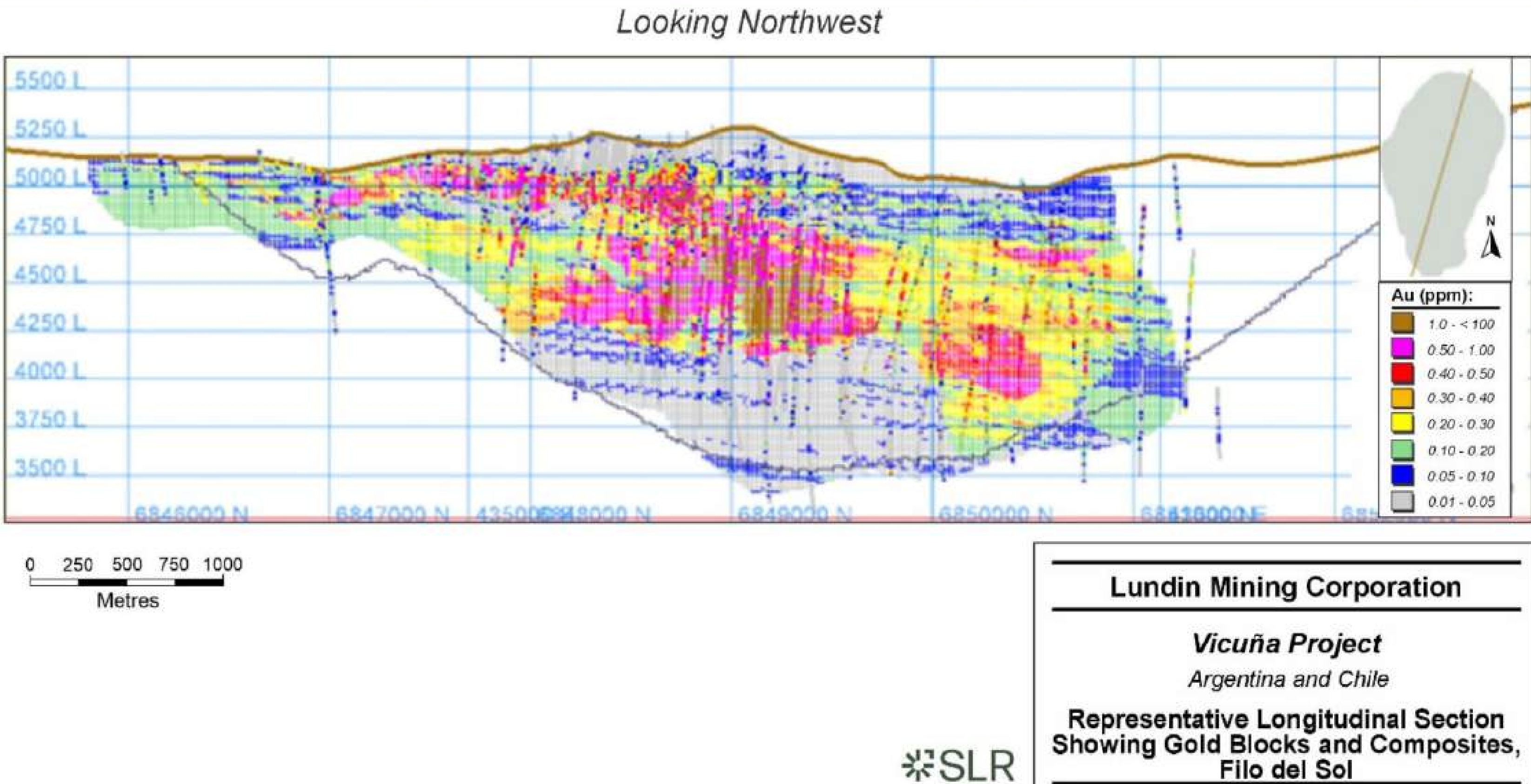
Example cross-sections looking to the northeast and plan views at 4,350 MASL with copper, gold, silver, and arsenic grades are shown in Figure 14-7 and Figure 14-8, respectively. The plan views show the Indicated and Inferred outlines with respect to the resource pit shell.

Figure 14-3: Representative Longitudinal Section Showing Copper Blocks and Composites, Filo del Sol



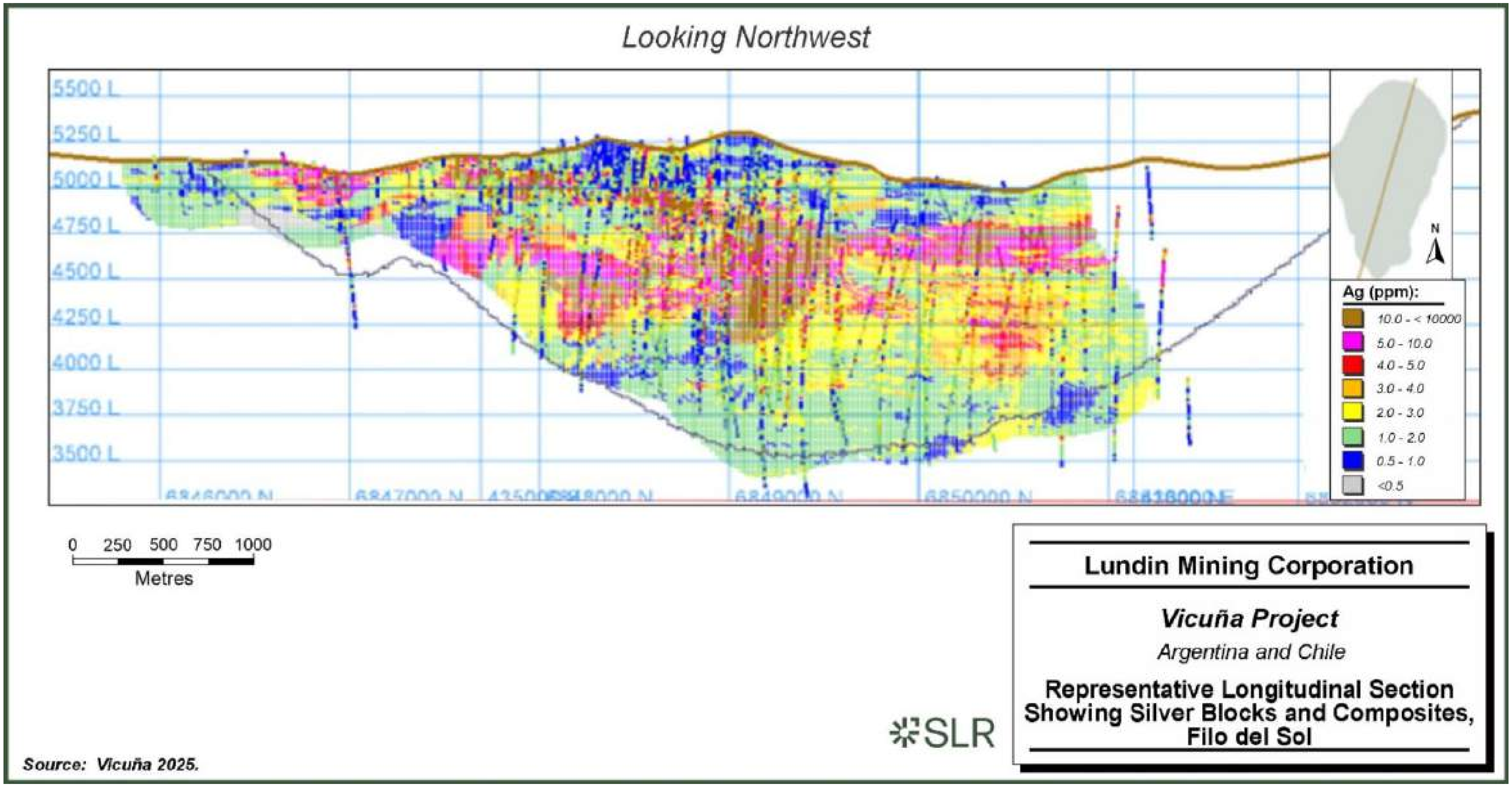
Source: Vicuña 2025.

Figure 14-4: Representative Longitudinal Section Showing Gold Blocks and Composites, Filo del Sol



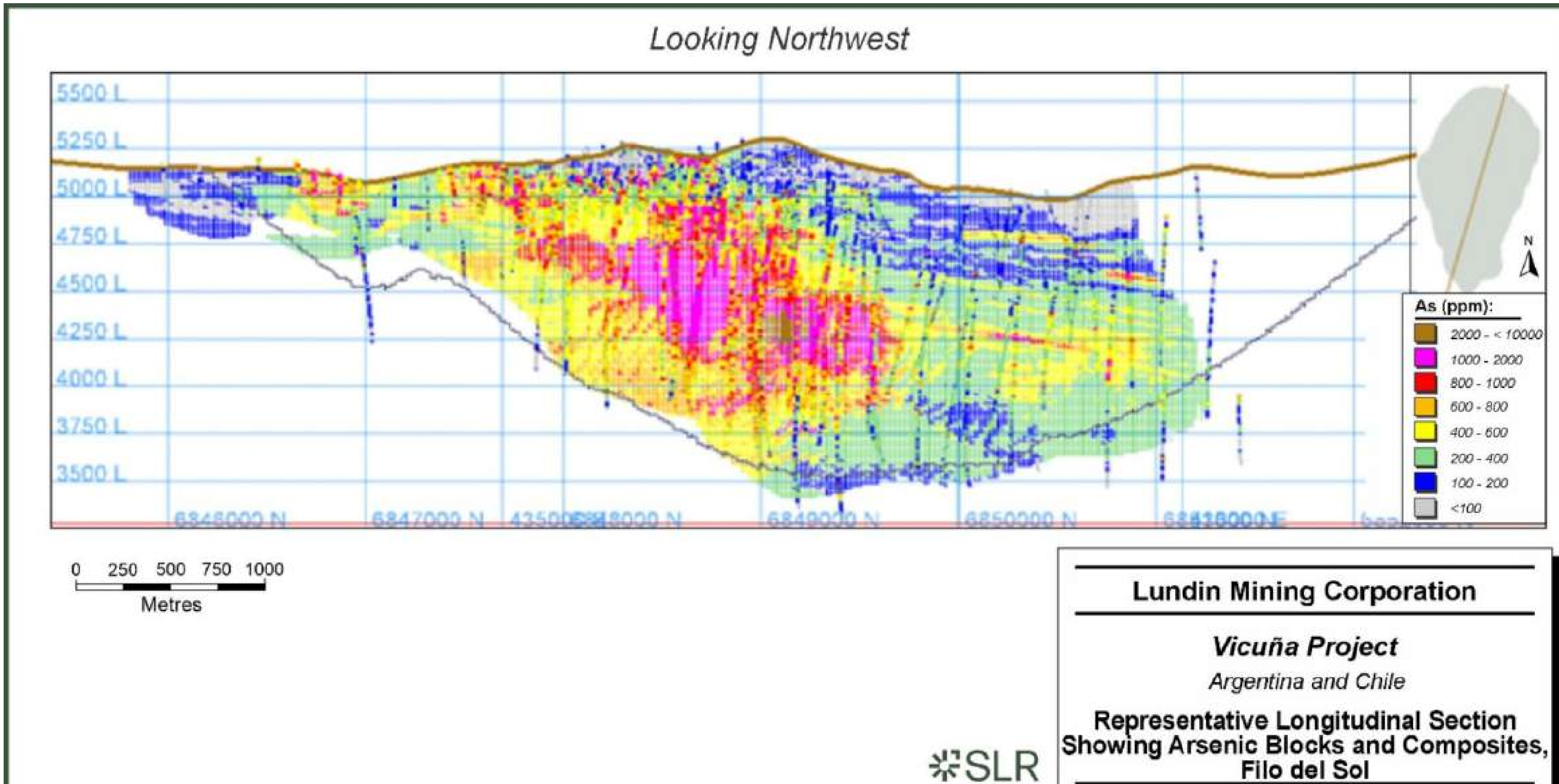
Source: Vicuña 2025.

Figure 14-5: Representative Longitudinal Section Showing Silver Blocks and Composites, Filo del Sol



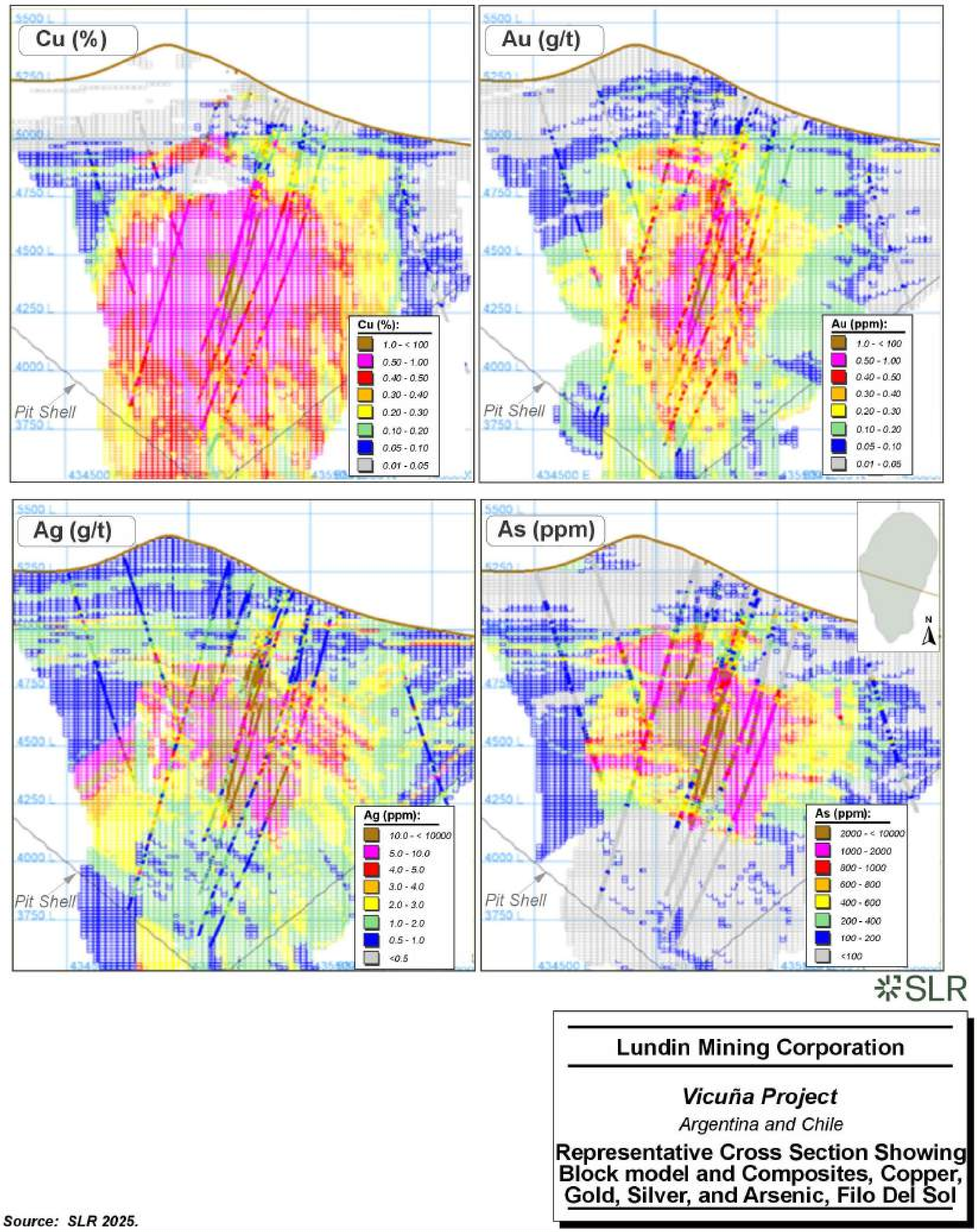
Source: Vicuña 2025.

