

Ministerio de Minería



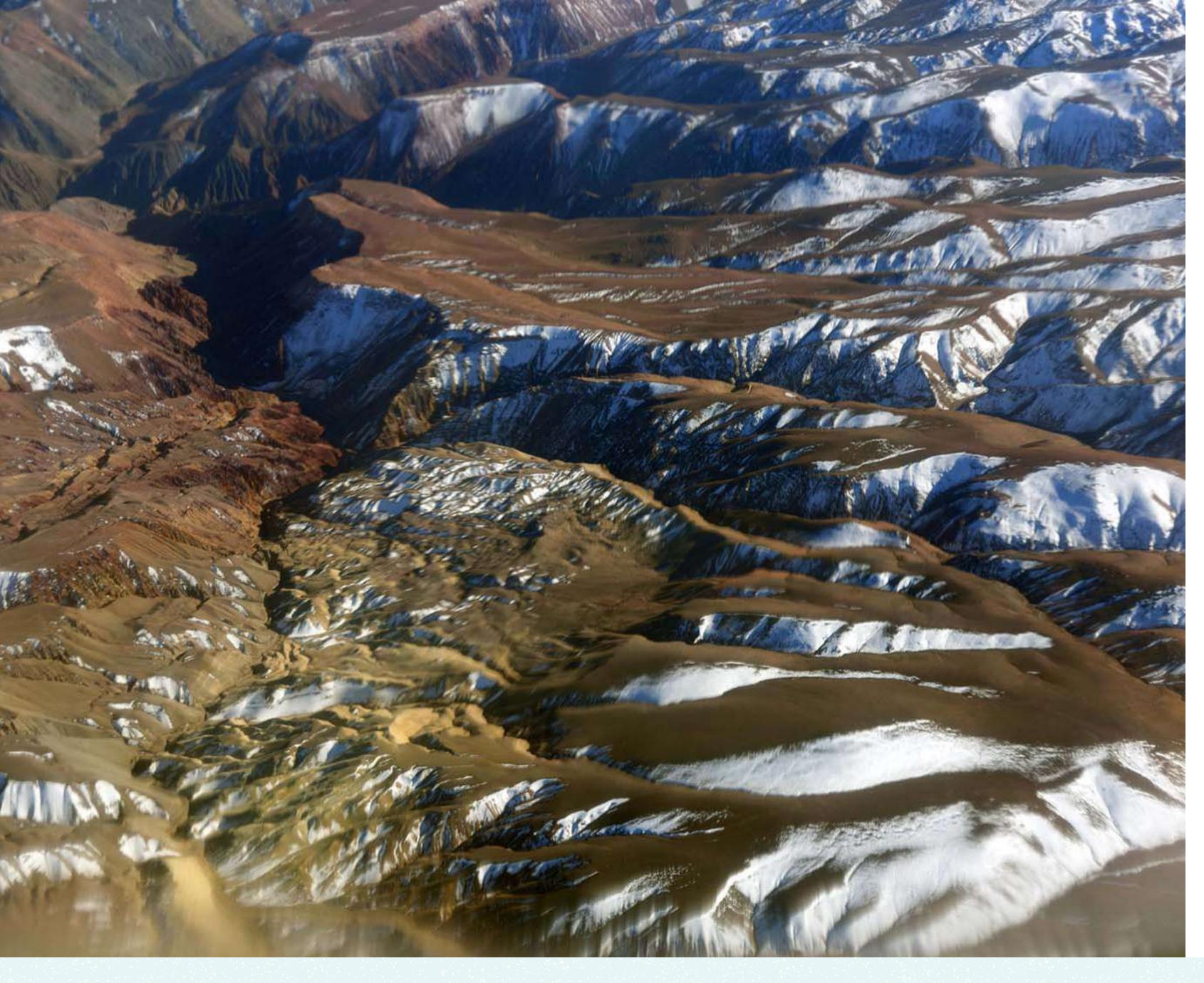
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# InvestChief

FOREIGN INVESTMENT PROMOTION AGENCY

# Chilean Mining Present for a sustainable future





The projects section included in this document was developed based on third party information. Hence, each project's reference information is the exclusive responsibility of the parties identified on each datasheet. The Ministry of Mining is not responsible for the use or misuse of this information and takes no responsibility for any commercial terms that may be agreed by providers with potential buyers.

# Fifth edition

Santiago, 2023

# **Editorial Board**

Ricardo Cerda, Ministry of Mining Eduardo Agüero, Ministry of Mining Christoff Janse, InvestChile Sofía Morales, InvestChile

# We thank the contributions of

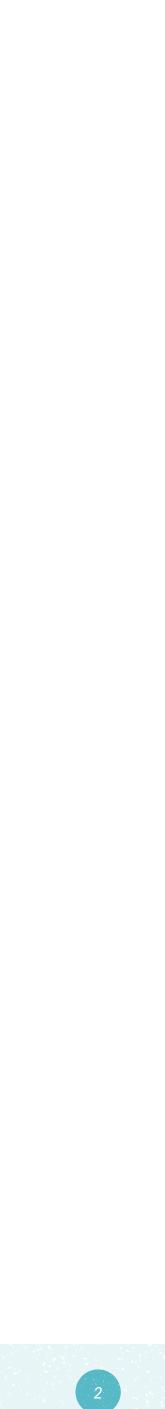
Empresa Nacional de Minería (Enami). Colegio de Geólogos and FEXMIN. Kura Minerals. Servicio Nacional de Geología y Minería (Sernageomin).

Design, layout and images

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# **Pictures**

Ronnie Zúñiga Salazar, Ministry of Mining Cover Photo Panoramic view of Caserones mine, Atacama Region





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(f) MinMineriaCL



**GREETINGS** from the Authorities

> Throughout its history, Chile has built an identity of mining excellence. The broad experience in the development of this industry has positioned our country in a leading position globally in the production of copper and other mineral resources, and has allowed us to foster specialized human capital and technological capabilities that enable the internationalization of local solutions and services of the highest standards.

> Chile is in the privileged position of possessing vast resources of minerals that are vital in the effort to mitigate global warming. We not only produce 26% of the world's copper and 35% of the world's lithium, but also have important reserves of critical minerals to accelerate electromobility and decarbonization of the energy matrix, thus addressing the technological and environmental goals of mining in the 21st century.

> This challenge offers us the unique opportunity to advance and promote a mining industry that makes progress

compatible with caring for the environment and fostering good community relations. These principles are in line with the environmental, social and governance criteria that should guide all sustainable investment management and environmentally responsible operations.

The fact that Chilean mining production has maintained a good pace in recent years, despite the difficulties imposed by the Covid-19 pandemic, is due to the industry's robustness and ability to quickly and efficiently respond and mobilize the necessary adaptations. It is this ability and the importance of Chilean mining as a key ally in the energy transition that will allow it to remain relevant and present for a sustainable future.

As a sign of our commitment to these goals, the national participation in the PDAC 2023 Convention is led by the Ministry of Mining, together with the key players in the Chilean mining sector. We represent an industry that aims to work together, generating public-private partnerships



Marcela Hernando Minister of Mining



Willy Kracht Undersecretary of Mining

and coordination that is testament to the maturity of the Chilean mining sector. A solid legal framework, socio-political stability, and the presence of world-class infrastructure for operational logistics, the availability of specialized human capital, in addition to its well-known geological riches, all position Chile as an ideal strategic partner to build the future.

Chile will be present at the 2023 PDAC convention to promote the comparative advantages for exploration investments and the value in technology and innovative services that the country's mining sector offers. This is supported by 42% of the world's lithium reserves and 23% of global copper reserves. The country boasts a 5.48% share of the global budget for mining exploration (2022), placing Chile as the leading destination for exploration in Latin America and the fourth globally. For copper alone, the exploration budget totaled US\$ 527.8 million in 2022, representing 18.9% of the global budget. Continuing with the contribution that our mining industry makes to the development of our people requires us to continue promoting mining exploration. With mining activity accounting for more than 50% of Chilean exports, including copper, molybdenum, iron and lithium, there is no doubt that the sector is a vital engine for the country's productive development. And now it is also of strategic importance for the world. Through this 2023 project portfolio, we encourage you to get to know, join and participate in our mining industry.

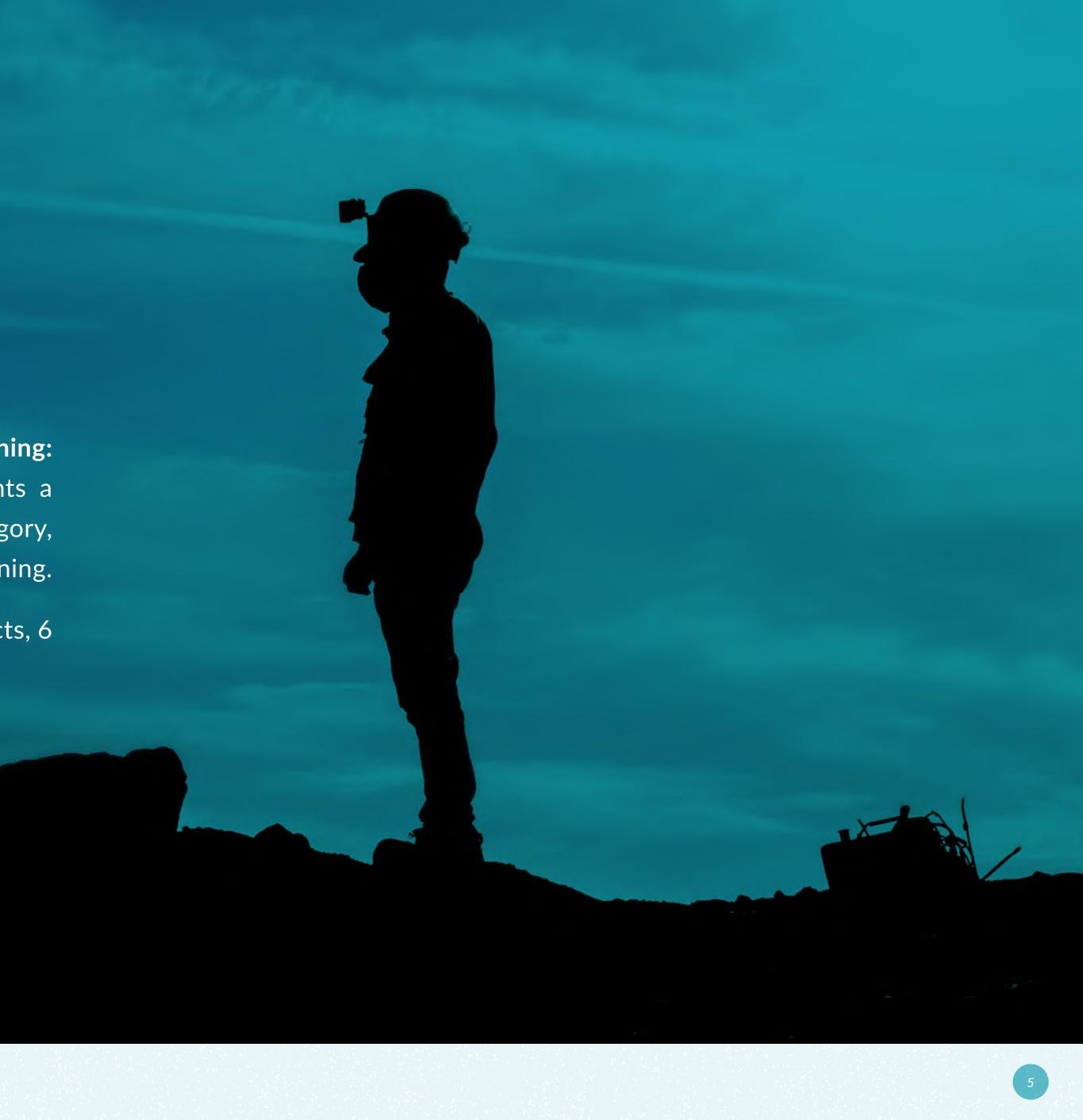
In this fifth edition of the exploration project catalogue "Chilean Mining: Present for a Sustainable Future", the Ministry of Mining presents a portfolio of 34 initiatives. Of these, 28 are in the exploration category, while 6 correspond to more advanced or pre-development stages of mining. In relation to minerals of economic interest, 17 refer to copper projects, 6 to gold, 8 to polymetallic projects, 2 to iron and 1 to other metals.



# **PROLOGUE**

In this fifth edition of the exploration project catalogue **"Chilean Mining: Present for a Sustainable Future"**, the Ministry of Mining presents a portfolio of 34 initiatives. Of these, 28 are in the exploration category, while 6 correspond to more advanced or pre-development stages of mining.