Figure 14-6: Representative Longitudinal Section Showing Arsenic Blocks and Composites, Filo del Sol



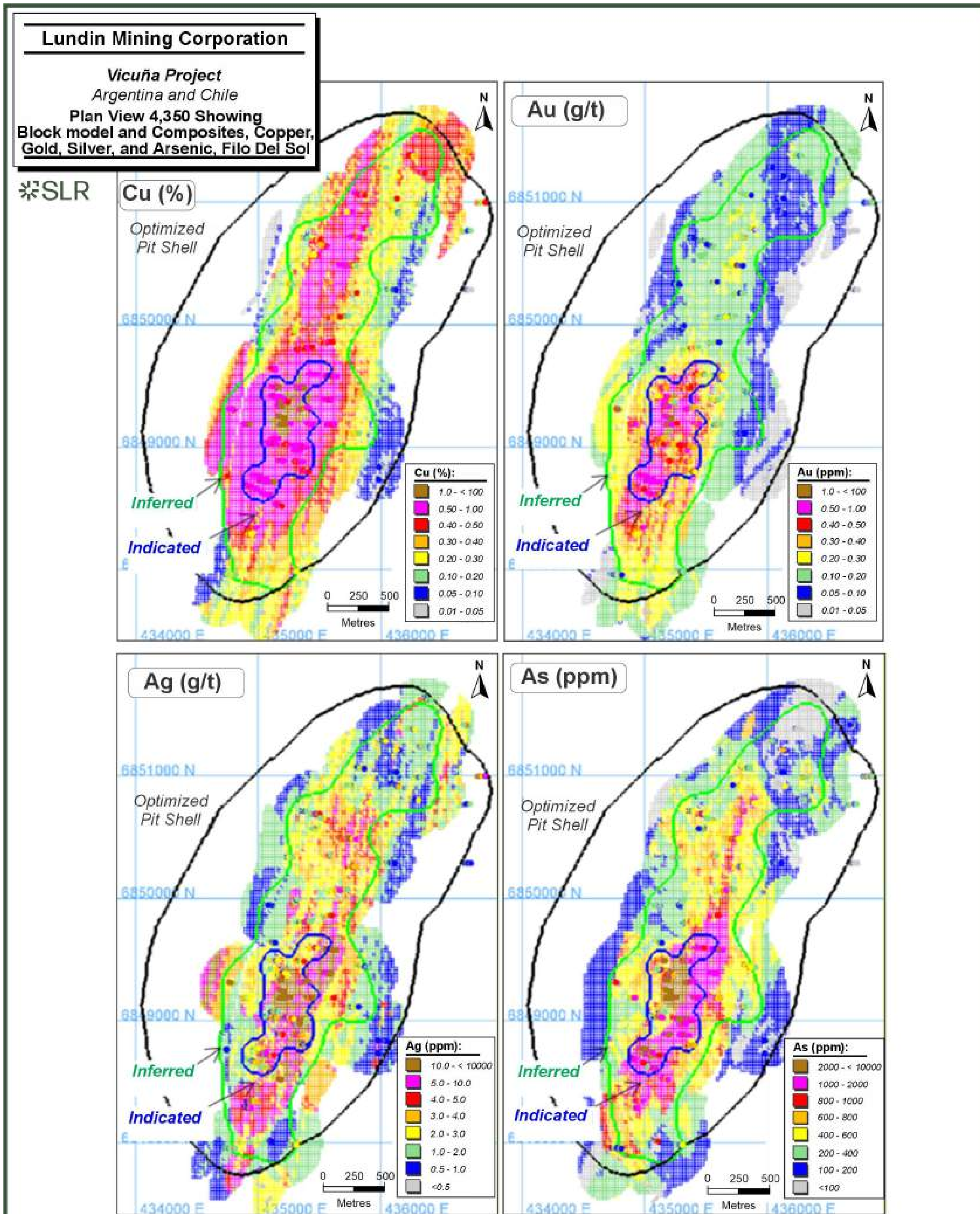
Source: Vicuña 2025.

Figure 14-7: Representative Cross Section Showing Block model and Composites, Copper, Gold, Silver, and Arsenic, Filo del Sol



Source: SLR 2025.

Figure 14-8: Plan View 4,350 Showing Block Model and Composites, Copper, Gold, Silver, and Arsenic, Filo del Sol



Source: SLR 2025.

14.1.13.2 Swath Plots

Swath plots were generated for the main economic metals to compare the NN to OK grades, in elevation, east, and north directions. The swath plots by elevation are shown in Figure 14-9 to Figure 14-12. The NN and OK block model average grades are very similar, indicating no local bias, and minor smoothing.

Figure 14-9: Copper Swath Plot by Elevation: OK and NN Grade Estimation

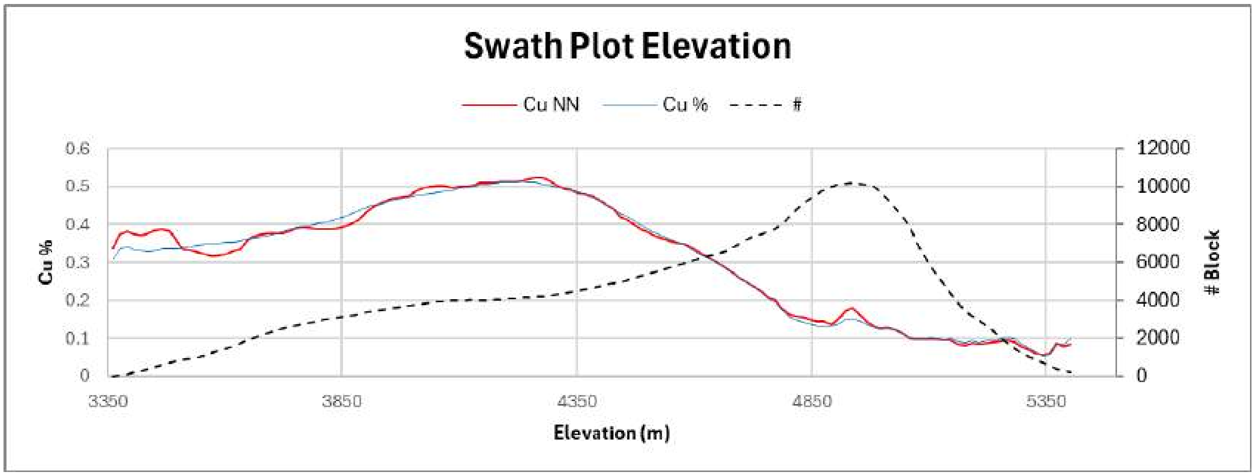


Figure 14-10: Gold Swath Plot by Elevation: OK and NN Grade Estimation

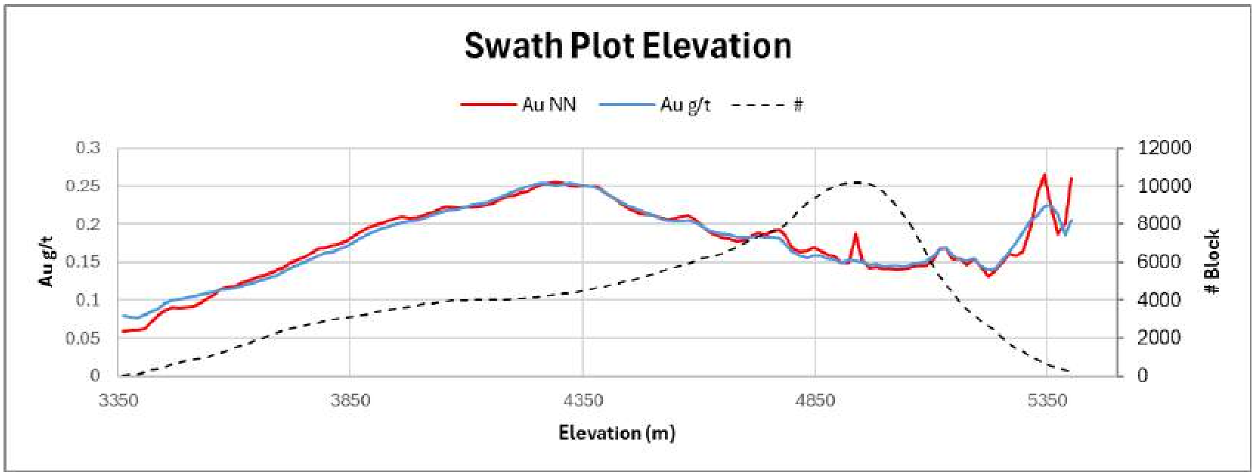


Figure 14-11: Silver Swath Plot by Elevation: OK and NN Grade Estimation

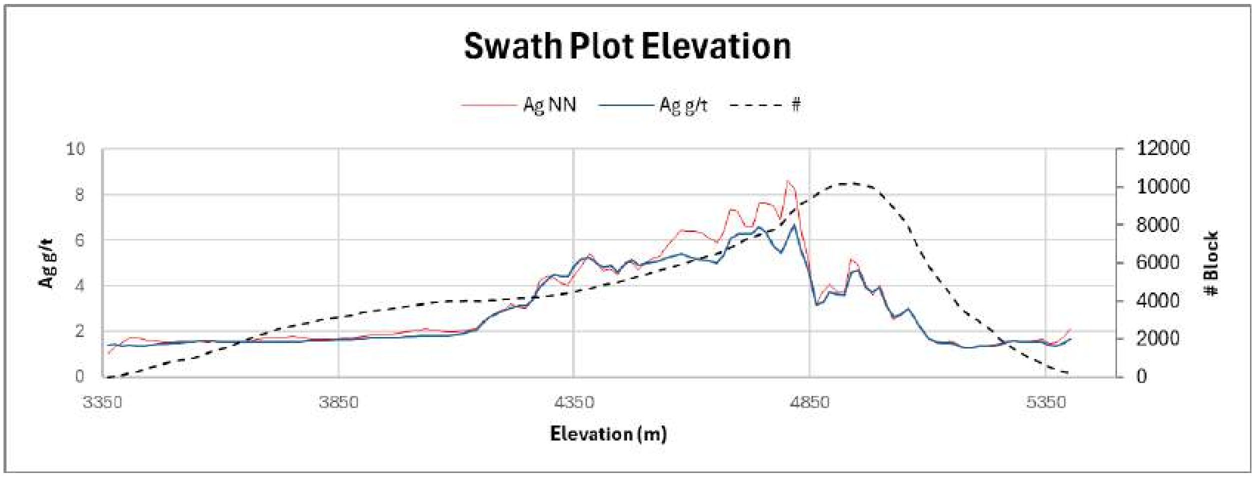
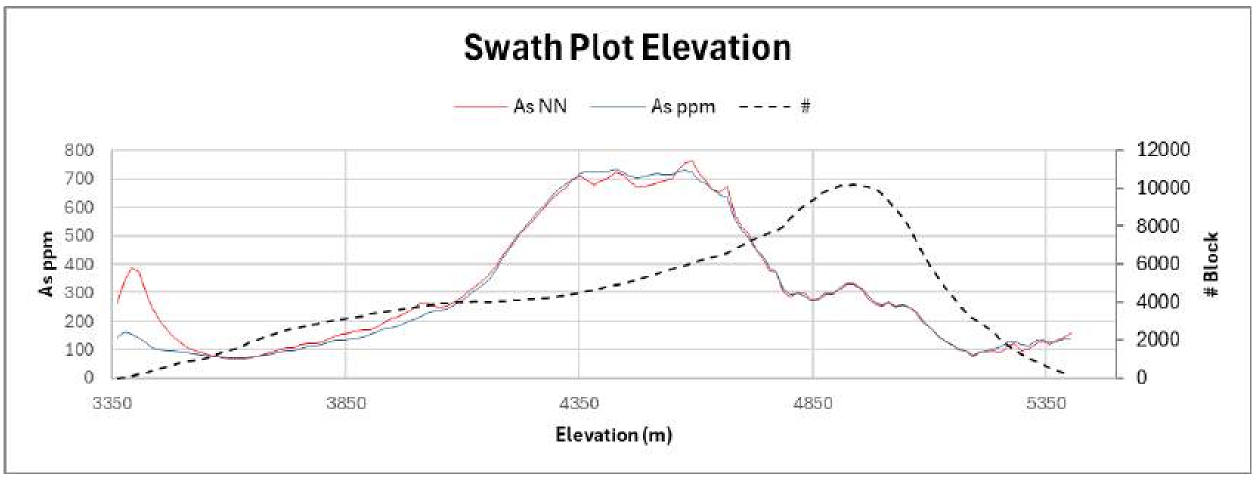


Figure 14-12: Arsenic Swath Plot by Elevation: OK and NN Grade Estimation



It is the SLR QP's opinion that the block grade distributions indicate a reasonable correlation for the kriged and NN estimates in all the swath plots. Higher grade variability was observed locally at the edges of the resource model where the data density is lower.

14.1.13.3 Comparison of the OK and NN Estimation Statistics

Checks for global bias were conducted on an estimation domain basis, and the relative percent differences of the kriged mean coper and gold grades were checked against the NN estimates (Table 14-9). Overall, the resource model shows differences of only one percent for both copper and gold, which is acceptable in the SLR QP's opinion.

Table 14-9: OK Versus NN Estimation Statistics, Filo del Sol

EST_DOM (Cu-Au)		Tonnes (000 t)	Au (g/t)	Au NN (g/t)	Au Difference (%)	Cu (%)	Cu NN (%	Cu Difference (%)
1	CuLix (Oxide Domain)	3,263,714	0.110	0.114	3%	0.046	0.045	-3%
2	CuOx (Oxide Domain)	1,175,513	0.206	0.212	2%	0.254	0.270	6%
3	Siliceous Zone (Oxide Domain)	75,889	0.326	0.314	-4%	0.058	0.065	12%
20	BXB (Lith Domain)	174,484	0.356	0.360	1%	0.358	0.367	2%
21	BXG_PHY(Lith + Alt Domain)	1,145,825	0.196	0.192	-2%	0.505	0.511	1%
22	BXG_POT(Lith + Alt Domain)	1,372,133	0.210	0.218	4%	0.411	0.413	0%
23	BXG_QAC (Lith + Alt Domain)	1,690,289	0.362	0.353	-3%	0.553	0.551	0%
30	BAKG	4,462,014	0.134	0.137	2%	0.278	0.276	-1%
40	MDD (Lith Domain)	148,277	0.106	0.131	23%	0.311	0.343	10%
50	MDS (Lith Domain)	331,454	0.236	0.236	0%	0.236	0.282	20%
63	PDB3 (Lith Domain)	387,644	0.198	0.197	0%	0.384	0.384	0%
	Totals	**14,227,238**	**0.181**	**0.183**	**1%**	**0.289**	**0.291**	**1%**

14.1.14 Mineral Resource Statement

Mineral Resources are reported in situ, using the CIM (2014) definitions in Table 14-10 to Table 14-13, and have an effective date of April 15, 2025.

Table 14-10: Mineral Resource Estimate - Gold Oxide

Confidence Category	Tonnage (Mt)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—
Indicated	288	—	0.29	3.1	—	2.7	29
Total Measured and Indicated	**288**	**—**	**0.29**	**3.1**	**—**	**2.7**	**29**
Inferred	673	—	0.21	3.3	—	4.5	72

Notes:

1. Mineral Resources are reported in situ, using the CIM (2014) definitions, and have an effective date of April 15, 2025.
2. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
3. The Qualified Person for the estimate is Mr. Luke Evans, M.Sc., P.Eng. an SLR Consulting (Canada) Ltd. employee.
4. Mineral Resources are estimated at an NSR cut-off value of $10.23/t and are constrained by an open pit resource shell with 40° pit slope angle.
5. Mineral Resources are estimated using long-term gold and silver prices of US$2,185/oz and US$28.80/oz, respectively.
6. Metallurgical recovery estimates average 73% for gold and 63% for silver. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
7. Numbers may not add or multiply accurately due to rounding.

Table 14-11: Mineral Resource Estimate - Copper Oxide

Confidence Category	Tonnage (Mt)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—
Indicated	434	0.34	0.28	2.5	1,483	3.9	35
Total Measured and Indicated	**434**	**0.34**	**0.28**	**2.5**	**1,483**	**3.9**	**35**
Inferred	331	0.25	0.21	2.1	838	2.3	22

Notes:

1. Mineral Resources are reported in situ, using the CIM (2014) definitions, and have an effective date of April 15, 2025.
2. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
3. The Qualified Person for the estimate is Mr. Luke Evans, P.Eng. an SLR Consulting (Canada) Ltd. employee.
4. Mineral Resources are estimated at an NSR cut-off value of US$15.59/t and are constrained by an open pit resource shell with 40° pit slope angle.
5. Mineral Resources are estimated using long-term copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively.
6. Metallurgical recovery estimates average 67% for copper, 63% for gold, and 78% for silver. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
7. Numbers may not add or multiply accurately due to rounding.

Table 14-12: Mineral Resource Estimate - Silver Oxide

Confidence Category	Tonnage (Mt)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—
Indicated	77	0.34	0.37	90.7	259	0.9	225
Total Measured and Indicated	**77**	**0.34**	**0.37**	**90.7**	**259**	**0.9**	**225**
Inferred	72	0.10	0.17	26.1	71	0.4	60

Notes:

1. Mineral Resources are reported in situ, using the CIM (2014) definitions, and have an effective date of April 15, 2025.
2. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Investments Canada Inc. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
3. The Qualified Person for the estimate is Mr. Luke Evans, P.Eng. an SLR Consulting (Canada) Ltd. employee.
4. Mineral Resources are estimated at an NSR return cut-off value of US$15.59/t and are constrained by an open pit resource shell with 40° pit slope angle.
5. Mineral Resources are estimated using long-term copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively.
6. Metallurgical recovery estimates average 67% for copper, 63% for gold, and 78% for silver. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
7. Numbers may not add or multiply accurately due to rounding.

Table 14-13: Mineral Resource Estimate - Sulphides

Confidence Category	Tonnage (Mt)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—
Indicated	1,192	0.54	0.39	8.1	6,452	14.8	311
Total Measured and Indicated	**1,192**	**0.54**	**0.39**	**8.1**	**6,452**	**14.8**	**311**
Inferred	6,080	0.37	0.20	3.2	22,643	38.9	631

Notes:
1. Mineral Resources are reported in situ, using the CIM (2014) definitions, and have an effective date of April 15, 2025.
2. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
3. The Qualified Person for the estimate is Mr. Luke Evans, P.Eng. an SLR Consulting (Canada) Ltd. employee.
4. Mineral Resources are estimated at an NSR cut-off value of US$10.39/t and are constrained by an open pit resource shell with 40° pit slope angle.
5. Mineral Resources are estimated using long-term copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively.
6. Metallurgical recovery estimates average 78% for copper, 62% for gold, and 62% for silver. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
7. Numbers may not add or multiply accurately due to rounding.

14.1.15 Factors that May Affect the Mineral Resource Estimate

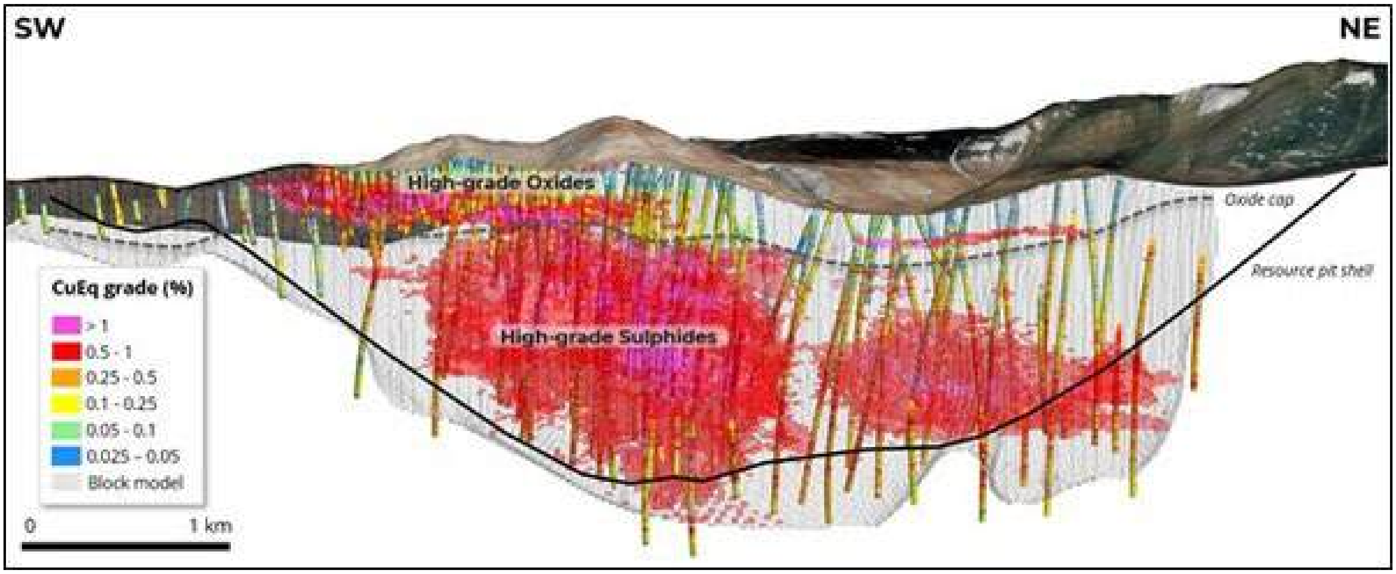
Mineral Resource estimates may be affected by changes to the following factors:

- Metal price and exchange rate assumptions;
- Changes to the assumptions used to generate the NSR cut-off value;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological and mineralization shapes, and geological and grade continuity assumptions;
- Density and domain assignments;
- Changes to geotechnical, mining, and metallurgical recovery assumptions;
- Changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates;
- Assumptions as to the continued ability to access the site, retain, or obtain mineral and surface rights titles, maintain or obtain environmental and other regulatory permits, and maintain or obtain the social licence to operate.

14.1.16 Higher-Grade Sulphide and Oxide Mineralization

The Filo del Sol deposit has two continuous cores of higher-grade sulphide mineralization and two blankets of higher-grade oxide mineralization as shown in Figure 14-13.

Figure 14-13: Longitudinal Section Looking Northwest and Showing Higher-Grade Sulphide and Oxide Mineralization at Filo del Sol



Source: Vicuña 2025

At a 0.75% copper equivalent (CuEq) cut-off grade, the higher-grade sulphide blocks classified as Measured and Indicated total 606 Mt grading 1.14% CuEq, 0.74% Cu, 0.49 g/t Au and 13.3 g/t Ag and containing 4.5 Mt of copper, 9.6 Moz of gold, and 259 Moz of silver (Table 14-14).

Table 14-14: Higher-Grade Sulphide Mineralization

Confidence Category	Tonnage (Mt)	Grade (% CuEq)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—	—
Indicated	606	1.14	0.74	0.49	13.3	4,503	9.6	259
Total Measured and Indicated	**606**	**1.14**	**0.74**	**0.49**	**13.3**	**4,503**	**9.6**	**259**
Inferred	861	0.90	0.66	0.35	4.8	5,662	9.6	132

Notes:

1. Reported at a 0.75% CuEq cut-off grade inside the open pit resource shell.
2. CuEq based on copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively, and metallurgical recovery estimates average 78% for copper, 62% for gold, and 62% for silver. The CuEq formula is: CuEq= Cu% + (0.59 * Au g/t) + (0.008 * Ag g/t).

At a 0.75% CuEq cut-off grade, the higher-grade oxide blocks classified as Measured and Indicated total 181 Mt grading 1.05% CuEq, 0.50% Cu, 0.39 g/t Au and 39.6 g/t Ag and containing 0.9 Mt of copper, 2.3 Moz of gold, and 230 Moz of silver (Table 14-15).

Table 14-15: Higher-Grade Oxide Mineralization

Confidence Category	Tonnage (Mt)	Grade (% CuEq)	Grade (% Cu)	Grade (g/t Au)	Grade (g/t Ag)	Contained Metal (kt Cu)	Contained Metal (Moz Au)	Contained Metal Moz Ag)
Measured	—	—	—	—	—	—	—	—
Indicated	181	1.05	0.50	0.39	39.6	911	2.3	230
Total Measured and Indicated	**181**	1.05	0.50	0.39	39.6	911	2.3	230
Inferred	29	0.76	0.43	0.32	18.5	124	0.3	17

Notes:

1. Reported at a 0.75% CuEq cut-off grade inside the open pit resource shell.
2. CuEq based on copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively, and metallurgical recovery estimates average 78% for copper, 62% for gold, and 62% for silver. The CuEq formula is: CuEq= Cu% + (0.59 * Au g/t) + (0.008 * Ag g/t).

14.2 Josemaría

14.2.1 Summary

The Mineral Resource estimate is based on drilling to December 31, 2022 (see discussion in Section 10).

The estimate was completed using Resource Modeling Solutions Ltd.'s (Resource Modeling Solutions) commercially distributed software package Resource Modeling Solutions Platform (RMSP). A stochastic simulation approach was adopted with the general workflow summarized as follows:

- Rock types and alteration were simulated using hierarchical truncated pluri-Gaussian simulation (HTPG); (Silva 2018);
- Copper total, CuAS, CuCN, gold, silver, arsenic, iron, sulphur, and density were simulated using turning bands, applying a projection pursuit multivariate transformation (PPMT) to reproduce multivariate relations (Barnett 2014);
- A total of 100 equiprobable realizations result from the above steps, where each realization contains a unique rock type, alteration, grade, and density that reproduce representative properties at the point (composite) scale variability;
- The simulation was performed on nodes spaced 5 m in each direction. The realizations are then scaled to the selective mining unit (SMU) scale support through averaging their composite scale variability within blocks measuring 25 m x 25 m x 15 m. NSR calculations and cut-off grades are then applied to each block realization.

14.2.2 Estimation Method Selection

HTPG is a sophisticated geostatistical method used to model complex geological structures (Silva 2018). It combines multiple Gaussian random fields to reproduce realistic spatial variability in geological domains. The hierarchical aspect serves to facilitate adding geological constraints on the model allowing more control and ensuring more realistic outputs. By truncating these Gaussian fields, HTPG can create sharp boundaries between different geological units, capturing intricate details of the underlying geology.

The method is considered appropriate to use in estimation for the Josemaría deposit as it explicitly captures the geological uncertainty related to the current drill spacing for the Project while producing a reasonable reproduction of the geological interpretation of the deposit.

14.2.3 Database Codes

A number of database codes are in use; these are summarized in Table 14-16 (mineralogy codes), Table 14-17 (lithology codes), and Table 14-18 (alteration codes).

Table 14-16: Mineralogy Database Codes, Josemaría

Mineralogy Code	Description
PYCPY	Pyrite–chalcopyrite
PYCCH	Pyrite–chalcocite (hypogene chalcocite)
NMIN	Unmineralized
Oxide: oxidized material	Iron oxides, copper oxides, and undifferentiated oxides

Mineralogy Code	Description
Mix: mixed oxidation zone	Transition zone between oxide and sulphide
PYCPYCC	Pyrite–chalcopyrite–chalcocite (mixed primary sulfide and supergene enrichment; typically surrounds PYCCS)
PYCCS	Supergene enrichment
PY	Pyrite

Table 14-17: Lithology Database Codes, Josemaría

Lithology Code	Description
TONL	Grouping of tonalite, granite, granodiorite and diorite
RHYL	Rhyolite and "black rhyolite"
PMV	Post mineral volcanics and volcanic tuff
BBX	Basal breccia
POREI	Grouping of early and intermediate porphyry
PORL	Late porphyry
OVB	Overburden and colluvium
DYK	General group for all dykes
BX	General group for all other breccias

Table 14-18: Alteration Database Codes, Josemaría

Alteration Code	Description
SCC	Sericite–chlorite–clay alteration
POT	Potassic alteration
SER	Sericite alteration
AA	Advanced argillic and argillic alteration
NALT	Not altered
HS	High-sulfidation (high in As)
PHY	Phyllic alteration
PROP	Propylitic alteration

14.2.4 Mineralogy Code Processing

CoreScan and copper speciation data (i.e., the total copper, CuAS, and CuCN) were used to improve the consistency of the mineralogy logging for downstream modelling purposes. A gradient boosting regressor was applied to predict the mineralization codes from these two attributes.

A total of 1.09% of the mineralogy logging codes were adjusted with the largest proportion of the adjusted codes corresponding to pyrite–chalcopyrite–chalcocite being reclassified as pyrite–chalcocite (0.16%).

14.2.5 Smoothing of Logging Codes

The lithology and alteration logging codes were smoothed using RMSP's categorical smoothing functionality. The smoothing was based on spatial outlier detection along each unique drill hole, applied both upwards and downwards along the drill trace.

A total of 4.7% of the alteration logging codes and 3.2% of the lithology logging codes were adjusted during smoothing.

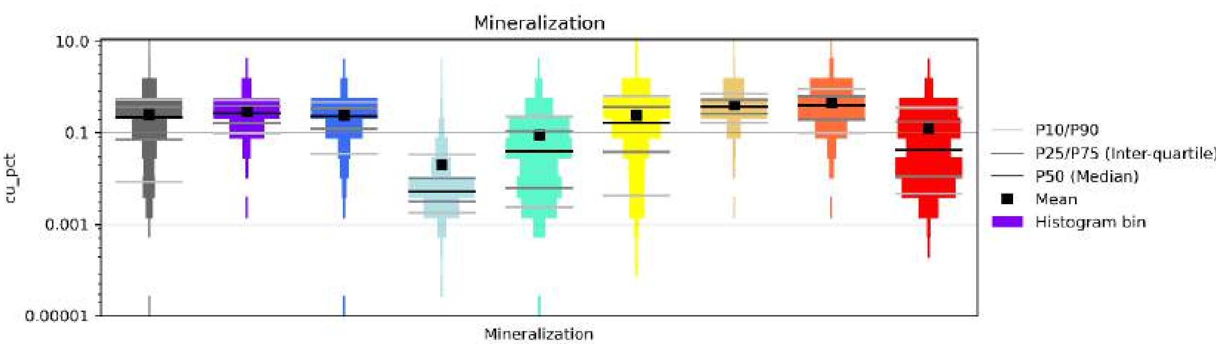
14.2.6 Compositing

For geological/domain simulation, sample intervals were composited to 2.0 m, corresponding to the predominant assay length of 2.0 m. As a 5.0 m node size was used for grade simulation, samples were composited to 4.0 m for this step.