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# InvestChile

Foreign Investment Promotion Agency

www.investchile.gob.c

For this publication, InvestChile has collaborated as a partner with the goal of fostering a more sustainable mining and dynamic exploration sector.

We are the public organization that promotes Chile internationally as a destination for foreign direct investment, serving as a bridge between investor's interests and the business opportunities the country offers. We facilitate strategic partnerships for a succe investment journey, strengthening Chile as the Latin Ame Hub for global business.

We provide tailor-made and individually-focused assistance, working closely with private organizations, public institutions and ministries to plan and offer attractive sectorial projects to promote investment and growth.



# LET'S MAKE YOUR NEXT PROJECT HAPPEN!

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At every stage:	Free-of-charge speacialized services
ے پینے Prospection	<ul> <li>Knowledge &amp; Info</li> <li>FDI statistics, business opportunity facts &amp; figures</li> <li>Market insights &amp; sectorial highlights</li> <li>Legal &amp; tax information</li> <li>Detailed reports &amp; studies on installation / sector-specific costs</li> <li>Portfolios of public projects &amp; tenders</li> </ul>
م م Pre-Investment	<ul> <li>Promotion &amp; Advice</li> <li>Meeting agenda/e-meetings with public &amp; private institutions</li> <li>Investor delegations &amp; B2B meetings</li> <li>Investment roadshows, conferences &amp; workshops</li> <li>Detailed information on installation/sector-specific costs</li> <li>Investment incentives &amp; special programs (i.e., R+D+i, visas, tax deductions/credits)</li> </ul>
<b>O</b> Landing	<ul> <li>Guidance &amp; Access</li> <li>Dedicated sector expert managers speaking several languages</li> <li>Sector-specific and legal advice on starting up</li> <li>Contact with key players within the business ecosystem &amp; site visits</li> <li>Assistance in applying for financial incentives &amp; government programs</li> <li>Public-private portfolios &amp; public tenders</li> <li>Incorporation into the Regional Support Network for projects outside the Santiago Metropolitan Region</li> </ul>
စြို့ မိုး Established Company	<ul> <li>Permanent Support</li> <li>Ongoing assistance for landing &amp; expansion/re-investment</li> <li>Policy advocacy</li> <li>#InvestChileE-Consuting with immediate -free of charge- assistance to resolve your concerns</li> <li>Management of contacts and difficulties with public sector institutions to speed up your investment (i.e., permits, R&amp;D+i, human capital)</li> <li>Online Investor's Toolkit with everything you need to facilitate the landing and expansion of your investment project.</li> <li>Media management to highlight your company's contribution to the country</li> <li>Special advisory on value-added &amp; sustainable development initiatives</li> <li>Contact with public and private partners to foster synergies and cooperation</li> </ul>

Over 700 companies advised each year! InvestChile, your strategic partner



# Why invest in mining exploration in **Chile?**

We are a worldwide leader in mining. By setting up or expanding operations in the country, you will be part of a forward-looking, We are an environmentally friendly agency strengthening our commitment to promoting sustainable development in Chile. Our promotional material is mostly digital, which helps us to spread the word about 'Why Chile' is the ideal destination for your integrated and sustainable mining sector, operating inside a mature & stable ecosystem that includes all of the sector's global players. project to thrive. Especially, in these challenging times, strongly supporting the operation of your company so you can speed up your business remotely.

Some of our country's attributes:

### Location:

When it comes to metals Chile has got it. The world's biggest producer of copper; large lithium reserves with very competitive production costs, gold and iron ore, to name only a few of our mineral endowments.

#### **Experience**:

We are leaders in the mining sector. Our competitive edge and solid economic foundations makes us a top mining country globally.

#### Vision of the future:

Chile is the Latin American Hub, exporting mining technology services to 39 markets. We have signed more Free Trade Agreements that anyone on the planet; guaranteeing special trade tariffs with 88% of the global GDP.



## **Request e-Consulting**

Get in touch with us! A multicultural/multilingual team of professionals is available to offer you remote and immediate specialized services, at every stage of you investment project. www.investchile.gob.cl

# **#InvestChileTools to power up your business**



# 'How to invest in Chile' Guide

A complete guide to setting up your business operations. Steps for landing Incentives for foreign investment/ Intellectual Property/ Chile's tax structure/ Environmental legislation/ Visas & foreign citizens/ Personal data protection legislation/Labor laws and social security.



# **InvestChile Talks** | The Power of Dialogue

Talks and events with speakers from the public & private sectors on the economic situation and investment opportunities in Chile.



# Sectorial e-Books

Projections & opportunities in Food, Energy, Mining, Venture Capital and Global Services & Digital Economy, Pharmaceutical Industry, Recycling Infrastructure in Chile.



# InvestChile Insights

Reports, studies and guides that address FDIrelated topics.



# **Investment Portfolios**

This public-private portfolio includes over 30 projects in Mining & other sectors (Infrastructure, Tourism & Energy).

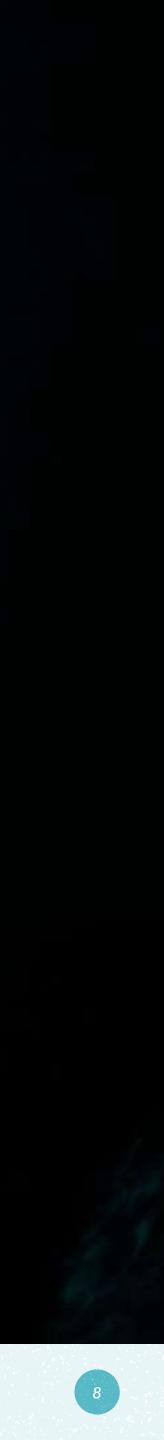


# China desk

Assistance, tools and contents in Mandarin to facilitate your arrival and expansion in Chile.



# ACKNOWLEDGEMENTS







https://www.enami.cl/

# https://www.fexmin.cl/

Founded in 1960, the National Mining Company, ENAMI aims to promote the development of small and medium scale mining, providing the services required to access the refined metals market, under competitive conditions. In order to fulfill its objective, ENAMI relies on the management of three financial instruments: for Mining Development, Minerals Beneficiation and Smelting and Refining.

Today, there are hundreds of producers who carry out their mining activities thanks to the permanent support of the institution, generating more than 20,000 direct jobs and contributing to the development of economies of scale at the local and national level. FEXMIN, the Exploration and Mining Convention, is organized by the Chilean Geologists Association and held annually in Santiago, Chile.

Its objective is the promotion and exhibition of mining properties as well as mining and exploration projects of various sizes, creating opportunities for explorers, entrepreneurs and investors.

In addition to the exhibition of the projects in booths and presentations, conferences and specialist forums are held to discuss new discoveries, technologies, and the future of mining exploration.





https://kuraminerals.com/

https://www.sernageomin.cl/

Kura Minerals is a boutique consultancy firm that was created with the goal of resolving the market asymmetry that affects the mineral exploration sector in Chile. The Kura Minerals team possesses extensive experience in the mining sector, having worked at major multinationals, and its professionals combine their backgrounds in both geology and law to offer clients advisory services of excellence. The National Geology and Mining Service (Sernageomin) is a Chilean state public service created in 1980, under the Ministry of Mining. It oversees specialized research and mapping of various aspects of the earth's crust, mainly related to the identification of productive resources (geothermal, hydrogeological, metallic, and non-metallic minerals); and monitoring and identifying geological hazards such as river overflows, tsunami floods, seismic resistance, volcanic eruptions, as well as landslides and rockfalls.



# **CHILE,** *a strategic partner to build the future*





In 2021, Chile reached a production of 5.62 million tons of fine copper. The 26% market share of global copper Other production highlights in 2021 include 49.4 thousand tons of molybdenum, 34.2 tons of gold, 1,383 tons of production and new greenfield and brownfield projects will allow Chile to maintain this historical position.



<sup>1</sup> Base on data published by Sernageomin. Copper production information by Cochilco.



# **EXAMPLE 1 Fortfolio 2022 - 2031**<sup>2</sup>

The updated mining investment project pipeline for the 2022-2031 period considers 53 initiatives valued at US\$ 73,655 million. The increase of 6.9% with respect to last year's portfolio stands out in this version, resulting from the exit of 7 projects (2 due to restructuring and 5 due to the start of production) and the inclusion of 9 initiatives in various stages of development, totaling 2 more projects than previously registered. Of the total amount, investments of US\$ 12,733 million have already materialized, with a total of US\$ 46,323 million, 62.9% of the portfolio, remaining to be invested during the five-year period 2022-2026, and the remainder between 2027 and 2031. During the five-year period, 45 of the 53 registered projects will be materialized, with the first projects expected to be commissioned during the remainder of this year. Thus, 58% of the portfolio will come into operation between 2021 and 2026, and 12 projects, equivalent to 41% of the portfolio, will materialize beyond 2026.

# The Antofagasta region, with a

Of the portfolio, 26% corresponds to **CODELCO** and **ENAMI** projects. Of the 53 initiatives registered 24 **involve the use of desalinated** or non-desalinated water, of which eight already have facilities in operation today, two will acquire the resource from a third party, and 14 initiatives will require the supply of new plants in the next ten years.

**39%** of the portfolio corresponds to greenfield projects, which is equivalent to **23 of the 53** initiatives registered.

<sup>2</sup> Based on information from Cochilco, according to data published in the report "Inversión en la minería chilena - Cartera de proyectos 2022 - 2031". <sup>3</sup> Based on information from Cochilco, according to data published in the report "Catastro de empresas exploradoras 2022".

share in this portfolio, is the most important region **O**/ in terms of investment, with copper as the main **O** target mineral with **93.5% of the region's total.** 

> **41** of the **53** initiatives seek to produce copper.

In terms of exploration, in 2022 the exploration budget in Chile reached US\$713.2 million and comprised a 5.48% share of the global budget. This represents an increase of 30% in relation to 2021, and once again positions Chile as the main exploration destination in Latin America, and the fourth country in terms of exploration budget allocation globally. This increase is mainly due to the end of the sanitary restrictions associated with the pandemic outbreak of COVID 19, and the high prices of certain minerals registered in 2021 and 2022, such as Copper, Gold and Lithium. There are 88 companies with exploration projects in Chile, of which 76 are juniors, 7 are medium-sized and 5 are state-owned or other. They come mainly from Canada and Australia, and their main source of financing is the issuance of shares in stock exchanges specialized in mining and exploration. Finally, considering 88 companies, 62 of them have prospects that have reported exploration activity in the last twelve months.<sup>3</sup>



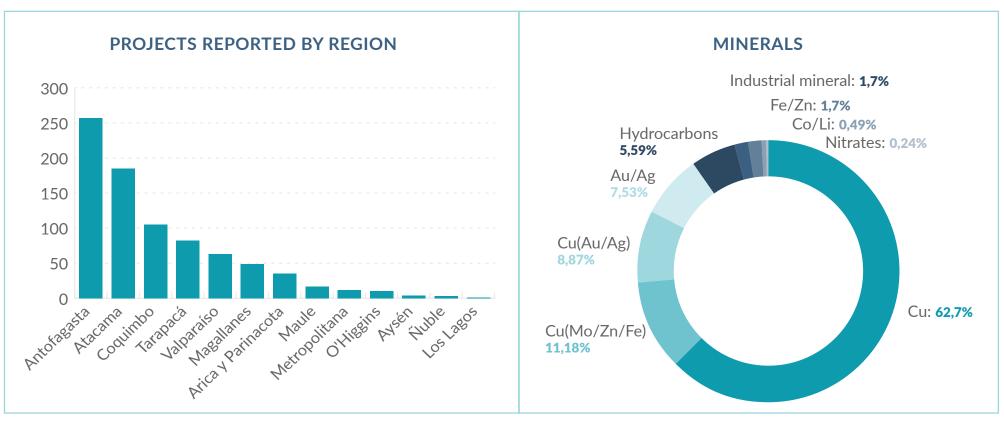
# **GEOLOGICAL** Exploration Information Platform (SIGEX) - Sernageomin

The new SIGEX platform displays the status of exploration projects reported to SERNAGEOMIN, allowing visualization through indicators and interactive graphics with the map. This is complemented with the option to download the reported data. The new SIGEX platform is an invitation to know the status of exploration projects in Chile.

TOTAL PROJECTS <b>815</b> IN AREA	NUMBER OF DRILL COLLARS 5,3 k
PROJECTS WITH	PROJECTS WITH
GEOLOGICAL MAP	GEOPHYSICS
<b>553</b>	<b>234</b>
IN AREA	IN AREA
PROJECTS WITH	PROJECTS WITH
SURFACE SAMPLES	GEOCHEMISTRY
<b>398</b> IN AREA	<b>145</b>
PROJECTS WITH	PROJECTS WITH
PETROGRAPHY	ABSOLUTE DATING
<b>67</b>	<b>119</b>
IN AREA	IN AREA

"SIGEX in its commitment to maintain a living, dynamic platform with updated content, today has available a new viewer renewed and enhanced with strategic information that invites exploration, investment and research in our country".





Some of the new features of SIGEX:

#### National coverage of drill collars:

- *a*) Making available 5,500 drillholes deployed throughout the national territory.
- b) 406 projects with drillholes.
- c) More than 340,000 m drilled available.
- d) Classified by type of drilling.
- e) Drillhole viewer with meters drilled per project.

The amount of information available per project is increased.

## National coverage of drill collars:

- *a*) 550 projects deployed in the national territory.
- b) Approximately more than >50,000 Km2 of exploration project areas.

The SIGEX update variable is incorporated, which filters the latest projects uploaded to the platform.

Chile's large operations are incorporated.

The Metallogenic Fringes are incorporated.

A user experience survey is incorporated to get user feedback, recommendations and communication about the platform.

"In the age of data and data science, SIGEX incorporates new geospatial information that enriches the platform and allows users to be able to review and evaluate reported projects more informed."





This version of the project catalogue includes a total of 34 projects focused on materializing national mid-mining The selected exploration projects are classified into four categories based on their development stages, such as industry initiatives. generative exploration, follow-up exploration, advanced exploration, and pre-development stage.

# **Basic Generative Exploration**

Focuses efforts on defining area(s) of interest (region) and identifying drilling targets. The first stage of basic exploration.

# **Basic Follow-up Exploration**

Exploration that through the identification of targets obtained during the generative exploration stage allows the discovery of relevant mineralization and, consequently, the identification or finding of ore bodies, that enables to identify main ores and type of deposit available. This stage closes the basic exploration stage.

# Advanced **Exploration**

Exploration stage where information obtained during the basic exploration stage (generative and follow-up) is analyzed to outline resources and define deposits with economic value. Under this stage pre-studies such as scoping studies or pre-feasibility studies are generated.

# **Mining Pre**development

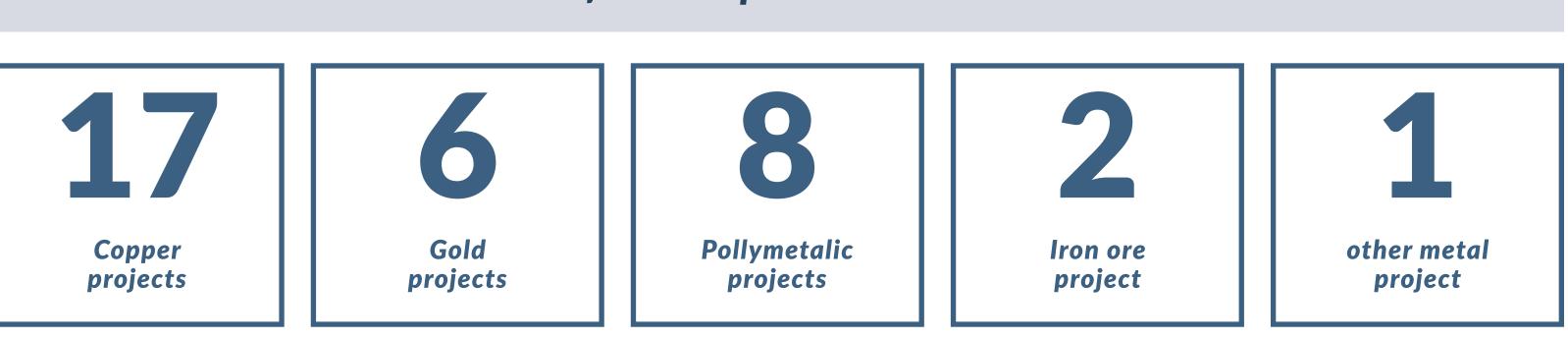
Stage under which the project's technical-economic or pre-feasibility studies are performed. During this legal phase, environmental (EIA), mining and investment plans or assessments are drawn, as well as evaluation of costs for the proposal of the mine-plant project.



Based on this classification, 28 basic exploration projects with their corresponding follow-up or generative stages are included; 4 projects correspond to the advanced exploration stage and 2 to the predevelopment stage.

Based on the type of mineralization of every project,17 correspond to copper, 6 to gold, 8 to pollymetalic,2 iron ore projects and, lastly, 1 to other metal project.





# Classification per stage



# **Classification per mineralization**



# **PROJECTS** by regional location

# **Antofagasta Region:** 7

- o Pampa Paciencia
- o Cerro Cumbre
- 0 Imilac
- ି Río Frío
- o Celinda
- Paloma
- ි Toro Rosa

# Coquimbo Region: 8

- 0 Atacamita
- o Molibdenita
- ି Megalo
- ି La Viuda
- o Los Rulos
- o Joshua
- o Samuel
- o Blanco y Negro

# **Ñuble Region:** 1

ං Minas del Prado

# Tarapacá Region: 2

O Leoncito El Loa ◊ Paguanta

# Atacama Region: 13

- O América
- o El Morado
- 0 Atenea
- 0 Los Negritos
- o Tesoro Negro

# Valparaíso Region: 1 o Plateado

**O'Higgins Region:** 1 O Catedral

# Aysén Region: 1

• Cerro Bayo

♦ Fénix Gold

o Tres Puntas

Cerro Negro

O Pastenes

- 0 Esperanza 0 Florita-Pazota
- Los Azules
- o Jerusalem

- Basic exploration projects (Generative)
- Basic exploration projects (Follow-up)
- Advanced exploration projects
- Predevelopment projects



# Basic GENERATIVE EXPLORATION PROJECTS

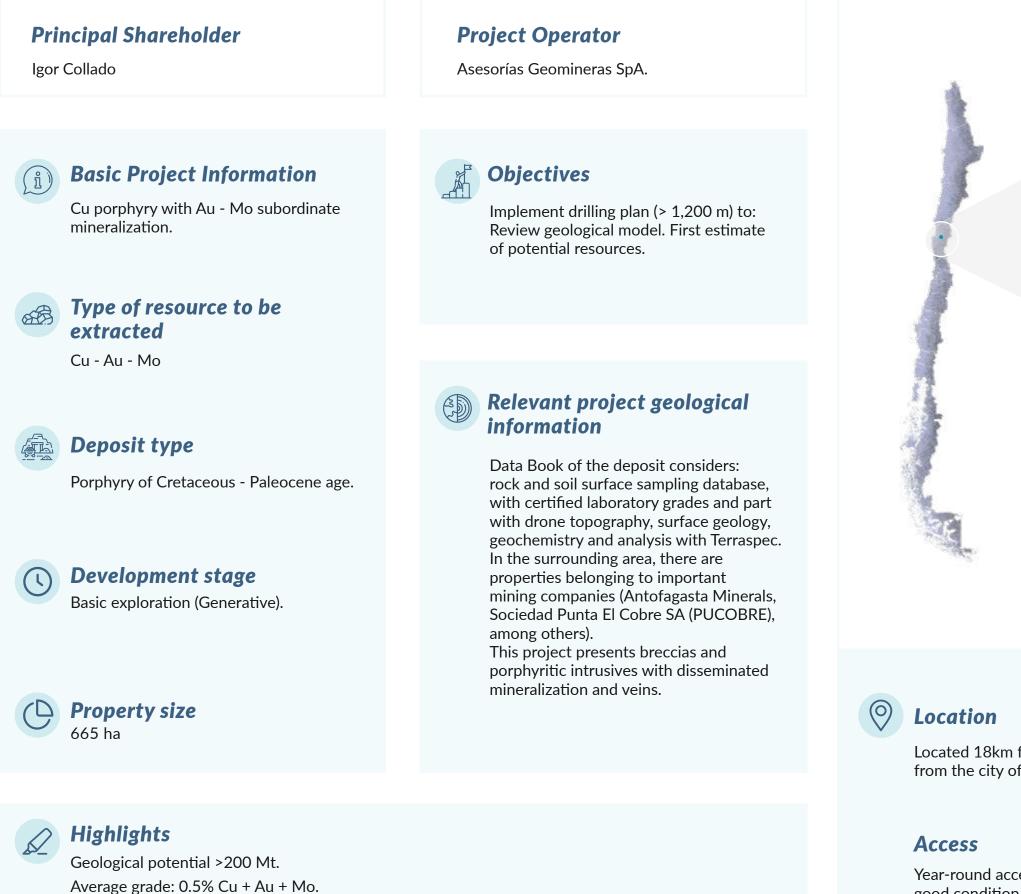






#### **Contact:** Igor Collado

@: igor.collado@gmail.com



Located in a Historic Mining District, where there is little small and medium scalemining development.

Close to mineral buying powers, ports and supply centers.

**CHILEAN MINING** Present for a sustainable future

# **Basic Generative Exploration**



Coquimbo Region

Located 18km from the town of Combarbalá and 175km from the city of La Serena, Coquimbo region.

Year-round access on paved and stone aggregate roads in good condition.







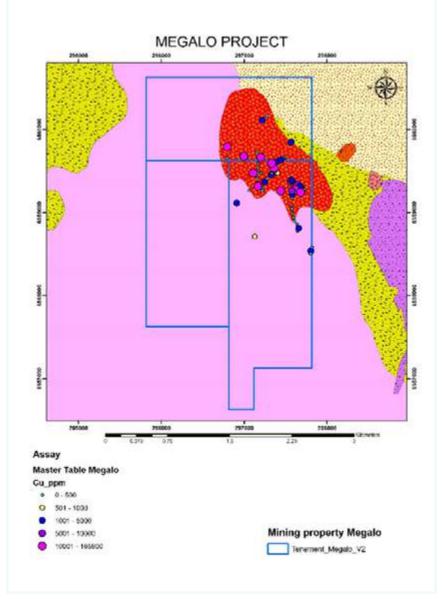
## Target

- Cu Oxidized + Cu Enrichment Surface Zone.
- Sulphide Cu Surface Zone (Primary) and Enrichment Zone.



## **Description of Company**/ **Economic Group**

Group of exploration professionals focused on the development of exploration projects.



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#### **Contact:** Igor Collado

@: igor.collado@gmail.com

**Project Operator** 

Objectives

information

among others).

of potential resources.

Implement drilling plan (> 1,000 m) to:

Relevant project geological

Data Book of the deposit considers:

In the surrounding area, there are properties belonging to important

This project presents breccias and

mineralization and veins.

rock and soil surface sampling database, with certified laboratory grades and part

with drone topography, surface geology,

mining companies (Antofagasta Minerals,

Sociedad Punta El Cobre SA (PUCOBRE),

porphyritic intrusives with disseminated

geochemistry and analysis with Terraspec.

Review geological model. First estimate

Asesorías Geomineras SpA.

# **Principal Shareholder**

Igor Collado



# **Basic Project Information**

Cu porphyry with Au - Mo subordinate mineralization.

#### Type of resource to be extracted

Cu - Au - Mo



### **Deposit type**

Porphyry of Cretaceous - Paleocene age.



### Development stage

Basic exploration (Generative).

# $(\bigcirc$

**Property size** 700 ha



# Highlights

Geological potential >100 Mt. Average grade: 0.5% Cu + Au + Mo. Located in a Historic Mining District, where there is little small and medium scale mining development. Close to mineral buying powers, ports and supply centers.

 $(\mathbf{0})$ Location

region.

# Access

# **Basic Generative Exploration**



Coquimbo Region

Located 10km from the town of Combarbala and 180km from the city of La Serena, Coquimbo

Year-round access on paved and stone aggregate roads in good condition.



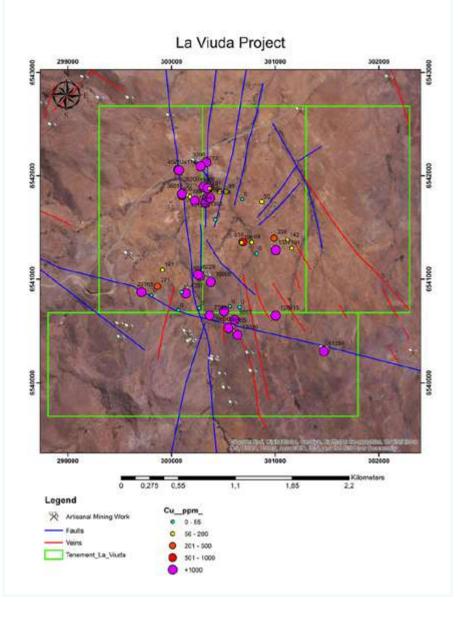


### Target

- Cu Oxidized + Cu Enrichment Surface Zone.
- Sulphide Cu Surface Zone (Primary) and Enrichment Zone.