14.2.7 Exploratory Data Analysis

The Resource Modeling Solutions' QP performed exploratory data analysis using box plots and an examination of mineralization, lithology and alteration statistics, based on the cleaned/smoothed logging codes, prior to HTPG domaining. Example box plots and statistics are provided in Figure 14-14 (by mineralization code), Figure 14-15 (by lithology code), and Figure 14-16 (by alteration code).

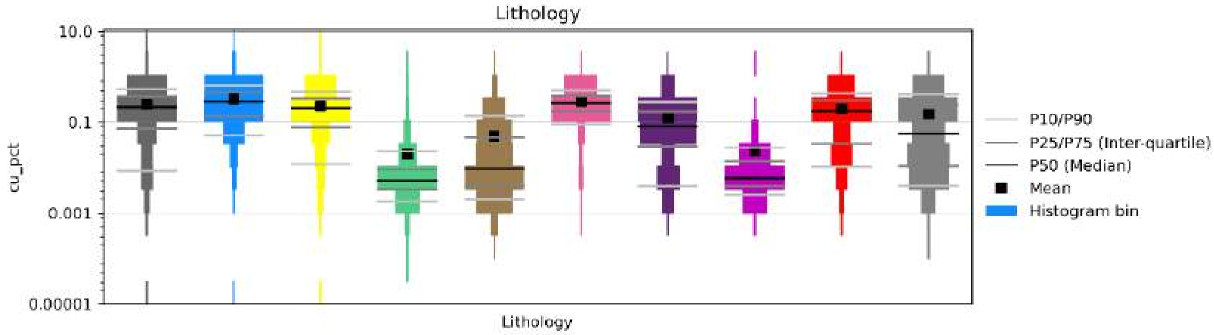
Figure 14-14: Copper Statistics by Mineralization Code, Josemaría



	Global	PYCPY	PYCCH	NMIN	OXIDE	MIX	PYCPYCC	PYCCS	PY
count	48,119	11,912	13,681	2,801	4,421	2,274	6,418	2,283	4,329
mean	0.252	0.292	0.248	0.020	0.091	0.248	0.415	0.460	0.122
stdev	0.235	0.181	0.177	0.086	0.156	0.273	0.275	0.372	0.169
cv	0.933	0.619	0.712	4.348	1.713	1.102	0.662	0.808	1.392
min	0.000	0.002	0.000	0.000	0.000	0.000	0.003	0.003	0.000
P10	0.008	0.095	0.035	0.002	0.002	0.004	0.165	0.097	0.005
P50	0.215	0.265	0.228	0.005	0.040	0.166	0.375	0.388	0.042
P90	0.527	0.516	0.462	0.034	0.223	0.619	0.698	0.892	0.353
max	11.109	2.445	3.424	2.676	1.976	4.186	11.109	4.787	1.803

Note: Figure prepared by Resource Modeling Solutions, 2024.

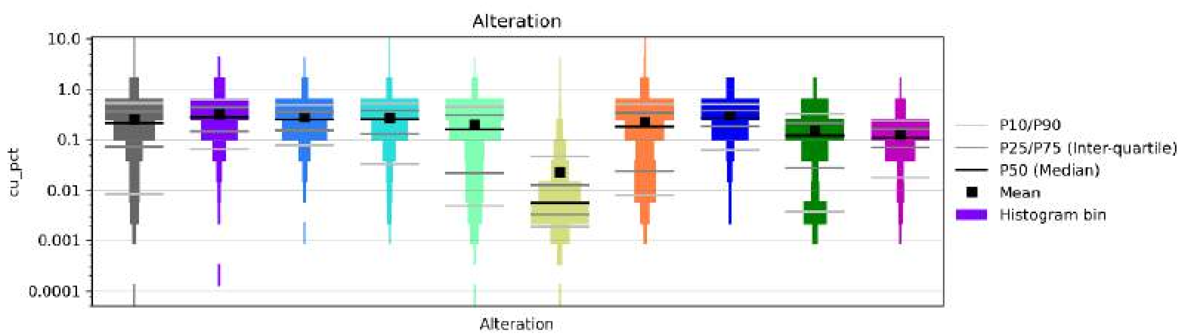
Figure 14-15: Copper Statistics by Lithology Code, Josemaría



	Global	TONL	RHYL	PMV	BBX	POREI	PORL	OVB	DYK	BX
count	48,036	17,289	14,830	1,939	1,359	6,943	1,127	125	2,379	2,045
mean	0.253	0.330	0.229	0.020	0.050	0.288	0.124	0.023	0.200	0.151
stdev	0.235	0.277	0.193	0.118	0.120	0.181	0.138	0.135	0.176	0.202
cv	0.932	0.839	0.842	5.875	2.384	0.628	1.115	5.770	0.880	1.334
min	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.000
P10	0.008	0.051	0.012	0.002	0.002	0.088	0.004	0.002	0.011	0.004
P50	0.216	0.285	0.203	0.005	0.010	0.268	0.081	0.006	0.174	0.057
P90	0.528	0.642	0.461	0.023	0.138	0.496	0.280	0.027	0.431	0.413
max	11.109	11.109	4.787	3.424	2.676	3.288	1.110	1.512	1.400	1.594

Note: Figure prepared by Resource Modeling Solutions, 2024.

Figure 14-16: Copper Statistics by Alteration Code, Josemaría



	Global	SCC	POT	SER	AA	NALT	HS	PHY	PROP	SPC
count	48,119	16,584	2,117	9,945	11,549	2,764	2,776	690	1,156	538
mean	0.252	0.323	0.282	0.276	0.198	0.023	0.230	0.310	0.148	0.127
stdev	0.235	0.245	0.200	0.230	0.202	0.084	0.272	0.237	0.150	0.095
cv	0.933	0.760	0.708	0.834	1.017	3.709	1.185	0.762	1.012	0.747
min	0.000	0.000	0.002	0.001	0.000	0.000	0.001	0.003	0.001	0.001
P10	0.008	0.065	0.078	0.032	0.005	0.002	0.008	0.063	0.004	0.017
P50	0.215	0.278	0.254	0.256	0.158	0.005	0.179	0.274	0.120	0.110
P90	0.527	0.618	0.488	0.516	0.448	0.048	0.502	0.502	0.330	0.239
max	11.109	2.851	1.907	11.109	2.330	2.676	4.787	1.632	1.427	0.778

Note: Figure prepared by Resource Modeling Solutions, 2024.

As a result of the exercise, the following actions were taken:

- Given the similarities in copper distribution and copper speciation between the PYCPYCC and PYCCS, the two mineralogy codes were combined prior to HTPG;

- PY was excluded from HTPG as it is not a relevant copper mineralization domain.

14.2.8 Variography

Variograms are calculated during multiple steps during the geology/domain simulation and grade simulation workflow. These include:

- Variograms used for HTPG simulation of lithology, alteration, and sulphide mineralization;
- Grade variograms in original units within the sulphide mineralization domains used to inform anisotropy ratios and declustering weights. These variograms are also used to validate resulting back transformed grade simulations;
- Variograms of despiked, normal-scored, detrended data used to simulate the PPMT-transformed variables by domain (total copper, CuAS, CuCN, gold, silver, arsenic, iron, sulphur, and density).

14.2.9 Grid Setup and Selective Mining Unit

Geology/domain simulation and grade simulation was performed at a point scale of 5 m in x (easting), y (northing), and z (elevation). The realizations were re-blocked to the SMU block model measuring 25 m x 25 m x 15 m. During reblocking to SMU scale, numeric variables were averaged, weighted by simulated density, while the majority category, weighted by the density, was selected for categorical variables.

The simulation grid and SMU blocks were limited by topography and to 300 m from the closest drill hole, and above a smooth bottom surface near the bottom of the deepest drill holes. Blocks were assigned default values in unpopulated areas beyond the footprint of the potential Mineral Resource open pit reporting shell for pit optimization purposes.

The simulation and SMU grid definitions are provided in Table 14-19.

Table 14-19: Simulation and SMU Grid Definition, Josemaría

Grid	Easting	Northing	Elevation
Simulation Grid			
Minimum (m)	444,900	6,853,000	3,730
Maximum (m)	447,575	6,855,700	4,910
Node spacing (m)	5	5	5
Number of nodes	535	540	282
SMU Block Model			
Minimum (m)	444,900	6,853,000	3,725
Maximum (m)	447,575	6,855,700	4,910
Block size (m)	25	25	15
Number of blocks	107	108	94
Note: the minimum and maximum values represent node/block corners.			

14.2.10 Geological/Domain Simulation

14.2.10.1 Method

HTPG was used for domaining mineralogy, lithology, and alteration. In total, 100 realizations for each feature were completed.

Mineralogy, lithology and alteration models, completed by Lundin Mining personnel using Leapfrog Geo software, were used as a guide, and, in many instances, constraints to the HTPG simulations.

The HTPG domaining included the following considerations:

- Overburden was not simulated, but modelled as a single surface below the topography;
- BBX and PMV lithologies were not simulated, but based on wireframes provided by Lundin Mining;
- Lithology and alteration were modelled considering major faults;
- Sulphide mineralization was modelled without considering faults. While it is understood that the faults have been reactivated and therefore post-date the mineralization, no strong evidence for significant mineralization offsetting was detected that warranted separate domains within fault blocks;
- The principal directions of continuity for the sulphide mineralization, lithology, and alteration zones were interpreted from experimental variograms in spherical space. However, for some zones, anisotropy directions were pre-determined, based on the underlying geology;
- Anisotropy angles for TONL, RHYL, PORL, and POREI were interpreted from Lundin Mining's lithology wireframe solids rather than spherical searches. TONL and RHYL exhibit omni-directional horizontal variography, while POREI and PORL have three principal directions;
- Anisotropy angles and principal directions for PYCPY, PYCCH, and MIX were interpreted from Lundin Mining's mineralogy wireframe solids rather than spherical searches;
- The mineralization zones OXIDE and MIX, while still simulated, were not allowed to extend deeper than their corresponding Lundin Mining-generated wireframes unless the block was within 50 m of a fault to facilitate a reasonable extrapolation of the domains;
- Control data, informed by Lundin Mining's solids, were used for the TONL and RHYL lithology zones, and for the MIX, OXIDE, and PYCCS mineralization zones. The control data were only used in trend calculation, and not in either the indicator variography or the HTPG algorithm.

14.2.10.2 Validation

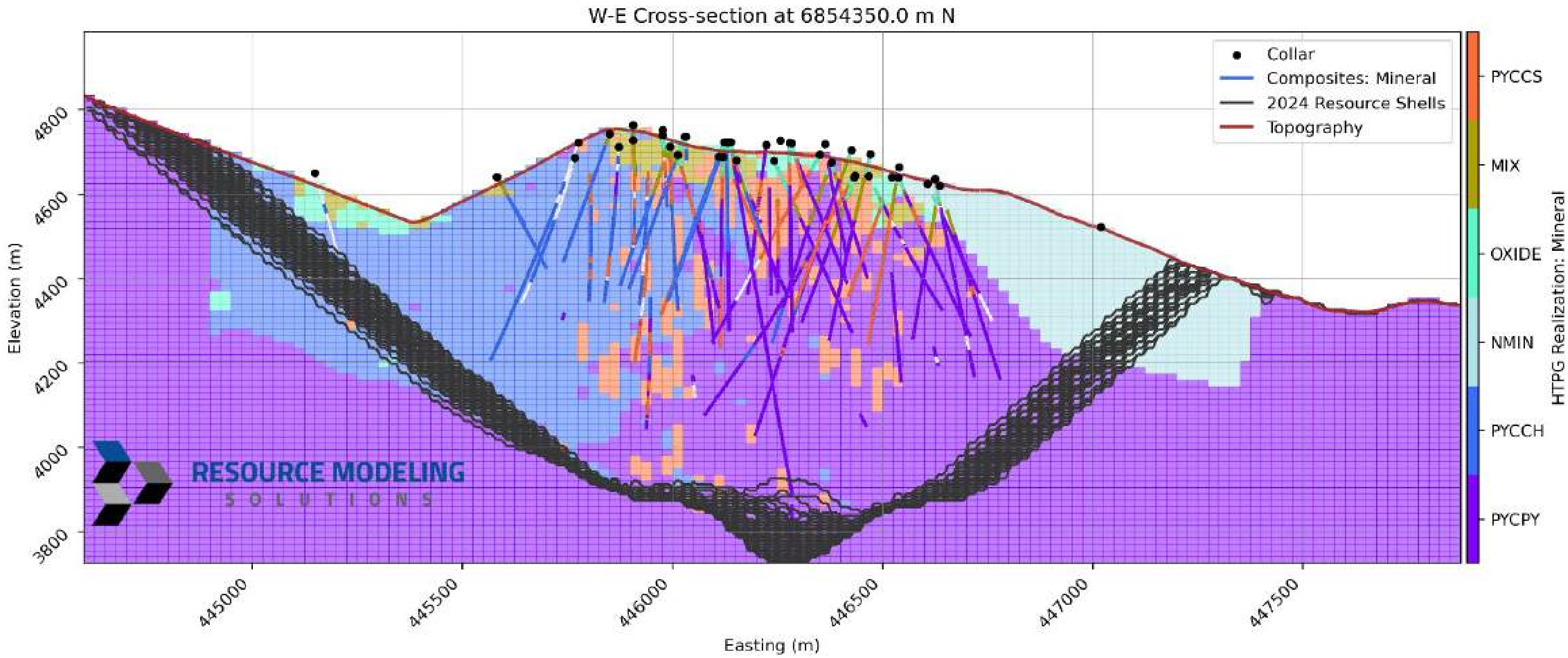
The simulated domains generated using HTPG were validated using the following approaches:

- Comparison between target and resulting proportions for the mineralogy, alteration, and lithology simulations. The target proportions were derived during trend modelling;
- Visual inspection of domains and comparison with Lundin Mining's Leapfrog-derived interpretations (those mentioned in section 14.3.10.1).

Examples of the simulations are provided in Figure 14-17 (mineralization), Figure 14-18 (lithology), and Figure 14-19 (alteration).

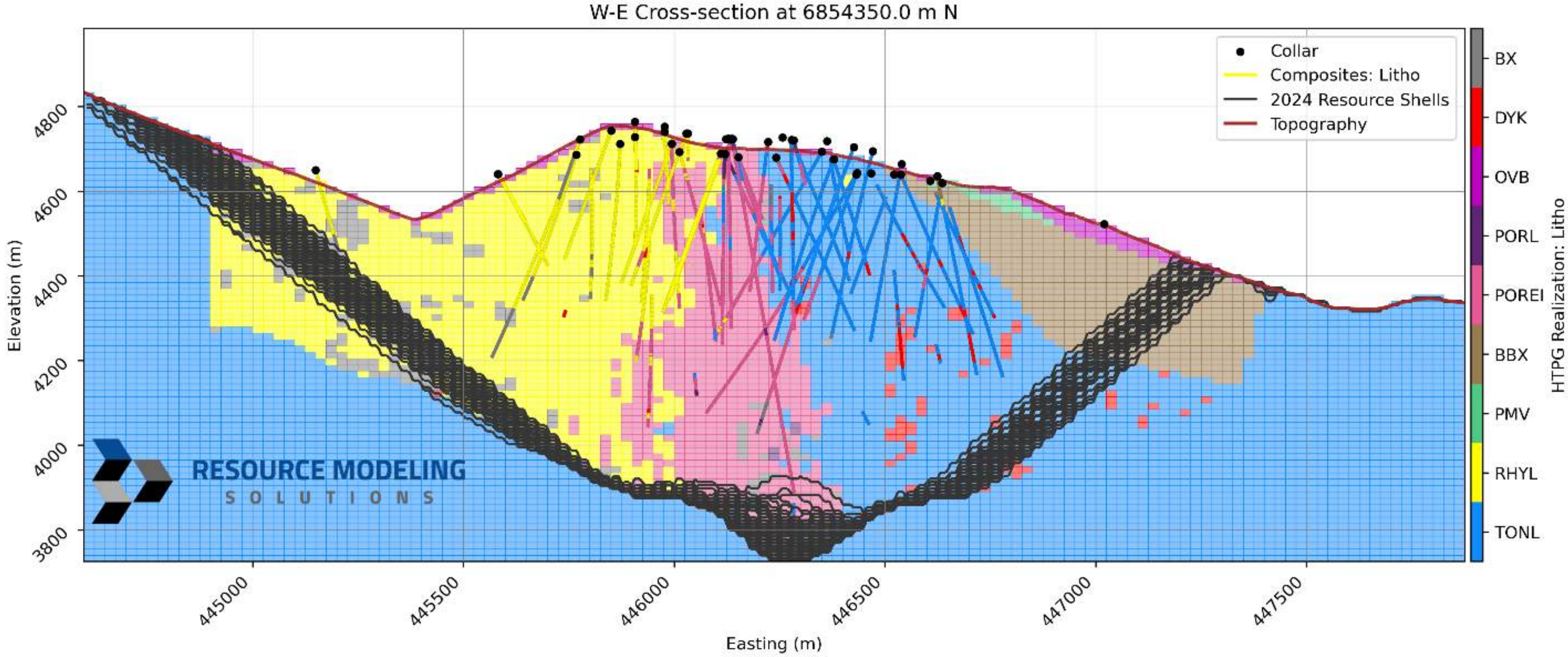
The validation showed that the HTPG methodology appropriately represents the geological interpretation and honours the underlying input logged codes.

Figure 14-17: East–West Vertical Section Showing Simulated Sulphide Mineralization Domains, Josemaría



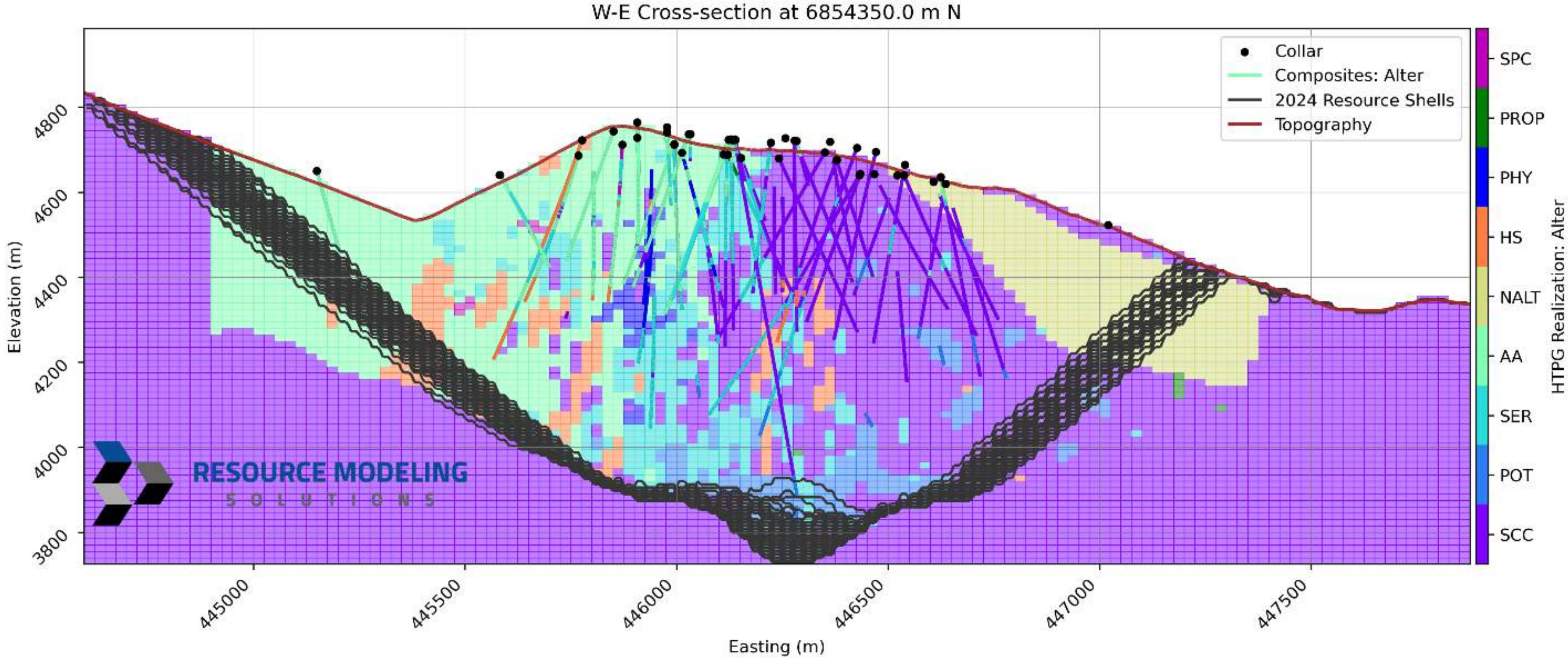
Note: Figure prepared by Resource Modeling Solutions, 2024. Legend key for codes used on y-axis provided in Table 14-14.

Figure 14-18: East–West Vertical Section Showing Simulated Lithology Domains, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024. Legend key for codes used on y-axis provided in Table 14-15.

Figure 14-19: East–West Vertical Section Showing Simulated Alteration Domains, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024. Legend key for codes used on y-axis provided in Table 14-16.

14.2.11 Grade Simulation

14.2.11.1 Method

The variables copper, CuAS, CuCN, CuRes, sulphur, gold, silver, arsenic, iron, and density were simulated over 100 realizations, constrained by the corresponding mineralogy domain. The workflow adopted can be summarized as follows:

- Variograms in original units were modelled within each domain to be used for determination of search anisotropy during declustering;
- Declustered weights for each variable within each domain were calculated by accumulating inverse distance weighting to the second power (ID2) estimation weights;
- Data were despiked (dealing with numerous values of equal value, e.g., at detection limit), and then normal scored;
- Variograms in normal-score units were fitted following anisotropic directions from the variograms in the original units;
- A smooth, generalized grade trend was fitted using a moving average Gaussian kernel. Data was then detrended using a stepwise conditional transformation following a Gaussian mixture model;
- Variogram models were fitted to de-trended experimental variograms;
- A multivariate spatial bootstrap was applied over 100 realizations to incorporate histogram uncertainty;
- PPMT of the 100 bootstrapped distributions was performed with the purpose of decorrelation;
- Grade was simulated over 100 realizations using turning bands and then back-transformed to original units. Back-transformations in sequential order included PPMT (re-correlation), trend (adding back trend), and normal scores (normal score back to original units).

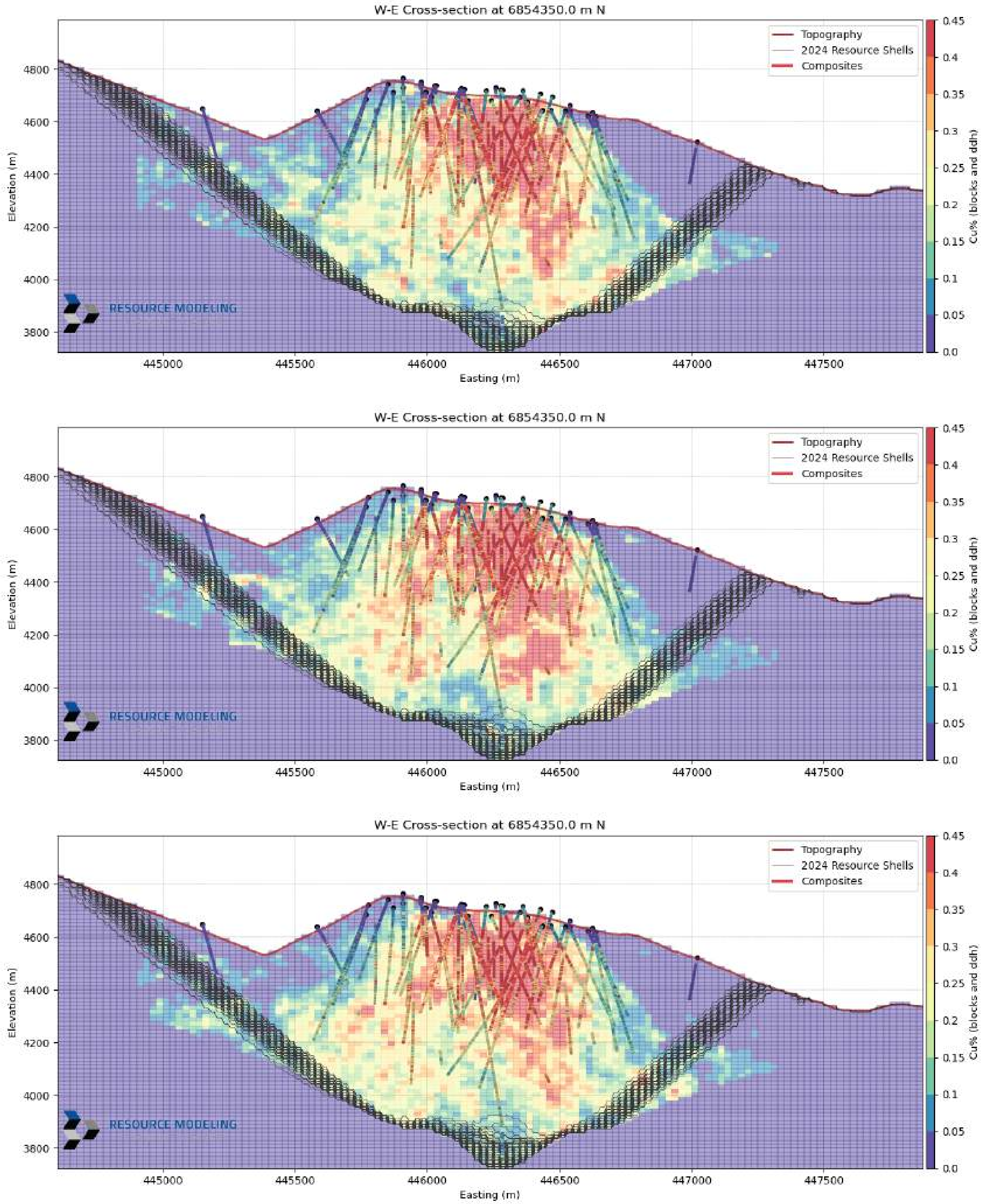
14.2.11.2 Validation

The estimate was validated using standard validation techniques, along with additional validation steps specific to the stochastic simulation approach. Validation of simulated grades was completed on the 5 m blocks.

While no significant issues associated with the results were identified, some extraneous high-density values were identified. Any densities exceeding the 99th percentile were reset to this value. The impact of the extraneous densities was found to be minimal.

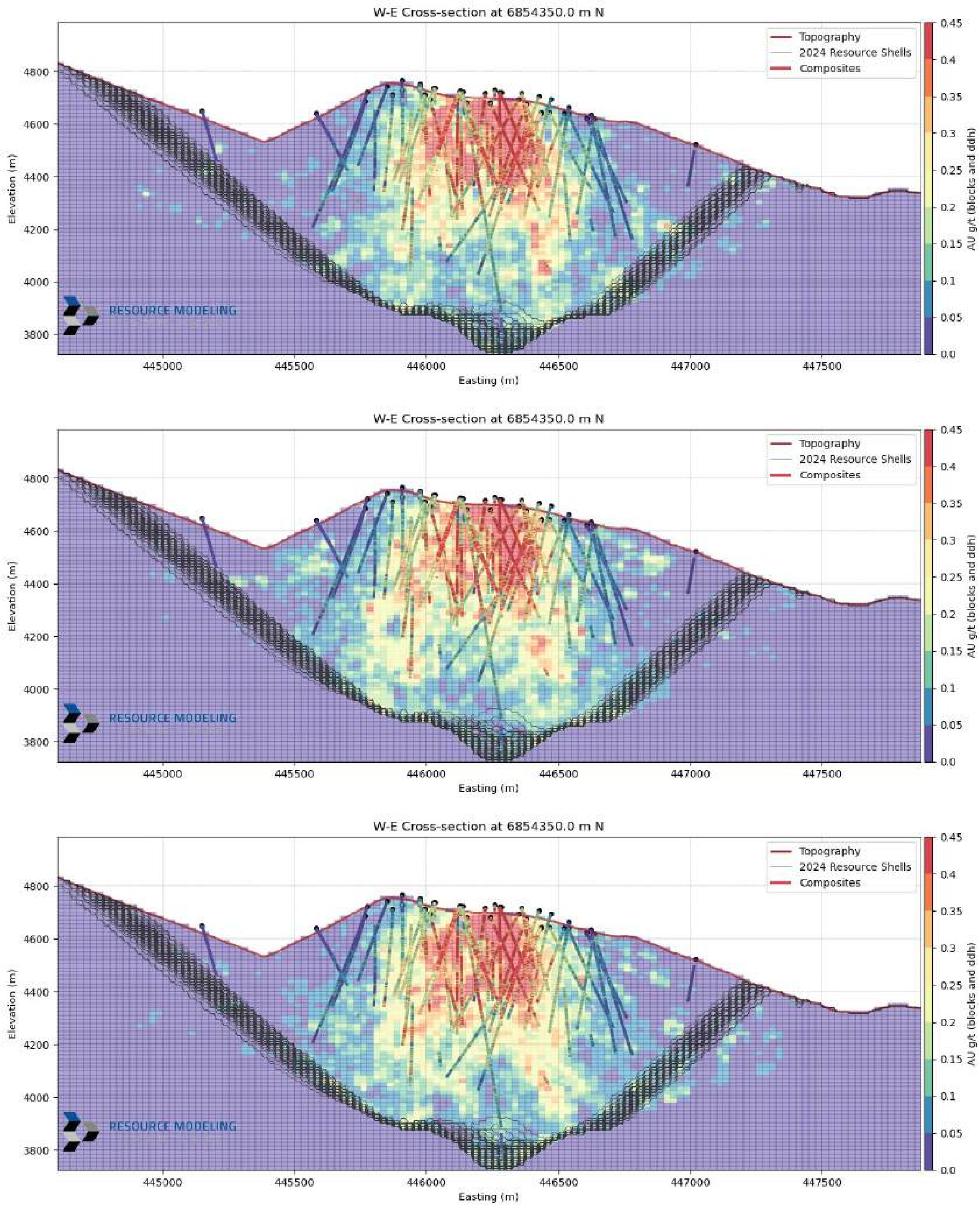
Reproduction of composite grades was spot checked on plans and sections. Examples are provided in Figure 14-20 (copper) and Figure 14-21 (gold), at realizations of P25, P50, and P75. These checks showed a reasonable reproduction of the underlying composite grades.