### **Description of** Company/Economic Group

Group of exploration professionals focused on the development of exploration projects.







**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

# **Project Operator**

Empresa Nacional de Minería (Enami)



# **Basic Project Information**

Cu porphyry with Mo subordinate mineralization.



#### Type of resource to be extracted

Pórfido de edad Cretácico - Paleoceno.

Cu - Mo

**Deposit type** 

**Development stage** 

Basic exploration (Generative).



### Objectives

Implementar plan de Sondajes (> 1.000 m) para: Revisar modelo geológico. Primera estimación de recursos potenciales.



## Relevant project geological information

Geological exploration in the area is of a generative nature, with a geological map, surface geochemical samples, aeromagnetic profiles and 23km of IP geophysical lines.





km 1,160 of route 5N.

Access

10,000 ha

**Property size** 

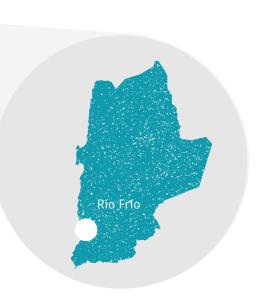
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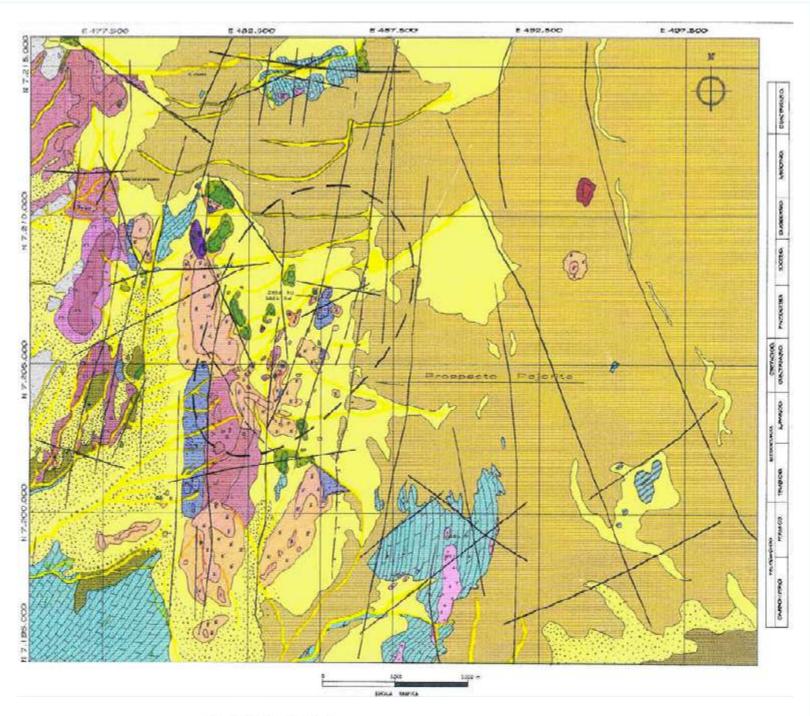
# Highlights

The predominant structural feature is characterized by north-south oriented reverse and normal faults that could correspond to the continuation of the western fault system at Chuquicamata.

# **Basic Generative Exploration**



Antofagasta Region



LEYENDA



Located 191km east of Tal tal, Antofagasta region.

Access through 90km of secondary roads from



# **MINAS DEL PRADO**

## **Contact:** Martin Engel

@: martin.engel.prieto@gmail.com

**Principal Shareholder** Inversiones del Prado Ltda. e Inversiones Coihueco SpA.

Type of resource to be

# **Basic Project Information**

Epithermal.

extracted

**Deposit type** 

Au

Epithermal, late Tertiary - Quaternary age

# **Development stage**

Basic exploration (Generative).

# **Property size**

414 ha

(þ

# Highlights

A surface area of 200 to 300 m2 is defined for exploration of a high tonnage, low grade gold deposit. The deposit has been the subject of several studies (José Frutos 1989, Ricardo Lagos Jaramillo 1988, Asarco 1981, Minera Phelps Dodge 1984, Jozef Ambrus 1980, BRGM Vincent and Boudet and Enami).

The deposit has been exploited by quarrying and subway workings.

# **Project Operator**

SCM Minas del Prado

**Objectives** 

Exploration program to measure more accurately the reserves and the potential of the deposit. With excavation of 800 m of galleries distributed in 4 sectors of the deposit.

# **Relevant project geological** information

It has three DDH drill holes with a total of 429m oriented to recognize the Ramaznes, Rodemil Perez and Pique Palma sectors at depth.

The mineralization is mainly in veins and veinlets of quartz, pyrite and limonite associated to hydrothermal breccia zones with abundant silicification and pyritization.

It seems feasible to apply the model enunciated by Ambrus and defined by Frutos that characterizes the deposit as a dome or mushroom-shaped volcanic center that thins at depth.

# Location

region.

# Access

Minas del Prado.

# **Basic Generative Exploration**



Nuble Region

Located 53km east of the town of Chillan at 500masl in the foothills of the northern foothills of the Alto del Padre mountain, Coihueco, Ñuble

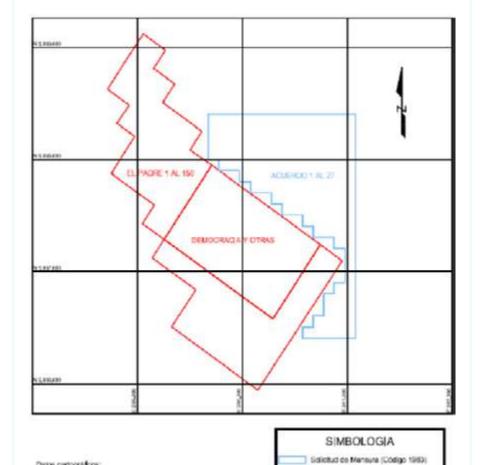
Access by rural and forest roads all year round, from Chillan 26km to Coihueco by paved road and then 27km by dirt road to the town of





Target

- Ramazones Quarry. Presence of intensely silicified hydrothermal breccia with a high density of veinlets, where a stock work has developed in the breccia and in the agglomerate. A mineralized zone has been recognized down to 50 m depth.
- Rodemil Perez vein. To the SW of the vein zone.
- San Lorenzo sector. Vein up to a little more than 1 m thick, included as a zone of composite veinlets in the hydrothermal breccia. Shallow oxidized part and SW extension of the San Lorenzo vein zone. 20,000 t grading 3 gr/t.
- Pique Palma. Mineralization associated with NS vetiform body parallel to andesitic dyke that shows great continuity and outcrops to the W of the Ramazones quarry.



Datos cartogotificos: Elipsoide Internacional de 1924 Datum Provisionio Budamericano La Canas 1966 Huas 19

**Basic Follow-up Exploration** 

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Concestion de explotación (Código 193





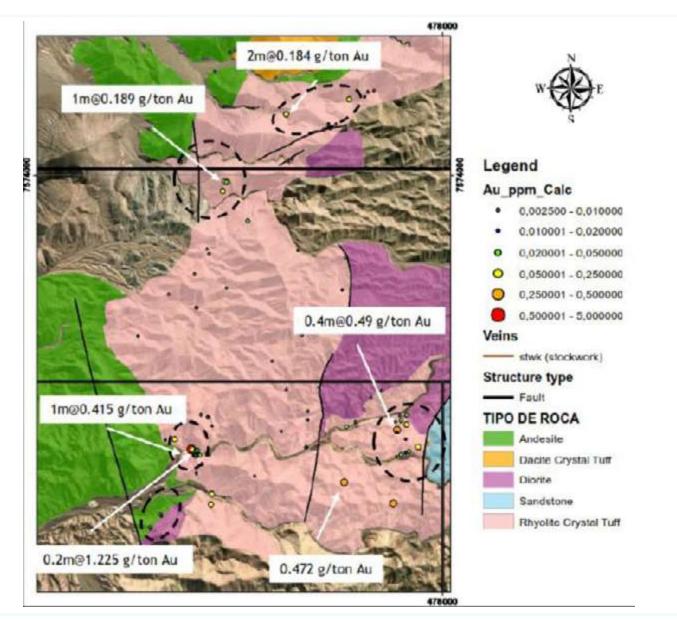
**Contact:** Thomas Eggers

@: teggers@kuraminerals.com



# **Basic Generative Exploration**

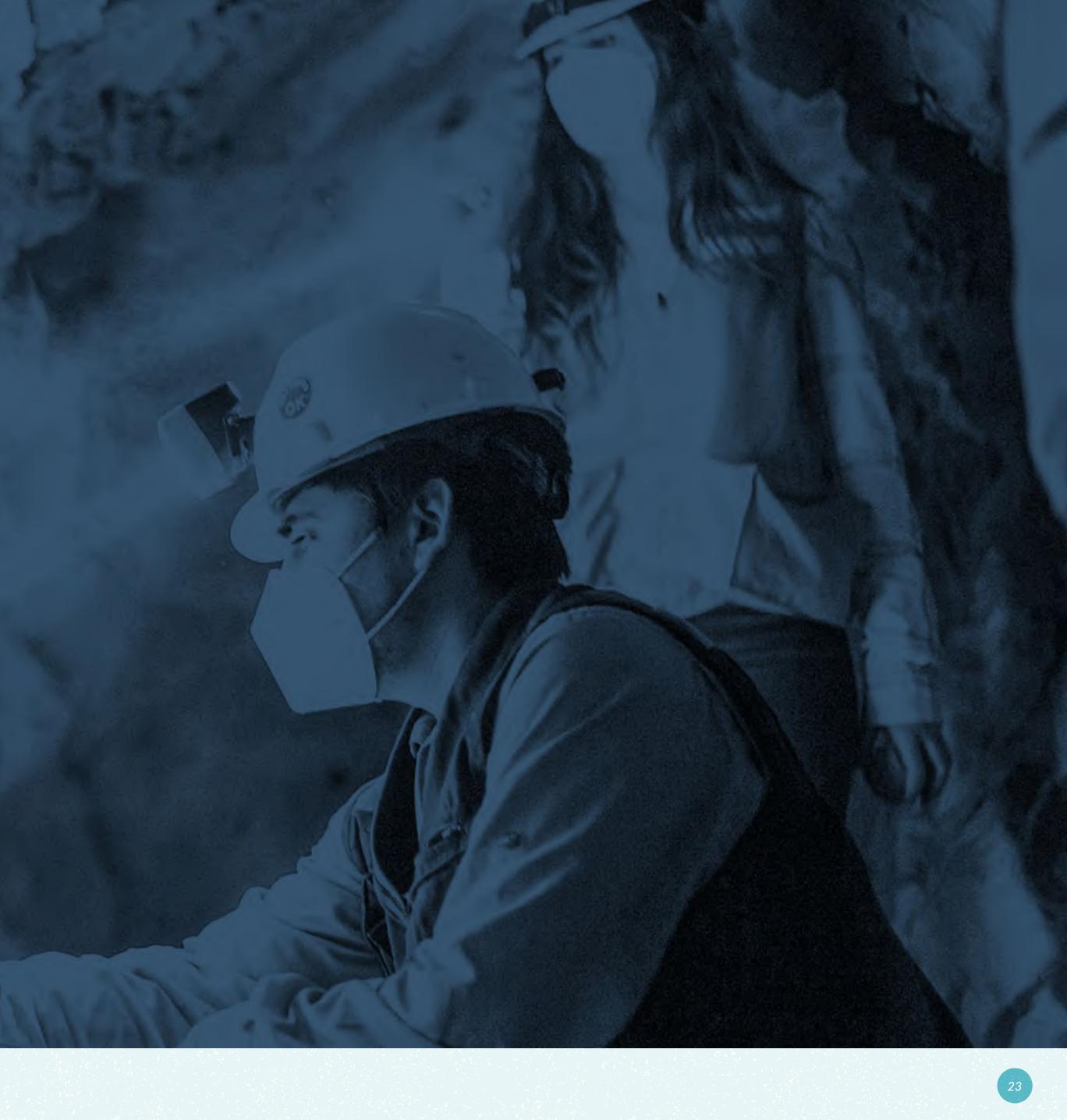




22



# Basic FOLLOW-UP EXPLORATION PROJECTS





# **Contact:** Álvaro Cruz / acruz@galgocapital.cl Nicolás Bañados / nbanados@galgocapital.cl

<b>Form of Financing</b> Private Funds.	<b>Project Operator</b> Minera Bornita SpA.	<b>Principal Shareho</b> Inversiones Hualtatas Sp
(i) <b>Basic Project Information</b> Cu porphyry with Mo mineralization.	<b>Objectives</b> Deep drilling (>500 m) throughout the structural corridor.	
Type of resource to be extracted Cu - Mo	Relevant project geological information	
Deposit type Disseminated of Paleocene age.	and drill hole information DDH 3,907 m. Structural corridor of alteration and mineralization of about 4.5 km in NW direction. With plenty of room for further drilling.	
<b>Development stage</b> Basic exploration (Follow-up).	Description of Company/ Economic Group Group of professionals focused on the	
Property size 3,300 ha	development of mining projects.	<b>O</b> Location
Highlights Potencial geológico >500 Mt. Ley media: 0,5% Cu Eq (Mo).	<b>Best Drilling Intercept</b> 42m @1352ppm Cu / 128ppm Mo.	Located 85km sou Atacama region. <b>Access</b> Year-round access