Figure 14-20: East–West Vertical Section Showing Simulated Copper Grades, P25 (top), P50 (centre), and P75 (lower) Realizations, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

Figure 14-21: East–West Vertical Section Showing Simulated Gold Grades, P25 (top), P50 (centre), and P75 (lower) Realizations, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

Conventional global mean comparisons were performed as well as cumulative distribution frequency reproduction checks. These checks showed reasonable reproduction of the underlying composite distribution with no significant bias detected.

Variograms of the simulated realizations, back-transformed to normal-score units were compared to the variograms of the composites in normal-scored units. This comparison indicated appropriate reproduction of the spatial variability of grade.

Swath plots for all variables and all mineralogy domains were plotted along eastings, northings, and elevations. The swath plots showed reasonable spatial reproduction of the underlying composite grades across the deposit.

14.2.12 Classification of Mineral Resources

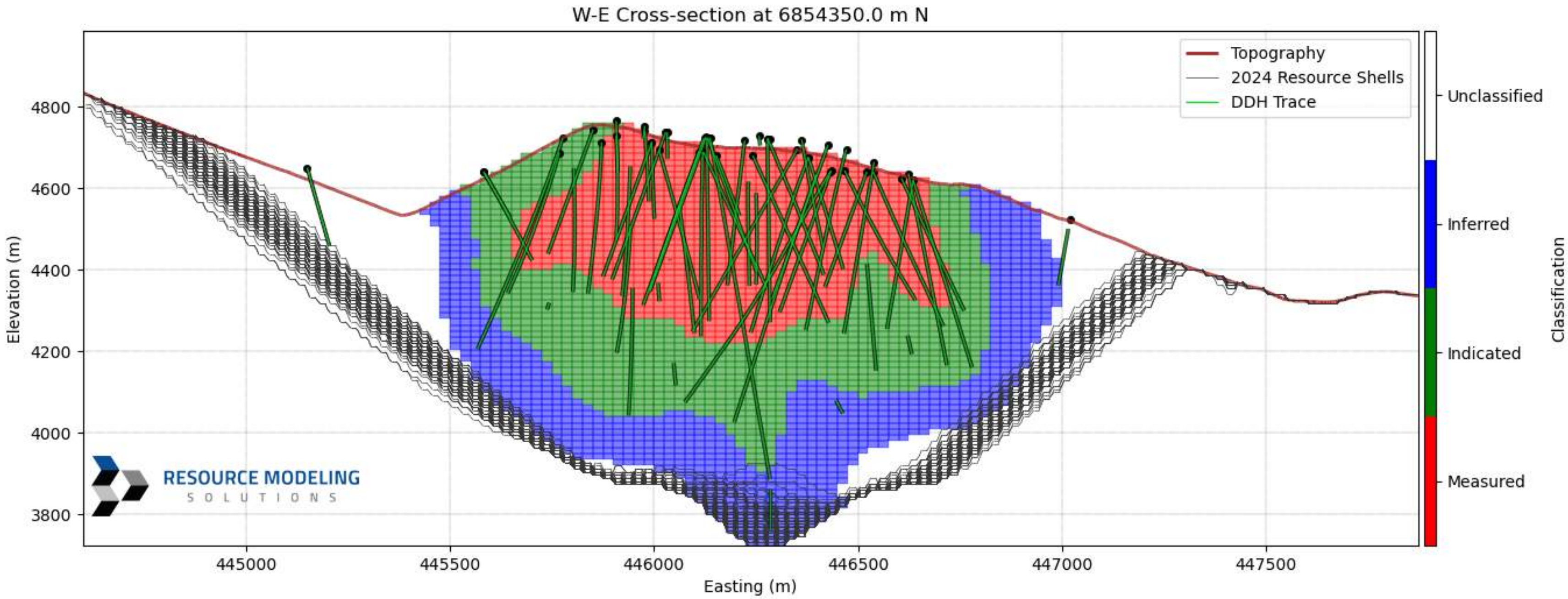
The classification categories are based primarily on drill hole spacing criteria, determined by calculating the probability of achieving the predicted grade, tonnes, and metal within volumes that approximate monthly tonnages:

- Measured Mineral Resources: the simulation results imply that for material informed by drilling spaced ≤60 m, the grade, tonnage, and metal of nominal monthly production volumes will be within 10% of predicted, with a 90% probability or higher;
- Indicated Mineral Resources: at a drill hole spacing of ≤125 m, the grade, tonnage and metal of nominal quarterly production volumes will be within 15% of predicted, with a 90% probability or higher;
- Inferred Mineral Resources: at a drill hole spacing of ≤200 m, the grade, tonnage, and metal of nominal annual production volumes will be within 15% of predicted, with a 90% probability or higher.

Drill hole spacing was calculated based on the average distance from each SMU block to the nearest three drill holes.

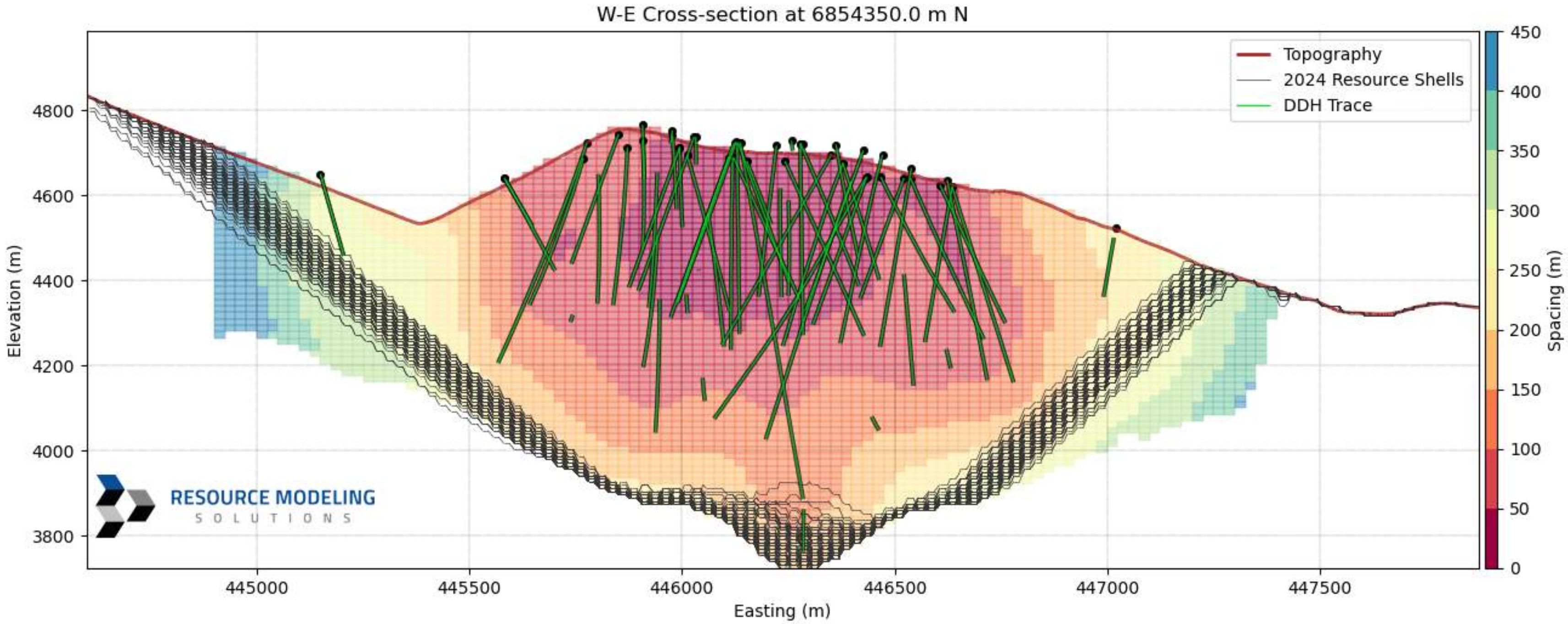
Figure 14-22 is an example section showing the final classification and Figure 14-23 is a corresponding section showing the drill hole spacing.

Figure 14-22: Typical East–West Section Showing Classification, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

Figure 14-23: Typical East–West Section Showing Drill Hole Spacing, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

14.2.13 Consideration of Reasonable Prospects for Eventual Economic Extraction

Mineral Resources were reported within optimized open pit constraining shells generated for each realization of the stochastic simulation using RMSP's mining module. The pit optimization was based on a cut-off applied to a calculated NSR value incorporating variable metallurgical recoveries, smelter terms, refining costs, and Lundin Mining's long-term metal price forecasts.

The conceptual pit shell used the parameter assumptions in Table 14-20.

Table 14-20: Input Assumptions, Conceptual Pit Shell and Net Smelter Return, Josemaría

Item	Cu	Au	Ag
Economic Assumptions			
Metal price	US$4.43lb	US$2,185/oz	US$28.80/oz
Treatment charge	US$65/dmt		
Logistics cost	US$95.51/wmt (transit loss = 0.3%)		
Concentrate moisture content	10.9%		
Refining cost	US$0.065/lb	US$5.0/oz	US$0.46/oz
Royalty	1.5% of gross payable revenue		
Metallurgical Recoveries			
See section 13.4.2 for formulas			
Average Recoveries	82.2%	60.1%	56.1%
Geotechnical Assumptions			
Pit slope angles	Maximum pit slope = 45º		
Cost Assumptions			
Base mining cost	US$2.083/t		
Uphill mining cost increment	US$0.03/bench		
Downhill mining cost increment	US$0.045/bench		
Processing cost (including G&A)	US$7.30/t		
Note: dmt = dry metric tonne; wmt = wet metric tonne			

The estimate included a revenue deduction, which was applied when determining the gross revenue after accounting for deductions related to a recovered arsenic penalty.

Operating costs comprised mining and processing costs. General and administrative (G&A) costs were incorporated in the processing cost. The mining cost included an uphill and downhill adjustment from a base elevation of 4,535 MASL (reference bench 21). While geometallurgical types, depending on the modelled geology, have been identified, a fixed processing cost was used for all mineralization.

The outcome of the reasonable prospects determination was:

- A variable NSR value assigned to blocks (a unit US$ value per tonne of rock);

- A pit discard NSR cut-off value of US$7.30/t (processing and G&A cost in US$);
- An open pit reporting constraint based on a pit optimization completed in RMSP.

14.2.14 Mineral Resource Statement

Mineral Resources are reported in situ, using the CIM (2014) definitions.

Mineral Resources have an effective date of June 30, 2024.

The QP for the estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions Ltd. employee.

The Mineral Resource estimate is provided in Table 14-21. The values in Table 14-21 represent the average Mineral Resource tabulation over the 100 realizations completed. Each realization was reported within its own optimized pit shell, the results of which were then averaged to produce the final Mineral Resource statement. Each realization met the minimum criteria for reasonable prospects of eventual economic extraction.

Table 14-21: Mineral Resource Estimate - Sulphides

Category	Tonnes (Mt)	Grades			Contained Metal		
		Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (Moz)	Ag (Moz)
Measured	654	0.33	0.25	1.2	2,148	5.2	25
Indicated	992	0.25	0.14	1.1	2,475	4.6	34
Total Measured and Indicated	**1,646**	**0.28**	**0.19**	**1.1**	**4,623**	**9.8**	**59**
Inferred	736	0.22	0.11	1.0	1,587	2.6	23

Notes to accompany Mineral Resource table:

1. Mineral Resources are reported in situ, using the CIM (2014) definitions, and have an effective date of June 30, 2024.
2. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.
3. The Qualified Person for the estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions Ltd. employee.
4. Mineral Resource estimates for Josemaría were constrained within a pit shell with pit slope angles of up to 45º. Metal prices used were US$4.43/lb copper, US$2,185/oz gold, US$28.80/oz silver and a NSR cut-off value of US$7.30/t. Other inputs include average metallurgical recoveries of 82%, 60% and 56% for Cu, Au and Ag respectively; base mining cost of US$2.083/t; processing and general and administrative costs of US$7.30/t; treatment costs of US$65/dmt; logistics costs of US$95.51/wmt; variable refining costs including US$0.065/lb Cu, US$5/oz Au, and US$0.46/oz Ag. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
5. Estimates have been rounded. Totals may not sum or multiply accurately due to rounding.

14.2.15 Factors that May Affect the Mineral Resource Estimate

Mineral Resource estimates may be affected by the following factors:

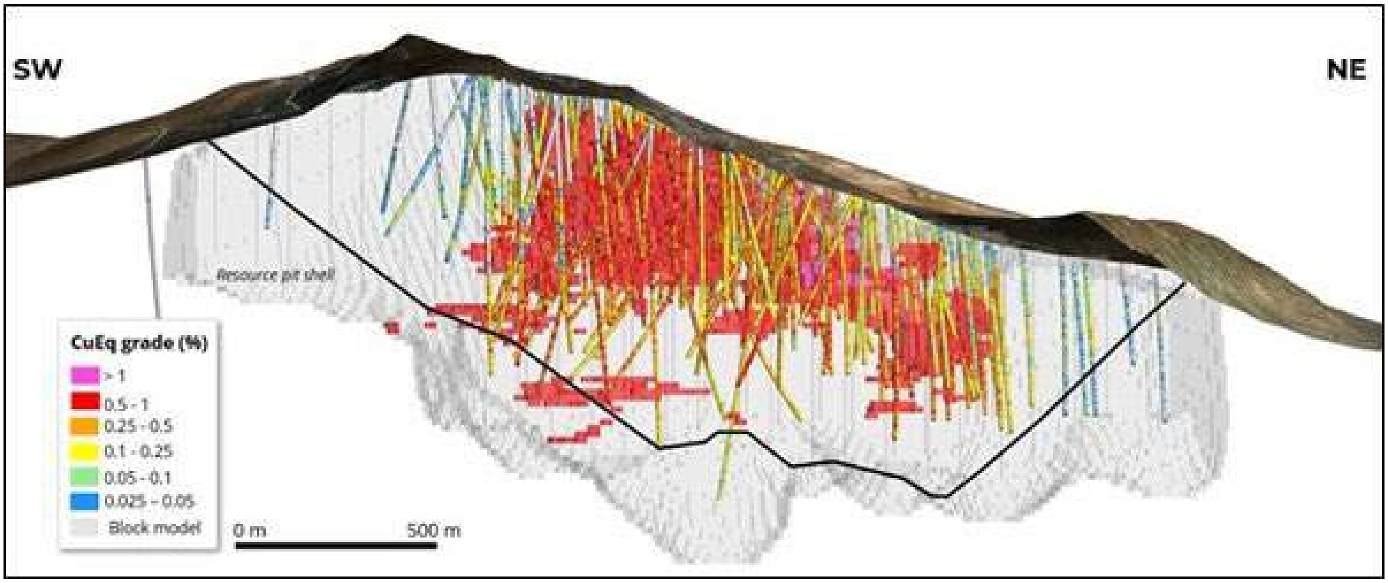
- Metal price and exchange rate assumptions;
- Changes to the assumptions used to generate the NSR cut-off value;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological and mineralization shapes, and geological and grade continuity assumptions;
- Density and domain assignments;

- Changes to geotechnical, mining, and metallurgical recovery assumptions;
- Changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates;
- Assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social license to operate.

14.2.16 Higher-Grade Mineralization

The Josemaria deposit has a continuous core of higher-grade mineralization as shown in Figure 14-24.

Figure 14-24: Longitudinal Section Looking Northwest and Showing Higher-Grade Mineralization at Josemaria



Source: Vicuña 2025

At a 0.60% CuEq cut-off grade, the higher-grade blocks classified as Measured and Indicated total 196 Mt grading 0.73% CuEq, 0.50% Cu, 0.38 g/t Au and 1.7 g/t Ag and containing 978 kt of copper, 2.4 Moz of gold, and 11 Moz of silver (Table 14-22).

Table 14-22: Higher-Grade Sulphide Mineralization

Category	Tonnes (Mt)	Grades				Contained Metal		
		CuEq (%)	Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (Moz)	Ag (Moz)
Measured	161	0.74	0.50	0.39	1.7	807	2.0	9
Indicated	35	0.68	0.49	0.31	1.7	171	0.4	2
Total Measured and Indicated	**196**	**0.73**	**0.50**	**0.38**	**1.7**	**978**	**2.4**	**11**
Inferred	5	0.66	0.46	0.32	2.2	24	0.1	0

Notes:

1. Reported at a 0.60% CuEq cut-off grade inside the open pit resource shell.
2. CuEq based on copper, gold, and silver prices of US$4.43/lb, US$2,185/oz, and US$28.80/oz, respectively, and metallurgical recovery estimates average 84% for copper, 67% for gold, and 63% for silver. The CuEq formula is: CuEq= Cu% + (0.58 * Au g/t) + (0.007 * Ag g/t).

14.2.17 Comparison with Previous Estimate

The previous estimate had an effective date of November 2020 (McCarthy et al., 2020). In that estimate, copper, gold, silver, molybdenum, arsenic, iron, and sulphur was estimated using OK. Density values were interpolated using ID2 into a partial (percent) block model.

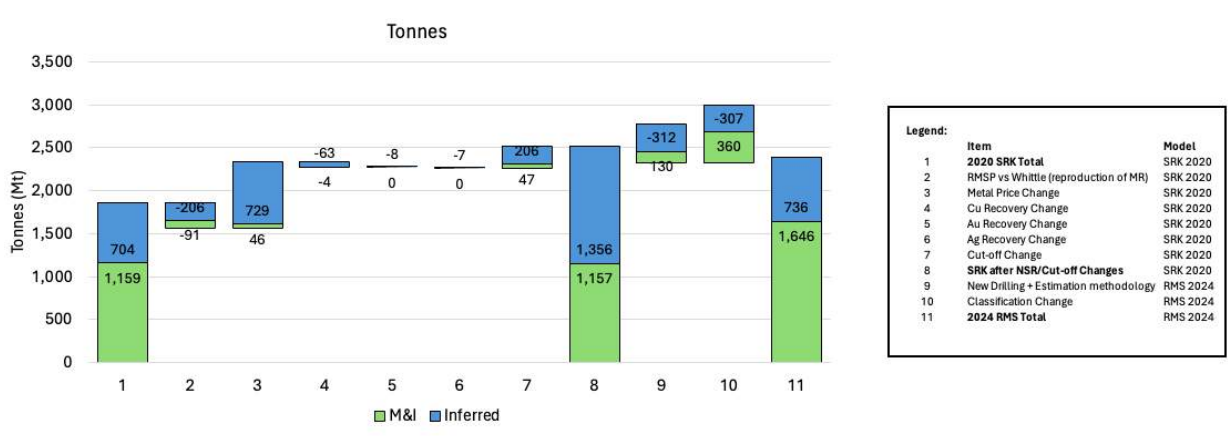
Key changes between the previous estimate and the current estimate, in order of impact, include:

- Increase in metal prices (49%, 46%, and 41% higher for copper, gold, and silver respectively);
- Additional drilling (34,797.49 m of drilling in 75 drill holes);
- Assumption of lower operating costs when assessing reasonable prospects of eventual economic extraction. While the base mining cost increased, the main impact was due to approximate 27% decrease to processing costs;
- Change in estimation methodology from OK to stochastic simulation;
- Changes to metal recoveries resulting in very small relative decreases to metal recovered.

The changes are summarized in the waterfall charts provided as Figure 14-25 (changes to tonnage estimates) and Figure 14-26 (changes in contained copper metal).

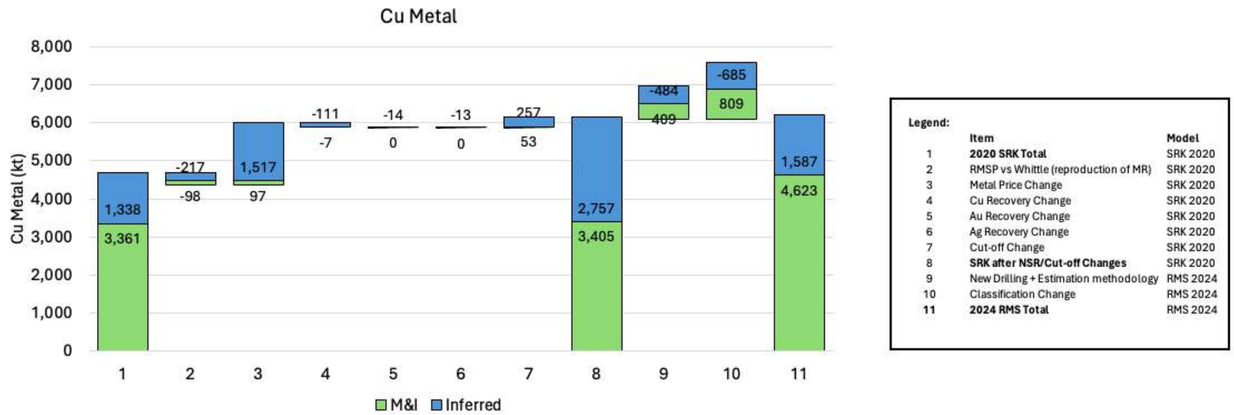
Previous Mineral Resource and Mineral Reserve estimates for the Josemaría deposit (including McCarthy et al. 2020) are not considered current and the Mineral Reserve estimates for the Josemaría deposit are declassified.

Figure 14-25: Changes in Tonnage Estimates Since Previous Mineral Resource Estimate, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

Figure 14-26: Changes in Contained Copper Metal Since Previous Mineral Resource Estimate, Josemaría



Note: Figure prepared by Resource Modeling Solutions, 2024.

14.2.18 QP Comments on Josemaría Mineral Resource Estimate

There are no other environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the QP that would materially affect the estimation of Mineral Resources that are not discussed in this Technical Report.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories.

14.3 Vicuña Project Mineral Resource Estimate

The total Mineral Resources for the Vicuña Project are reported in situ, using the CIM (2014) definitions.

The Qualified Person for the Filo del Sol estimate is Mr. Luke Evans, M.Sc., P.Eng., an SLR employee. The Qualified Person for the Josemaría estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions employee.

The Filo del Sol estimate has an effective date of April 15, 2025, and the Josemaría estimate has an effective date of June 30, 2024.

- The combined Mineral Resource estimates for Filo del Sol and Josemaria are (Table 14-23):
    - Measured Mineral Resources: 654 Mt grading 0.33% Cu, 0.25 g/t Au and 1.2 g/t Ag and containing 2,148 kt of copper, 5.2 Moz of gold, and 25 Moz of silver;
    - Indicated Mineral Resources: 2,984 Mt grading 0.36% Cu, 0.28 g/t Au and 6.6 g/t Ag and containing 10,669 kt of copper, 27.0 Moz of gold, and 634 Moz of silver;
    - Combined Measured and Indicated Mineral Resources: 3,638 Mt grading 0.35% Cu, 0.27 g/t Au and 5.6 g/t Ag and containing 12,817 kt of copper, 32.2 Moz of gold, and 659 Moz of silver;

- Inferred Mineral Resources: 7,895 Mt grading 0.32% Cu, 0.19 g/t Au and 3.2 g/t Ag and containing 25,139 kt of copper, 48.7 Moz of gold, and 808 Moz of silver.

Table 14-23: Mineral Resource Statement, Vicuña Project

Deposit	Zone	Category	Tonnes (Mt)	Grades			Contained Metal		
				Cu (%)	Au (g/t)	Ag (g/t)	Cu (kt)	Au (Moz)	Ag (Moz)
Filo del Sol	Gold Oxide	Measured							
		Indicated	288		0.29	3.1		2.7	29
		Total Measured and Indicated	288		0.29	3.1		2.7	29
		Inferred	673		0.21	3.3		4.5	72
	Copper Oxide	Measured							
		Indicated	434	0.34	0.28	2.5	1,483	3.9	35
		Total Measured and Indicated	434	0.34	0.28	2.5	1,483	3.9	35
		Inferred	331	0.25	0.21	2.1	838	2.3	22
	Silver Oxide	Measured							
		Indicated	77	0.34	0.37	90.7	259	0.9	225
		Total Measured and Indicated	77	0.34	0.37	90.7	259	0.9	225
		Inferred	72	0.10	0.17	26.1	71	0.4	60
	Sulphide	Measured							
		Indicated	1,192	0.54	0.39	8.1	6,452	14.8	311
		Total Measured and Indicated	1,192	0.54	0.39	8.1	6,452	14.8	311
		Inferred	6,080	0.37	0.20	3.2	22,643	38.9	631
Josemaría	Sulphide	Measured	654	0.33	0.25	1.2	2,148	5.2	25
		Indicated	992	0.25	0.14	1.1	2,475	4.6	34
		Total Measured and Indicated	1,646	0.28	0.19	1.1	4,623	9.8	59
		Inferred	736	0.22	0.11	1.0	1,587	2.6	23
Vicuña Project Total		Measured	654	0.33	0.25	1.2	2,148	5.2	25
		Indicated	2,984	0.36	0.28	6.6	10,669	27.0	634
		Total Measured and Indicated	3,638	0.35	0.27	5.6	12,817	32.2	659
		Inferred	7,895	0.32	0.19	3.2	25,139	48.7	808

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are reported in situ. The Filo del Sol estimates have an effective date of April 15, 2025 and the Josemaría estimates have an effective date of June 30, 2024.
3. Mineral Resources are reported on a 100% basis. The Project is a 50:50 joint venture between Lundin Mining and BHP Canada. Lundin Mining's attributable interest in the Mineral Resource estimate is 50%.

4. The Qualified Person for the Filo del Sol estimates is Mr. Luke Evans, M.Sc., P.Eng., an SLR Consulting (Canada) Ltd. employee. The Qualified Person for the Josemaría estimate is Mr. Sean D. Horan, P.Geo., a Resource Modeling Solutions Ltd. employee.
5. Mineral Resource estimates for Filo del Sol were constrained within a pit shell with 40º pit slope angles. Metal prices used were US$4.43/lb copper, US$2,185/oz gold, and US$28.80/oz silver. Net smelter return (NSR) cut-off values and metallurgical recoveries varied by zone, and included:
   - Gold Oxide: 73% gold; 63% silver recoveries with an NSR cut-off value of $10.23/t;
   - Copper and Silver Oxide: 67% copper, 63% gold, and 78% silver recoveries with an NSR cut-off value of $15.59/t;
   - Sulphide: 78% copper, 62% gold, and 62% silver recoveries with an NSR cut-off value of $10.39/t.
6. Mineral Resource estimates for Josemaría were constrained within a pit shell with pit slope angles of up to 45º. Metal prices used were US$4.43/lb copper, US$2,185/oz gold, US$28.80/oz silver and an NSR cut-off value of US$7.30/t. Other inputs included average metallurgical recoveries of 82%, 60% and 56% for Cu, Au and Ag respectively; base mining cost of US$2.083/t; processing and general and administrative costs of US$7.30/t; treatment costs of US$65/dmt; logistics costs of US$95.51/wmt; variable refining costs including US$0.065/lb Cu, US$5/oz Au, and US$0.46/oz Ag.
7. Recovery estimates consider metallurgical test work completed up to January 13, 2025.
8. Estimates have been rounded. Totals may not sum or multiply accurately due to rounding.

The QPs are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

15.0 Mineral Reserve Estimates

There are no current Mineral Reserves estimated for the Project. Historical Mineral Reserve estimates are declassified.

16.0 Mining Methods

This section is not applicable.

17.0 Recovery Methods

This section is not applicable.

18.0 Project Infrastructure

This section is not applicable.

19.0 Market Studies and Contracts

This section is not applicable.

20.0 Environmental Studies, Permitting, and Social or Community Impact

This section is not applicable.

21.0 Capital and Operating Costs

This section is not applicable.

22.0 Economic Analysis

This section is not applicable.

23.0 Adjacent Properties

This section is not applicable.

24.0 Other Relevant Data and Information

No additional information or explanation is necessary to make this Report understandable and not misleading.

25.0 Interpretation and Conclusions

25.1 Geology and Mineral Resources

- Mineralization in the Project area includes both porphyry copper–gold and high-sulphidation copper–gold–silver epithermal systems. The mineralized system in its entirety is a telescoped porphyry–epithermal system, with multiple intrusive and breccia centres, and so combines aspects of both deposit types.
- The Vicuña Project area encompasses the crest of the central Andes mountain range along the Chile–Argentina border and the area eastward into Argentina. It forms a significant part of the Vicuña metallogenic belt, defined by a trend of copper and gold (±silver) mineralization related to porphyry and epithermal systems developed during compressive stages of Andean arc development.
- To date, two significant deposits have been delineated through drilling, Filo del Sol and Josemaría.
- Given that porphyry deposits often occur in clusters, and that there are prospects identified in the vicinity of the Filo del Sol and Josemaría deposits, there is good exploration potential to identify additional porphyry-hosted copper-gold and copper–gold–silver epithermal systems.
- The Filo del Sol deposit remains open in almost all directions and the Josemaría deposit remains open to the south, beneath a thickening cover of post-mineral volcanic rocks, and also at depth. Both deposits warrant more drilling.

25.1.1 Filo del Sol

The SLR QP makes the following conclusions:

- Host rocks to the mineralization are Permo-Triassic felsic volcanic and monzogranitic basement units of the Choiyoi magmatic province, which are unconformably overlain by a sequence of terrigenous sedimentary and andesitic volcanic rocks, assumed to be Cretaceous in age.
- Several intermineral porphyry phases are distinguished in the Filo del Sol area and form a large subsurface swarm with over one kilometre of vertical extension and at least 3 km of strike length, coincident with the more broadly defined north-to-northeast- trending Filo del Sol alignment.
- The Filo del Sol alignment is an approximately 8 km-long, north- to northeast-trending series of prospects consisting of porphyry copper–gold, porphyry copper, and related epithermal copper–gold–silver mineralization. Mineralized zones comprise a gold-only oxide zone, a zone of supergene copper enrichment at the top of an oxide zone, a high-grade silver zone, and a hypogene sulphide zone.
- The overall Filo del Sol deposit, which includes the Tamberías, Aurora, and Bonita zones is 6.5 km long (northeast–southwest) and 1.5 km in width (east–west) at its widest part in the Aurora zone. It has been drill tested to 1.8 km below surface. The deposit remains open to the north, south, east, west, and at depth.
- Mineral Resources are reported in situ, using the CIM (2014) definitions and have an effective date of April 15, 2025.