# **Basic Follow-up Exploration**

# holder

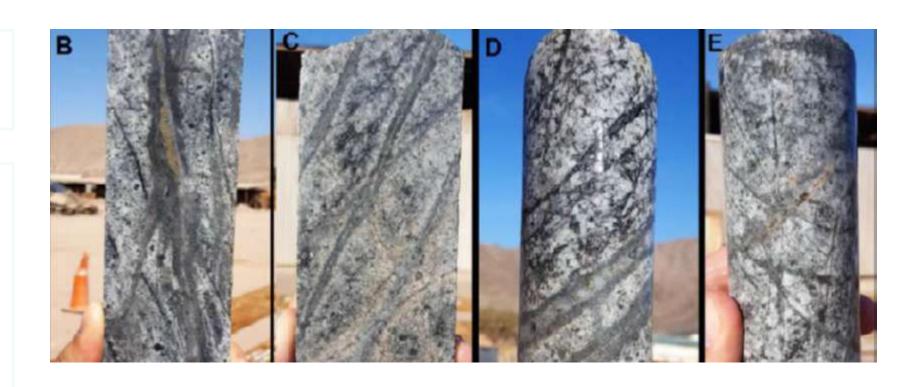
SpA.

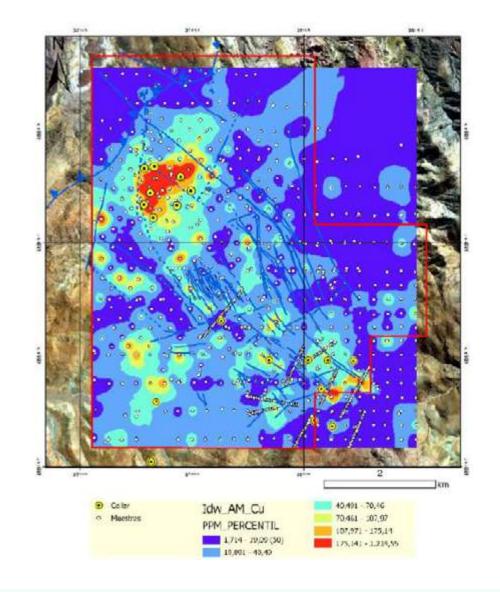


Atacama Region

outheast of the city of Copiapó,

ss on gravel roads.





**Basic Generative Exploration** 

**Basic Follow-up Exploration** 

Advanced Exploration

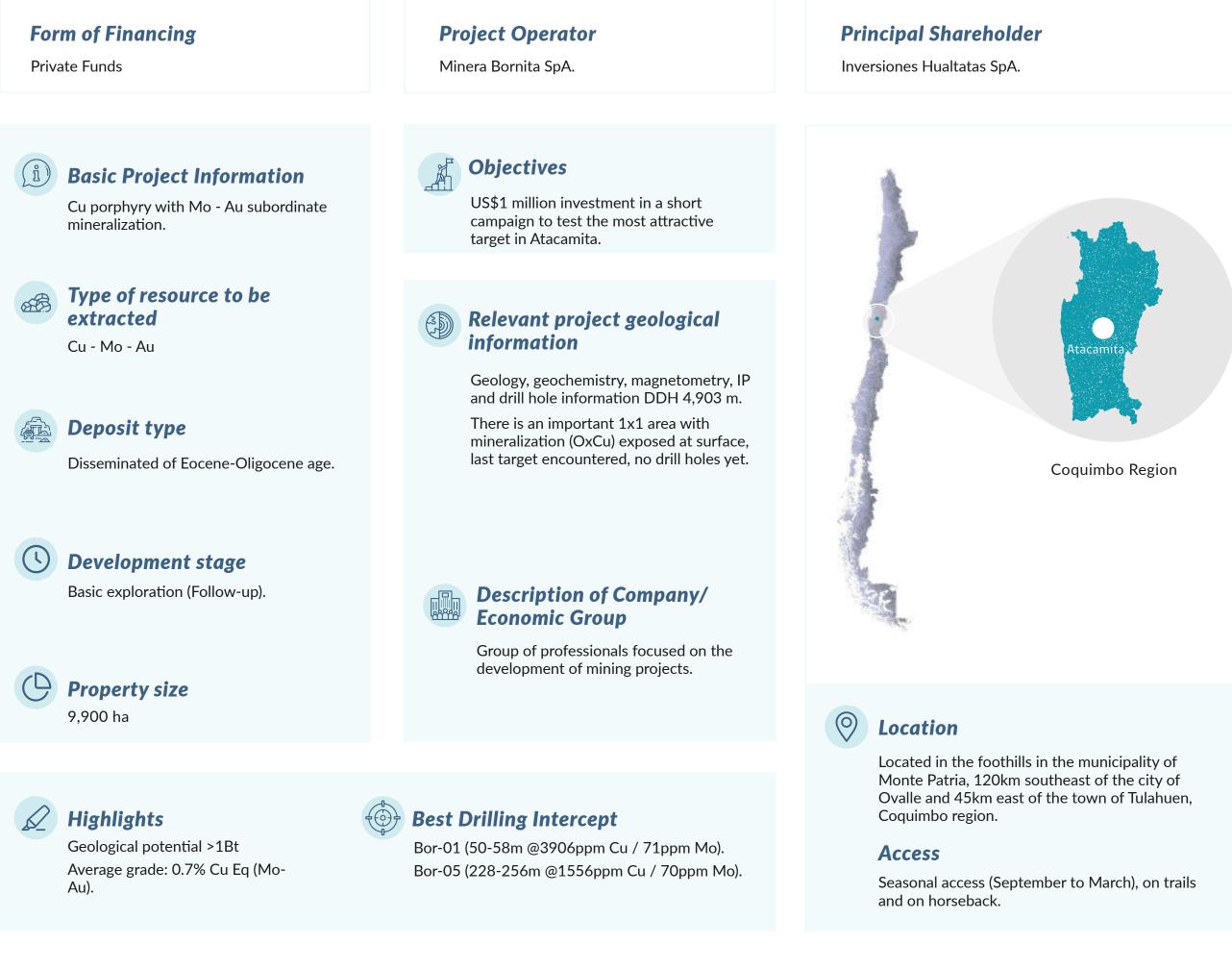
Mining Pre-development

24



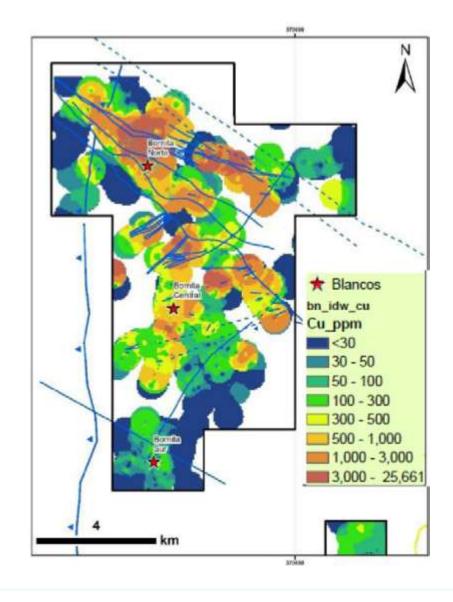


# **Contact:** Álvaro Cruz / acruz@galgocapital.cl Nicolás Bañados / nbanados@galgocapital.cl



# **Basic Follow-up Exploration**





**Basic Follow-up Exploration** 

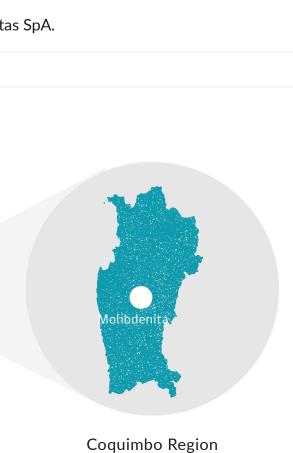




# **Contact:** Álvaro Cruz / acruz@galgocapital.cl Nicolás Bañados / nbanados@galgocapital.cl

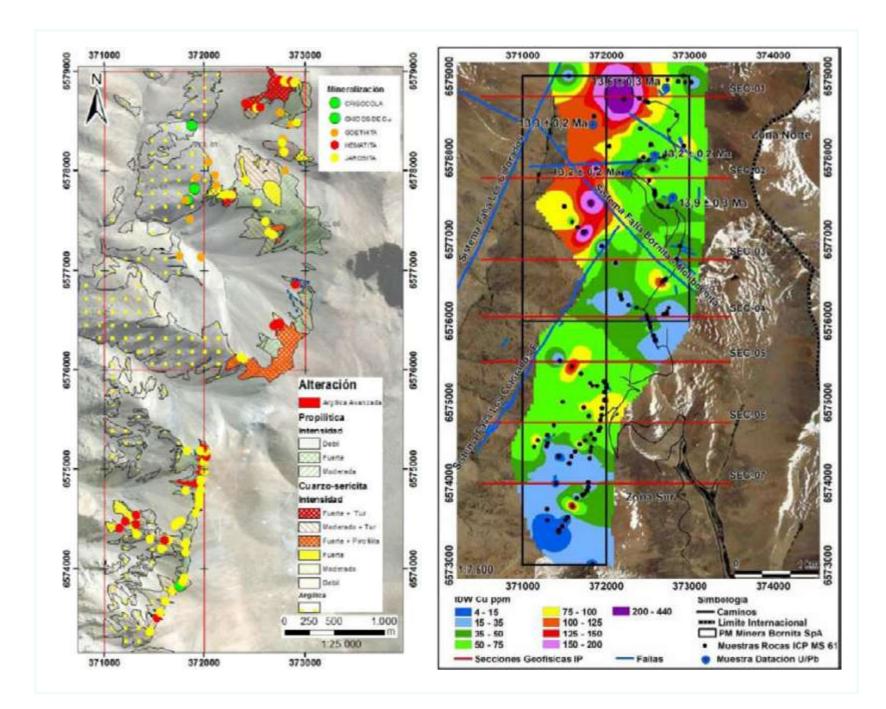
<b>Form of Financing</b> Private Funds.	<b>Project Operator</b> Minera Bornita SpA.	<b>Principal Shareholder</b> Inversiones Hualtatas SpA.
Basic Project Information Disseminated Cu - Mo - Au mineralization.	<b>Objectives</b> Invertir US\$1M en una campaña corta para testear el blanco mas atractivo en Atacamita.	
Type of resource to be extracted Cu - Mo - Au	Relevant project geological information	
Deposit type Disseminated of Miocene age.	Geology, geochemistry, magnetometry, IP and drill hole information 1,238 m.	
<b>Development stage</b> Basic exploration (Follow-up).	Highlights Geological potential >1Bt. Average grade: 0.7% Cu Eq (Mo- Au).	
Property size 900 ha		<b>Decation</b>
<b>Description of Company/Economi</b> Group of professionals focused on the develop		Located in the foothills of the cite of the cite of the town of Tulahue <b>Access</b> Access by season (Septembre secondary road.

# **Basic Follow-up Exploration**



othills of the Monte Patria district, t of the city of Ovalle and 48km of Tulahuén, Coquimbo region.

(September to March), by

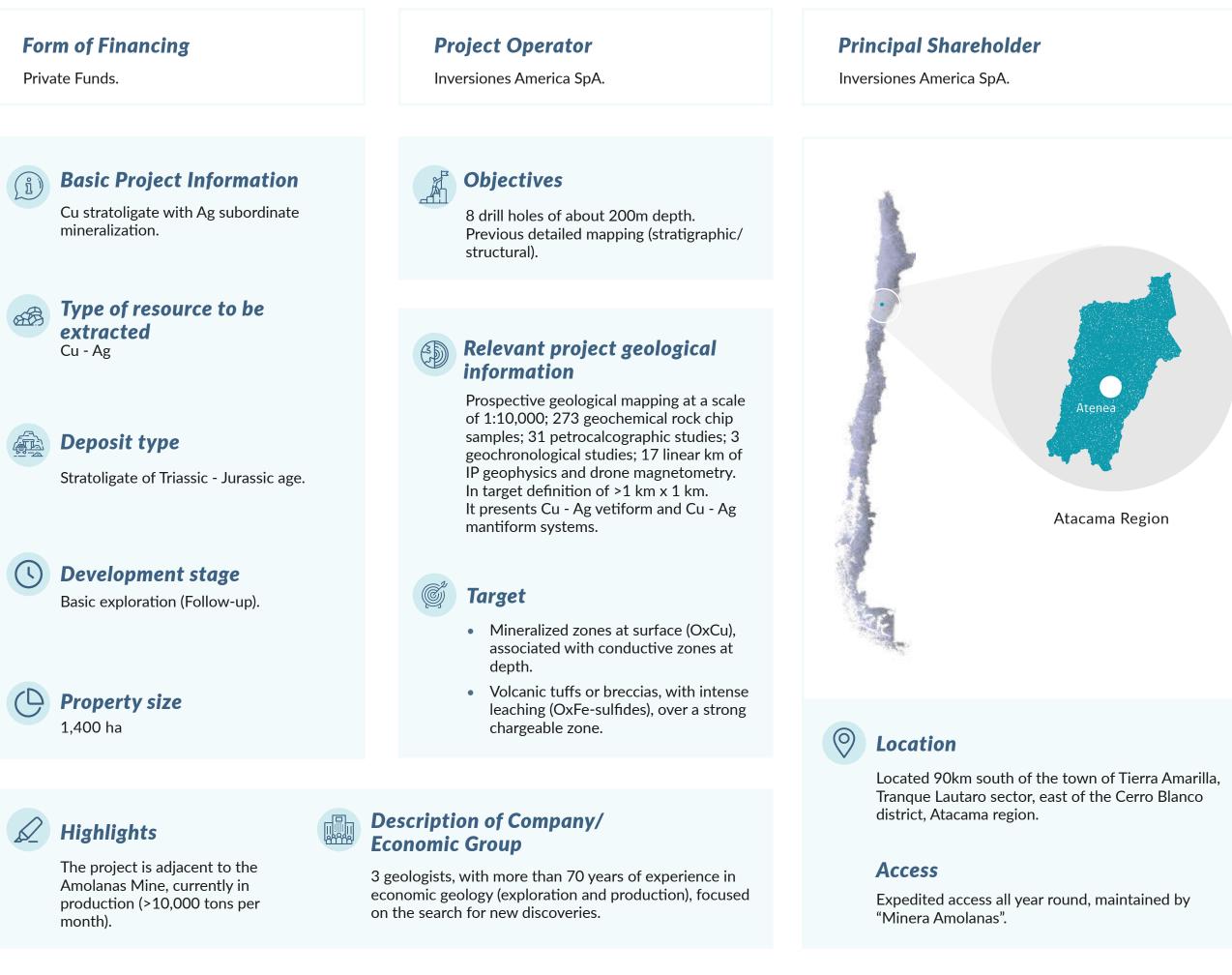


**Basic Generative Exploration** 





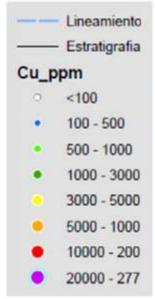
#### **Contact:** Javier Díaz @: javdiazs79@gmail.com



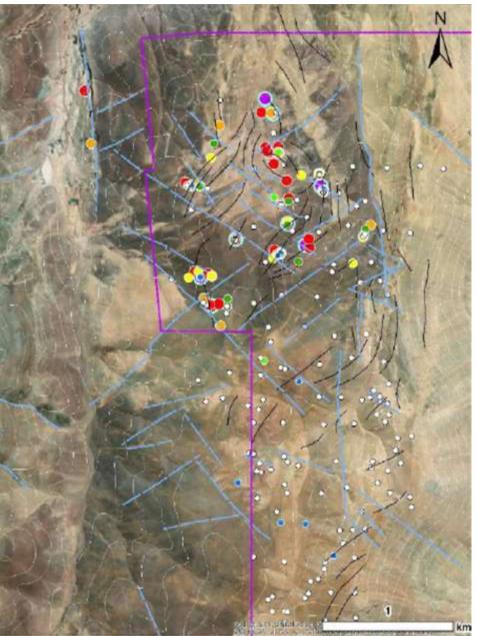
# **Basic Follow-up Exploration**











**Basic Follow-up Exploration** 

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# **BLANCO Y NEGRO**

#### **Contact:** Alamiro San Francisco Vera

@: asfcomin@gmail.com



# Highlights

The vein has a N30°W/55°W orientation, located in a regional structural train of similar direction, with a variable width of 19m - 30m, where the "La Cocinera" mine is also located. There have been 29 drill holes (DDH-RC) with a total amount of 3,732m, with magnetometry analysis and three IP lines perpendicular to the main structure. During 2011, 1640 tons were mined with a grade of 1.9% soluble Cu (Enami).

Location

 $\bigcirc$ 

Access

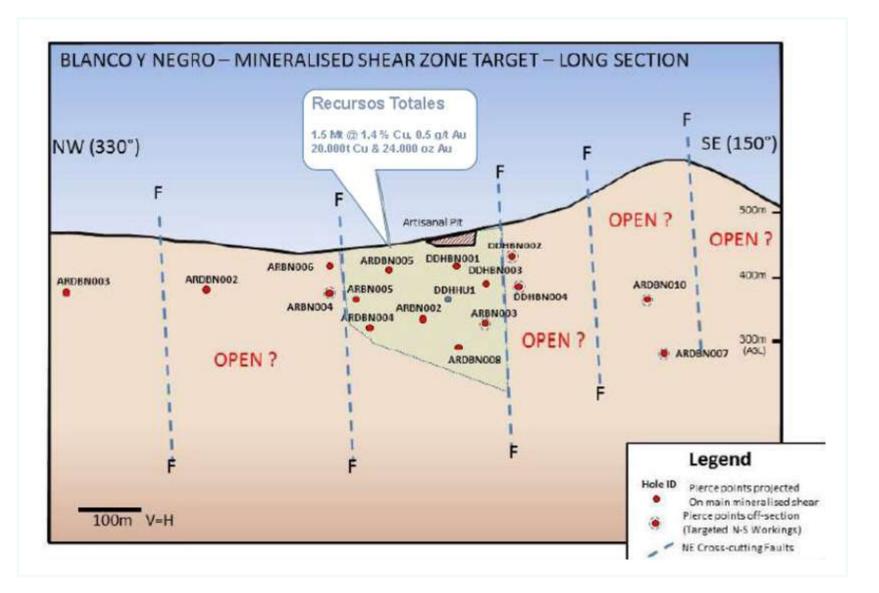
Year-round access by paved and dirt roads.

# **Basic Follow-up Exploration**



Coquimbo Region

Located 14km southeast of the city of Ovalle, Coquimbo region. This prospect is located at an average altitude of 450 meters above sea level.





 Information on geophysical magnetometry and IP, drilling and rock geochemistry.

Description of Company/ **Economic Group** 

> Company focused on the mining business.

### SONDAJE DDHHU12- 001. TRAMO MINERALIZADO19.45M DESDE 85.5M



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Contact: Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

# **Project Operator**

Empresa Nacional de Minería (Enami)



# **Basic Project Information**

Cu porphyry with Mo subordinate mineralization.

Type of resource to be extracted

Cu - Mo



#### Relevant project geological information

It has documented hydrothermal alterations associated with a copper porphyry (potassic alteration). Intrusive units of similar age to those observed at El Teniente, which is only 20 km away, have been described.



al

#### Development stage

Basic exploration (Follow-up).



# **Property size**

10,100 ha

# Highlights

The four drill holes, totaling 1,247m, survey the entire area of interest to an average depth of 250m.





mine, O'Higgins region.

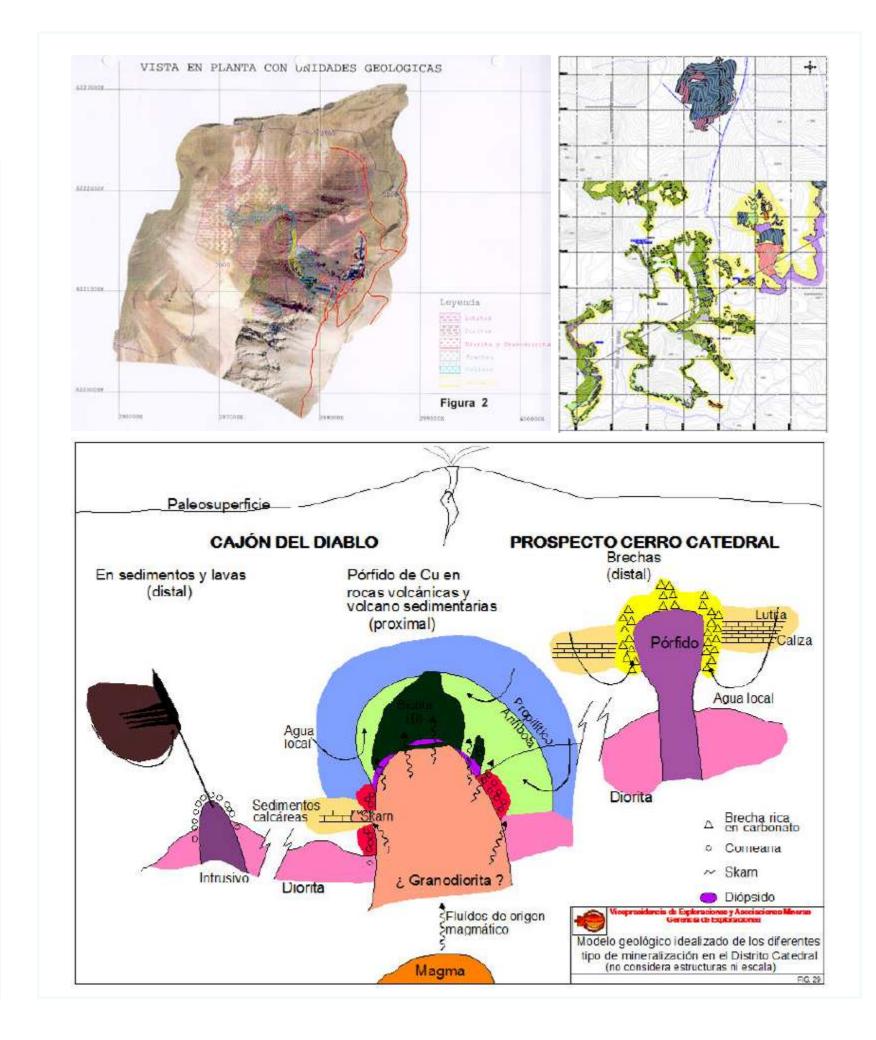
#### Access

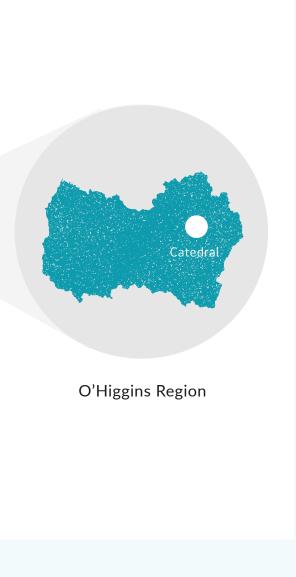
Access through a network of mining roads that allow partial recognition of the prospect.

# **Additional Comments**

Previous studies and analyses are not entirely conclusive given the limited field time to obtain samples and the difficulty in accessing them. Therefore, there is a lot of room for exploration.

# **Basic Follow-up Exploration**





Located 55km in a straight line east of the city of Rancagua, and 20km southeast of the El Teniente





#### **Contact:** José Pablo Donoso Silva

#### @: jpdonoso@nact.cl

**Project Operator** 



Jose Pablo Donoso Silva

# **Basic Project Information**

Cu porphyry with Ag subordinate mineralization.

## Type of resource to be extracted

Cu - Ag

# **Development stage**

Basic exploration (Follow-up).

# **Property size**

6,090 ha

### **Description of Company**/ **Economic Group**

Group of professionals interested in the development of mining properties with potential.

Celinda SCM

### **Project Description**

The expansion of the initial mining property to 6,090ha justified geophysical surveys that identified important geophysical/geo-electrical domains at significant depths. Chargeable anomalies were identified, which are of exploratory interest due to their relationship with formation models of copper porphyry or other types of metallic deposits with resistive cores.

## **Relevant project geological** information

Data Book of the deposit considers: Cu-Fe historical studies and Cu drill holes. Updating of topography, geology, geochemistry, geophysics, certified laboratory chemical analysis, trench sampling, Cu metallurgy and 3D Cu models.