- **Sulphides:**
  - Indicated Mineral Resources: 1,192 Mt grading 0.54% Cu, 0.39 g/t Au, and 8.1 g/t Ag and containing 6,452 kt of copper, 14.8 Moz of gold, and 311 Moz of silver;
  - Inferred Mineral Resources: 6,080 Mt grading 0.37% Cu, 0.20 g/t Au, and 3.2 g/t Ag and containing 22,643 kt of copper, 38.9 Moz of gold, and 631 Moz of silver.
- **Copper Oxide:**
  - Indicated Mineral Resources: 434 Mt grading 0.34% Cu, 0.28 g/t Au, and 2.5 g/t Ag and containing 1,483 kt of copper, 3.9 Moz of gold, and 35 Moz of silver;
  - Inferred Mineral Resources: 331 Mt grading 0.25% Cu, 0.21 g/t Au, and 2.1 g/t Ag and containing 838 kt of copper, 2.3 Moz of gold, and 22 Moz of silver.
- **Gold Oxide:**
  - Indicated Mineral Resources: 288 Mt grading 0.29 g/t Au and 3.1 g/t Ag and containing 2.7 Moz of gold, and 29 Moz of silver;
  - Inferred Mineral Resources: 673 Mt grading 0.21 g/t Au and 3.3 g/t Ag and containing 4.5 Moz of gold, and 72 Moz of silver.
- **Silver Oxide:**
  - Indicated Mineral Resources: 77 Mt grading 0.34% Cu, 0.37 g/t Au, and 90.7 g/t Ag and containing 259 kt of copper, 0.9 Moz of gold, and 225 Moz of silver;
  - Inferred Mineral Resources: 72 Mt grading 0.10% Cu, 0.17 g/t Au, and 26.1 g/t Ag and containing 71 kt of copper, 0.4 Moz of gold, and 60 Moz of silver.

25.1.2 Josemaría

The QPs from AGP and Resource Modeling Solutions make the following conclusions:

- The host rock units in the Josemaría area are assigned to the Permian–Triassic Choiyoi Group.
- The Josemaría Late Oligocene (~25 Ma) porphyry intrusions include a series of feldspar–quartz–hornblende–biotite-phyric dacitic intrusions that have been divided into three main phases based on their compositions, as well as timing based on the presence of vein fragments and relative vein density and intensity of mineralization.
- There are two main types of hypogene mineralization that occur in proximity to one another due to a high degree of telescoping of high-sulphidation alteration and mineralization over deeper mineralization related to potassic alteration. Late supergene enrichment within the northern part of the deposit has upgraded copper values over part of the system.
- The Mineral Resource estimate is hosted in an area that is approximately one kilometre east–west, 1.5 km north–south, extending to 600 m to 700 m vertical depth. The deposit remains open to the south.
- Mineral Resources are reported in situ, using the CIM (2014) definitions and have an effective date of June 30, 2024.

- **Sulphides:**
  - Measured Mineral Resources: 654 Mt grading 0.33% Cu, 0.25 g/t Au and 1.2 g/t Ag and containing 2,148 kt of copper, 5.2 Moz of gold, and 25 Moz of silver;
  - Indicated Mineral Resources: 992 Mt grading 0.25% Cu, 0.14 g/t Au and 1.1 g/t Ag and containing 2,475 kt of copper, 4.6 Moz of gold, and 34 Moz of silver;
  - Combined Measured and Indicated Mineral Resources: 1,646 Mt grading 0.28% Cu, 0.19 g/t Au and 1.1 g/t Ag and containing 4,623 kt of copper, 9.8 Moz of gold, and 59 Moz of silver;
  - Inferred Mineral Resources: 736 Mt grading 0.22% Cu, 0.11 g/t Au and 1.0 g/t Ag and containing 1,587 kt of copper, 2.6 Moz of gold, and 23 Moz of silver.

25.1.3 Vicuña Project

- The combined Mineral Resource estimates for Filo del Sol and Josemaria are:
  - Measured Mineral Resources: 654 Mt grading 0.33% Cu, 0.25 g/t Au, and 1.2 g/t Ag and containing 2,148 kt of copper, 5.2 Moz of gold, and 25 Moz of silver;
  - Indicated Mineral Resources: 2,984 Mt grading 0.36% Cu, 0.28 g/t Au, and 6.6 g/t Ag and containing 10,669 kt of copper, 27.0 Moz of gold, and 634 Moz of silver;
  - Combined Measured and Indicated Mineral Resources: 3,638 Mt grading 0.35% Cu, 0.27 g/t Au, and 5.6 g/t Ag and containing 12,817 kt of copper, 32.2 Moz of gold, and 659 Moz of silver;
  - Inferred Mineral Resources: 7,895 Mt grading 0.32% Cu, 0.19 g/t Au, and 3.2 g/t Ag and containing 25,139 kt of copper, 48.7 Moz of gold, and 808 Moz of silver.

25.2 Mineral Processing and Metallurgical Testing

- Four test work phases were completed at Filo del Sol, and seven phases at Josemaría.
- Test work results were used to determine appropriate process routes:
  - Oxide mineralization at Filo del Sol was considered amenable to heap leach operations to produce copper cathode and gold and silver in doré;
  - Oxide and hypogene mineralization at Josemaría and hypogene mineralization at Filo del Sol were considered amenable to conventional milling and flotation to produce copper concentrates;
  - Gold and silver were expected to reach payable levels in the copper concentrate.

25.3 Factors that May Affect the Mineral Resource Estimates

Mineral Resource estimates may be affected by the following factors: metal price and exchange rate assumptions; changes to the assumptions used to generate the NSR cut-off value; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and mineralization shapes, and geological and grade continuity assumptions; density and domain assignments; changes to geotechnical, mining, and metallurgical recovery assumptions; changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates; assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social licence to operate.

26.0 Recommendations

26.1 Filo del Sol

The QP makes the following recommendations:

1 Begin engineering studies for the Vicuña Project.

2 Carry out geotechnical studies to help refine pit slope criteria.

3 Carry out additional metallurgical test work.

4 Continue to drill the Filo del Sol deposit to help refine the mineralization extents and convert Inferred Mineral Resources to Indicated.

5 Update the Filo del Sol trend analysis, variography, and resource block model as new data become available.

6 Incorporate a structural model and define local higher-grade trends.

7 Consider using DA to interpolate block grades once the local grade trends are better understood.

8 Investigate adding key northwest striking cross faults that may offset mineralization.

9 Send pulps for external check assays.

10 Conduct additional copper concentrate marketing and arsenic treatment studies.

11 Continue to study the relevant water function of any geoforms located near the resource constraining pit shells.

26.2 Josemaría

The QPs make the following recommendations:

1 Advance the previous results of the Josemaría feasibility study in light of the Vicuña Project.

2 Estimate new Minera Reserves for Josemaría.

3 Conduct additional pit geotechnical drilling.

4 Conduct additional condemnation drilling to the south of the pit limits.

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28.0 Date and Signature Date

This report titled "NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile" with an effective date of April 15, 2025 was prepared and signed by the following Qualified Persons:

(Signed & Sealed) ***Luke Evans***

Dated at Toronto, ON
June 16, 2025

Luke Evans, M.Sc., P.Eng.
SLR Consulting (Canada) Ltd.

(Signed & Sealed) ***Paul Daigle***

Dated at Barrie, ON
June 16, 2025

Paul Daigle, P.Geo.
AGP Mining Consultants Inc.

(Signed & Sealed) ***Sean Horan***

Dated at Toronto, ON
June 16, 2025

Sean Horan, P.Geo.
Resource Modeling Solutions Ltd.

(Signed & Sealed) ***Jeffrey Austin***

Dated at Kelowna, BC
June 16, 2025

Jeffrey Austin, P.Eng.
International Metallurgical and Environmental Inc.

(Signed & Sealed) ***Bruno Borntraeger***

Dated at Vancouver, BC
June 16, 2025

Bruno Borntraeger, P.Eng.
Knight Piésold Ltd.

29.0 Certificate of Qualified Person

29.1 Luke Evans

I, Luke Evans, M.Sc., P.Eng., as an author of this report entitled "NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile" with an effective date of April 15, 2025 and prepared for Lundin Mining Corporation, do hereby certify that:

1. I am Global Technical Director – Geology Group Leader, and Principal Geologist with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
2. I am a graduate of University of Toronto, Ontario, Canada, in 1983 with a Bachelor of Science (Applied) degree in Geological Engineering and Queen's University, Kingston, Ontario, Canada, in 1986 with a Master of Science degree in Mineral Exploration.
3. I am registered as a Professional Engineer and a Consulting Engineer in the Province of Ontario (Reg. #90345885) and as a Professional Engineer in the Province of Quebec (Reg. # 105567). I have worked as a professional geologist for a total of 42 years since my graduation. My relevant experience for the purpose of the Technical Report is:
    - Geological Engineer specializing in resource and reserve estimates, audits, technical assistance, and training since 1995.
    - Review and report as a consultant on numerous exploration and mining projects around the world for due diligence and regulatory requirements.
4. 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.
5. I visited the Filo del Sol property on September 20, 2023.
6. I am responsible for overall preparation of the Technical Report, in particular Sections 2, 3, 4.1 to 4.10 (except 4.2.4 and 4.3.4), 5, 6, 7.1, 7.2, 7.3.1, 8, 9, 12.1.1, 14.1, 23, 24, Filo del Sol parts of Sections 10, 11, and 14.3, and related disclosure in Sections 1, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer, and the Vicuña Project applying the test set out in Section 1.5 of NI 43-101.
8. I have had prior involvement with the Filo del Sol deposit that is the subject of the Technical Report including resource modelling work for Filo Mining Corp.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the section numbers in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of June 2025

(Signed & Sealed) ***Luke Evans***

Luke Evans, M.Sc., P.Eng.

29.2 Paul Daigle

I, Paul Daigle, P.Geo., as an author of this report entitled "NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile" with an effective date of April 15, 2025 and prepared for Lundin Mining Corporation, do hereby certify that:

1. I am a Principal Resource Geologist with AGP Mining Consultants Inc., with a business address at #246-132K Commerce Park Dr., Barrie ON L4N 0Z7, Canada.
2. I am a graduate of Concordia University, Montreal, Canada (B.Sc. Geology) in 1989.
3. I am registered as a Professional Geologist in the Province of Ontario (No. 1592). I have worked as a geologist for a total of 35 years since my graduation. My most recent relevant experience for the purpose of the Technical Report is:
    - Mineral resource estimate and technical report for the Cotabambas porphyry copper deposit, Peru.
    - Mineral resource estimate and technical report for the Antilla porphyry copper deposit, Peru.
4. 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.
5. I visited the Josemaría deposit of the Vicuña Project from 3 May to 8 May 2023 for five days.
6. I am responsible for Section 7.3.2 and 12.1.2, portions of Sections 10 and 11 that reference the Josemaría deposit, and related disclosure in Sections 1, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer and the Vicuña Project applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of June 2025

(Signed & Sealed) ***Paul Daigle***

Paul Daigle, P.Geo.

29.3 Sean D. Horan

I, Sean D. Horan, P.Geo., as an author of this report entitled "NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile" with an effective date of April 15, 2025 and prepared for Lundin Mining Corporation, do hereby certify that:

1. I am Principal Geologist with Resource Modeling Solutions Ltd., of 7745 66 St SE, Calgary, Alberta.
2. I am a graduate of Rhodes University in 2004 with a B.Sc. Honours in Geology.
3. I am registered as a Professional Geologist in the Province of Ontario (No. 2090). I have worked as a geologist for a total of 18 years since my graduation. My relevant experience for the purpose of the Technical Report is:
    - I have been involved in the estimation of Mineral Resources including at various stages for a variety of commodities.
    - I have previously been involved in the estimation mineral resources for porphyry style Cu and Au deposits.
    - I have authored and acted as qualified person for numerous NI 43-101 Technical Reports.
4. 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.
5. I did not visit the Vicuña Project.
6. I am responsible for Sections 12.1.3, 14.2, and Josemaría parts of Section 14.3, and related disclosure in Sections 1, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer, and the Vicuña Project applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of June, 2025

(Signed & Sealed) ***Sean Horan***

Sean D. Horan, P.Geo.

29.4 Jeffrey Austin

I, Jeffrey Austin, P.Eng., as an author of this report entitled "NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile" with an effective date of April 15, 2025 and prepared for Lundin Mining Corporation, do hereby certify that:

1. I am the President of International Metallurgical and Environmental Inc. with an office address at 906 Fairway Crescent, Kelowna, BC, V1Y 4S7
2. I am a graduate of UBC(Vancouver) in 1984 with a B.A.Sc. in Mining and Mineral Processing
3. I am registered as a Professional Engineer in the Province of British Columbia, registration number 15708. I have worked as a metallurgist/consultant for a total of 40 years since my graduation. My relevant experience for the purpose of the Technical Report is:
    - Brenda Mines Ltd. operations
    - Highland Valley Copper, staff engineer
    - National Iranian Copper Corporation, consultant
    - Brenda Process Technology, consultant
4. 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.
5. I have not visited the Vicuña Project.
6. I am responsible for Sections 12.1.4, 13, and related disclosure in Sections of 1, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer and the Vicuña Project, applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 16th day of June, 2025

(Signed & Sealed) ***Jeffrey Austin***

Jeffrey Austin, P.Eng.

29.5 Bruno Borntraeger

I, Bruno Borntraeger, P.Eng., as an author of this report entitled “NI 43-101 Technical Report on the Vicuña Project, Argentina and Chile” with an effective date of April 15, 2025 and prepared for Lundin Mining Corporation., do hereby certify that:

1. I am employed as a Specialist Geotechnical Engineer | Associate with Knight Piésold Ltd (Vancouver), with an office address of. 1400-750 West Pender St., Vancouver, BC Canada
2. I graduated from the University of British Columbia in Vancouver, Canada (Bachelor of Applied Science in Geological Engineering), in 1990.
3. I am a member in good standing of the Engineers and Geoscientists of British Columbia (License #20926). I have practiced my profession continuously for 35 years. I have been directly involved in geotechnical engineering, mine waste and water management, heap leaching, environmental compliance, mine development with practical experience in feasibility studies, detailed engineering, permitting, construction, operations and closure.
4. 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.
5. I visited the Vicuña Project on March 22, 2018 for one day and reviewed design layouts and site conditions.
6. I am responsible for overall preparation of Sections 4.2.4, 4.3.4, 4.11 to 4.14, 12.1.5, and related disclosure in Sections 1, 25, 26, and 27 of the Technical Report.
7. I am independent of the Issuer and the Vicuña Project applying the test set out in Section 1.5 of NI 43-101.
8. I have most recently been a QP for environmental and permitting aspects for the Josemaria project PFS and also the Filo del Sol PFS in 2019.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections in the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 16th day of June, 2025

(Signed & Sealed) ***Bruno Borntraeger***

Bruno Borntraeger, P.Eng.

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