 $(\mathbf{0})$ Location

# Access

# Highlights

Prospect with potential for a world-class porphyry copper deposit on a large consolidated mining property of 6,090 hectares. Excellent location in an area with complete infrastructure for the development of a mining project. Located in a metallogenic belt east of the famous west fault, which hosts large world class porphyry copper deposits: Chuquicamata, RT and others. Coincidence in geological information from 2013 drilling and magnetometry anomalies and extended IP Q1/ Q2 2020. Favorable environmental situation, with no recognized conflicts. Nearby reference deposits:

- GABY Mine, CODELCO - Chile (620 Mt @0.41 % Cut (422 Mt Ox @0.53 % Cu). - Minera TUINA, (approx. 50 Mt @ 0.8 % Cu + Ag).

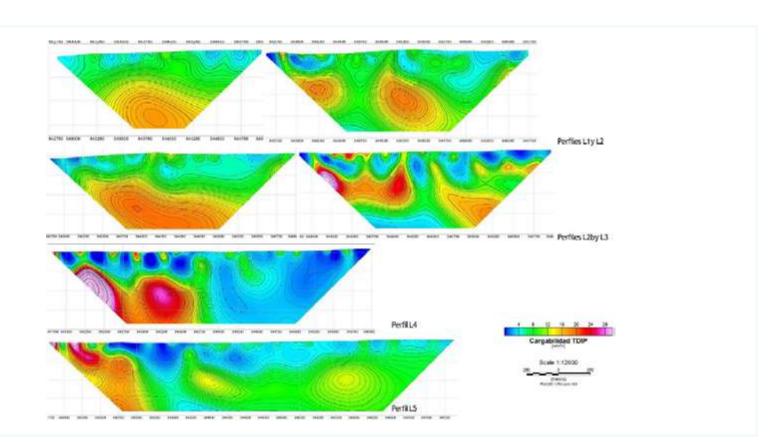
# **Basic Follow-up Exploration**



Antofagasta Region

Located 60km southeast of the city of Calama and 30km from the town of San Pedro Atacama. San Pedro de Atacama. Coordinates N 6,780,290; E 307,900 and Altitude 3,300masl, Antofagasta region.

Expedited year-round access by public and stone aggregate roads.



# Target

- Celinda Norte: potential presence of copper ore in the northern zone below 500 m.b.a.s.l.
- Celinda Sur, Target 1: In the zone of L4 where the intensity of the chargeability is intense, the magnetic low is more moderate, however, the extremely low electrical resistivity that manifests itself in L5 and continues towards L4 with chargeability greater than 30 mV/v, constitutes a target of great interest by itself.
- Celinda Sur, Target 2: Located around coordinate 544.500 mE and 7,449,000 mN (UTM 19S, PSAD56). This "L" shaped body has 3 sub-vertical branches emerging towards the surface that would be ore mineralization hosted in an andesitic matrix.

# **Best Drilling Intercept**

In 2014, the exploration potential of the area was recognized (700 ha in the N sector of the current area). Copper oxide veinlets with silver content (mineable values) associated with silicified, quartzhematite, chloritization and ECCC zones were identified on surface. There is a campaign of 13 RC drill holes (200 and 570 m) with a total of 4,212 m. As a result, traces of anomalous sulphide mineralization with anomalous copper contents are observed.

# **Objectives**

Confirmation of the hydrothermal system at (porphyry copper). Negotiation of investor contract to finance new drilling, exploration program for the entire mining property (confirmation of resources, environmental/sectoral and technical economic evaluation).

Potential extension of the body/anomaly identified with geophysical surveys.

The mining property allows to ensure the continuity of the open anomaly studies (to the N, S, SW and at depth).





**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

## **Project Operator**

Empresa Nacional de Minería (Enami)



# **Basic Project Information**

Cu porphyry with Mo subordinate mineralization.



# Type of resource to be extracted

Cu - Mo

# **Deposit type**

Porphyry of Eocene age.



# **Development stage**

Basic exploration (Follow-up).



# **Property size**

5,100 ha



# Highlights

The Prospect is located on the edge of an intense 12km by 20km aeromagnetic anomaly that connects to the southeast with the 10km by 10km Gaby aeromagnetic anomaly.

**Project Description** 

porphyry type system.

information

zinc (109 ppm) content.

In the prospect area there is a clear

history of hydrothermal alteration and mineralization corresponding to a copper

Relevant project geological

The sampling carried out comprises surface chip samples and trench samples. Results show that this

porphyry is the unit with the highest

copper (423 ppm), gold (0.04 ppm) and



# Location

region.

# Access

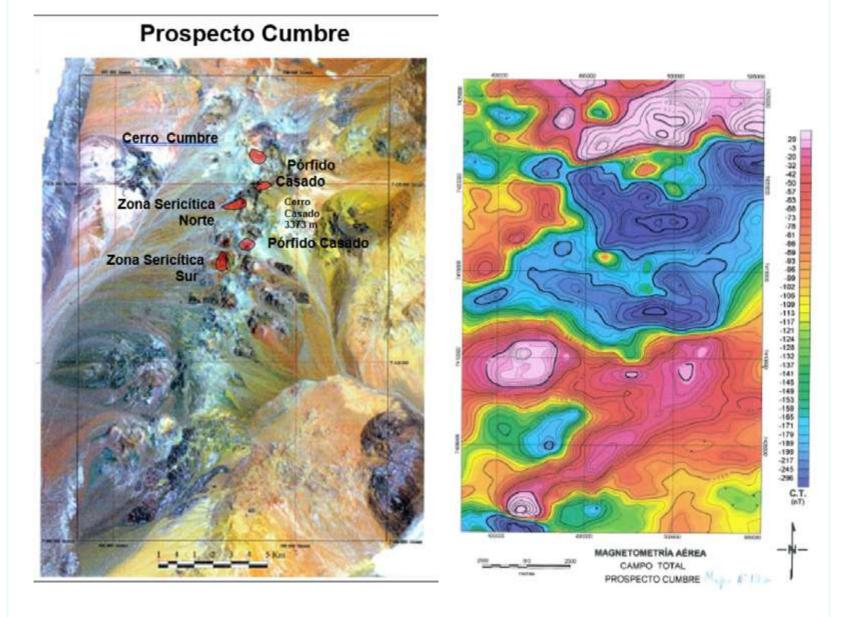
Access by the road that connects Antofagasta and Calama, going southeast into the town of Sierra Gorda on a dirt road.

# **Basic Follow-up Exploration**



Antofagasta Region

Located 100km south of the city of Calama and 25km west of the Gaby deposit, Antofagasta



# **Additional Comments**

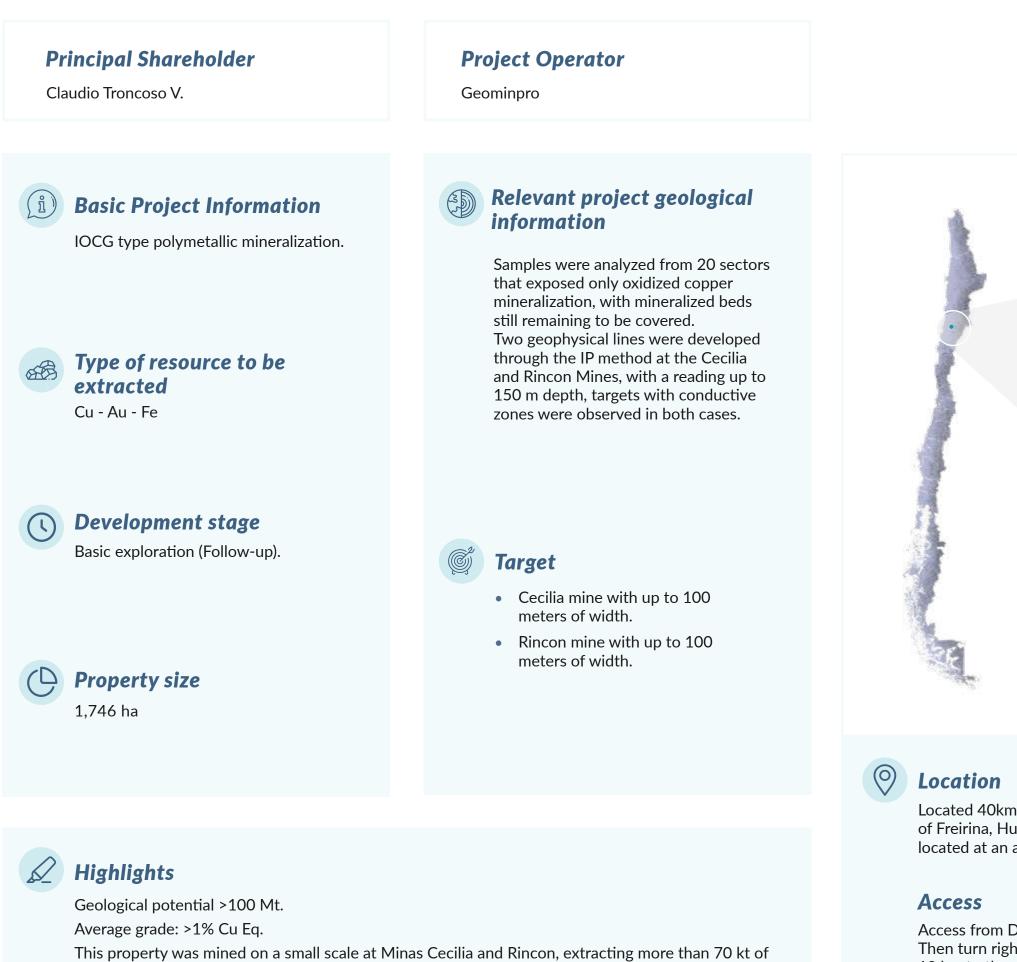
The effusive rocks show a penetrative hydrothermal alteration of the sericitic type with stockwork of "A", "B" and "D" veinlets, and jarositic and hematitic leach capping. In addition, it is intruded by a late porphyry with copper mineralization and by a breccia with abundant hematite.





Contact: Claudio Troncoso V.

@: clatrovel@hotmail.com

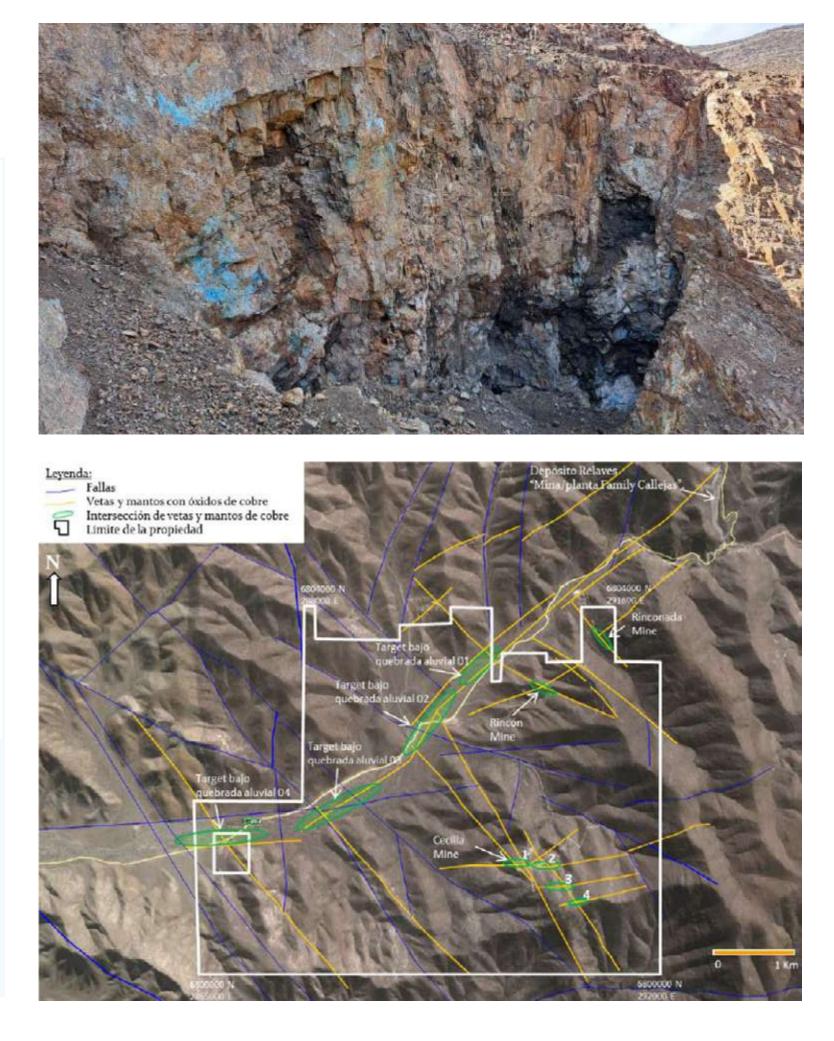


copper oxides grading 1%.

# **Basic Follow-up Exploration**



Atacama Region



Located 40km from the town of Domeyko, in the commune of Freirina, Huasco province, Atacama region. The prospect is located at an altitude of 1,000 meters above sea level.

Access from Domeyko traveling 35 km towards the coast. Then turn right through Quebrada El Morado and drive about 10 km to the project.

**Basic Follow-up Exploration** 

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**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

# **Project Operator**

Empresa Nacional de Minería (Enami)



**Basic Project Information** 

IOCG type polymetallic mineralization.

## Type of resource to be extracted Cu - Au - Fe

**Development stage** Basic exploration (Follow-up).

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# **Property size**

193 ha

Highlights



# **Resource Estimates**

1.65 Mt of ore @1.45% CuS.



## **Project Description**

Mining prospect currently without exploitation, with reserves and facilities that allow its continuity.

## Relevant project geological information

Categorized block model, with mining design and defined infrastructure. The deposit corresponds to a Kiruna type deposit with vein emplacement.



#### Target

**Additional Comments** 

from Diego de Almagro.

• Main vein follow-up by accesses Belén, Esperanza and Marta.

Located at a distance of approximately 27km from

ENAMI's El Salado treatment plant and 12km

#### $(\mathbf{0})$ Location

# Access

Advanced information, resource estimation and favorable location.

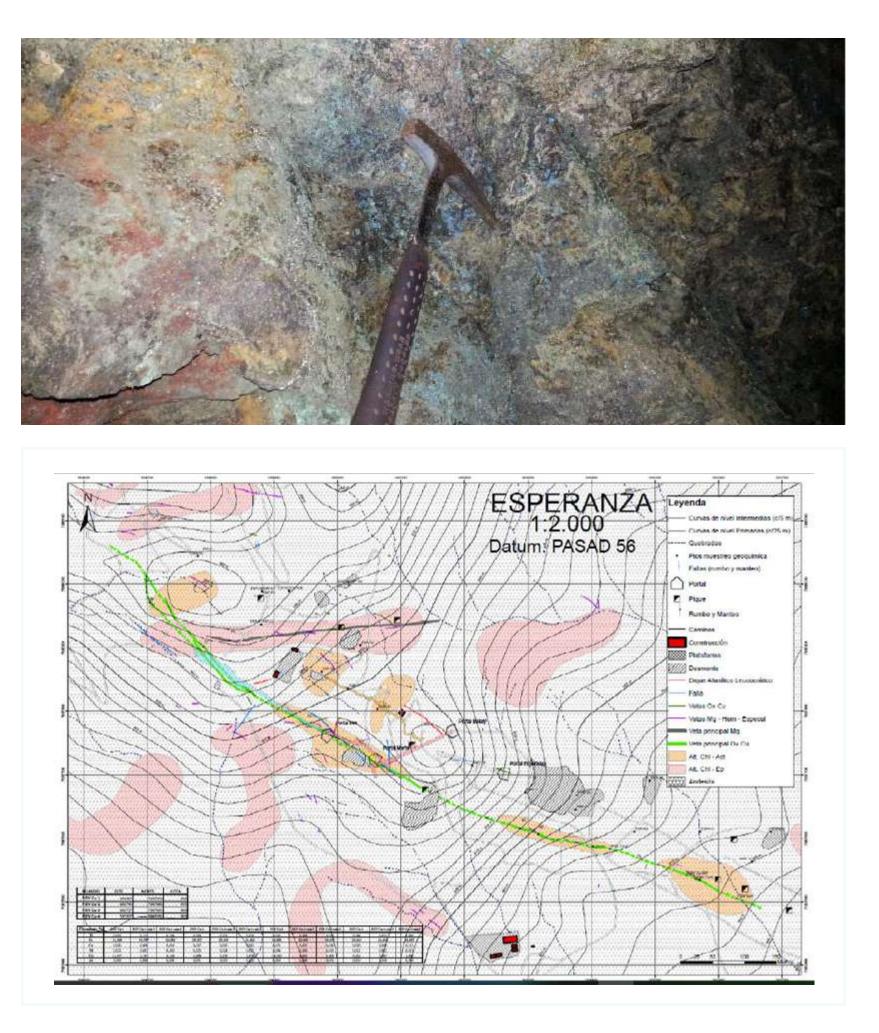
# **Basic Follow-up Exploration**



Atacama Region

Located in Sierra Apera, 12km northeast of Diego de Almagro, Atacama Region.

Access from Diego de Almagro by route C-151, 12 km of paved road and 1 km of dirt road.





# **FLORITA-PAZOTA**

**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

## **Project Operator**

Empresa Nacional de Minería (Enami)



**Basic Project Information** 

IOCG type polymetallic mineralization.



#### Type of resource to be extracted

Cu - Au - Fe



IOCG of type Kiruna.



## **Development stage**

Basic exploration (Follow-up).



**Property size** 

3,458 ha



## **Relevant project geological** information

Copper mineralization is associated with specularite breccias and veins, quartzcalcite veinlets and apparently shows lithological control. Electrical induction studies located discrete IP anomalies associated with breccia bodies and specularite veins with pyrite-chalcopyrite in the western sector of the mine property and a relevant IP anomaly in highly altered volcanic rocks outcropping to the east.



# **Best Drilling Intercept**

The presence of anomalous magnetite mineralization in drill holes drilled in 2009 (which did not intercept economic mineralization) is the only evidence of interesting copper-iron mineralization in the Florita sector. In areas of Pazota, zones with copper grades of 0.6% sulphides and oxides are detected, in addition to interesting IP anomalies.



#### $\bigcirc$ Location

# Access

# Highlights

Because it is adjacent to the Cuprum prospect, they share geological and structural domains of interest. The sector has a high exploration potential.

Target

• South Sector, Pazota 5 concession.

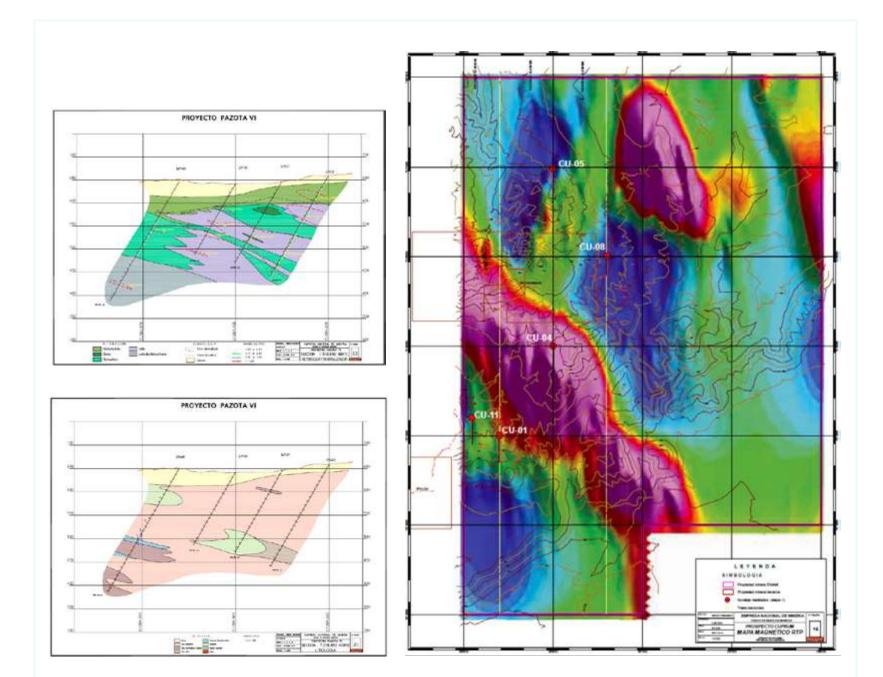
# **Basic Follow-up Exploration**



Atacama Region

Located 10km west of the city of Diego de Almagro, Chañaral province, Atacama region.

Access from Diego de Almagro on the road that goes to the town of El Salado, traveling approximately 15km to the turnoff to Mina Carmen.





Geophysical studies propose a series of tabular bodies of Cpy-py-oxFe type mineralization correlated by an IP anomaly, trending NNW-SSE.





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## **Project Operator**

Empresa Nacional de Minería (Enami)



# **Basic Project Information**

Cu porphyry with Mo subordinate mineralization.

### Type of resource to be extracted

Cu - Mo

( \)

of the

# **Development stage**

Basic exploration (Follow-up).



# Target

• There are zones with bands of propylitic alteration that can be indicated as targets.

Relevant project geological

In the area there is geological

veins. Studies of relict sulfides,

project with possible gold.

radiometric dating of different rock types, alteration and associated

mineralization. Small size porphyry

reconnaissance at scales 1:50,000, 1:25,000 and 1:10,000, geochemical rock sampling with more than 500 surface samples, which in general showed Cu anomaly grades of up to 145 ppm, except for the

information



Antofagasta region.

## Access

Access through public roads and mining roads in good condition.

#### The main fault in the area has a northwest and secondarily northeast direction typical of the Domeyko Fault system. The analysis of the satellite image allows recognizing some semicircular lineaments that, preliminarily, would indicate the presence of a caldera, adjacent to the large Imilac caldera described immediately east of the area.



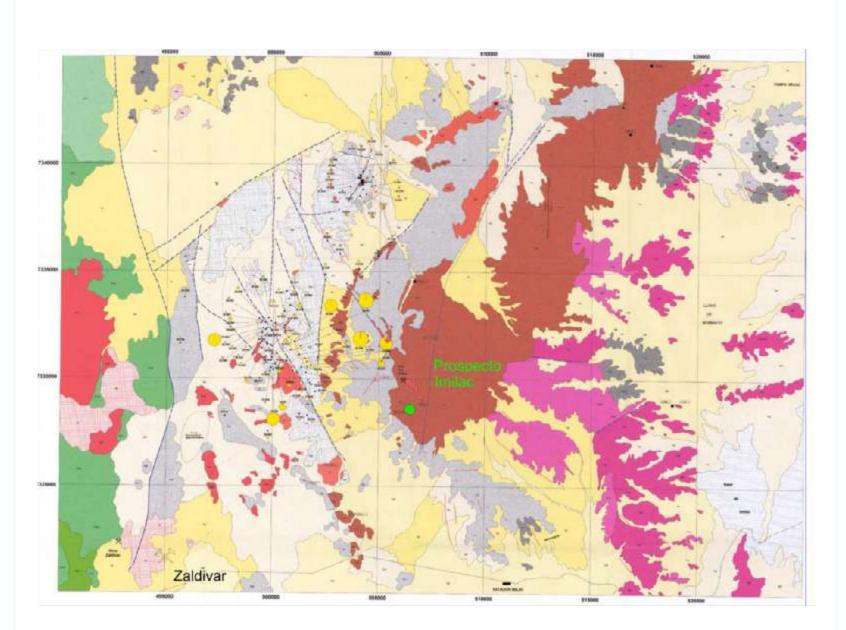
Highlights

# **Basic Follow-up Exploration**



Antofagasta Region

Located in the Domeyko mountain range, immediately northeast of the Escondida-Zaldívar complex, 155km southeast of Antofagasta,





# **Additional Comments**

It is a relatively unexplored area, with covered areas and is affected by the Domeyko Fault system.

35





**Contact:** Thomas Eggers @: Thomas Eggers

Form of Financing **Project Operator** Private Funds Los Cobres de Atacama SpA. **Project Description Basic Project Information** An industrial-mining pole is being IOCG type polymetallic mineralization. developed following the merger of Mantos Copper (Manto Verde) and Capstone (Santo Domingo), attracting explorers to find additional resources Type of resource to be that can become economic, considering potential synergies and installed extracted operating capacity. Cu - Au **Deposit type Relevant project geological** IOCG vein system, Cretaceous age. information There are 13 drill holes totaling 1,427 m, geochemical sampling (467) and two main tunnels. **Development stage** ( い Currently active on a small scale Basic exploration (Follow-up). and selling to ENAMI plant (El Salado). Between January 2009 and October 2010, the mine operated continuously and reached a production of 15,363 t, with a grade  $(\mathcal{D})$ **Property size** of 1.91% soluble Cu. 48 ha



## Highlights

Immersed in a competitive mining district, defined by the consolidation of the Mantoverde and Santo Domingo operations, opening the opportunity to define additional economic resources to a growing mining cluster.

There are several other advanced exploration projects and historic producing mines, where Sierra Norte (Alxar) and San Pietro (former Radiss Project - Sumitomo / now Golden Arrow), stand out as potential candidates to add economic resources to the district.

#### $\bigcirc$ Location

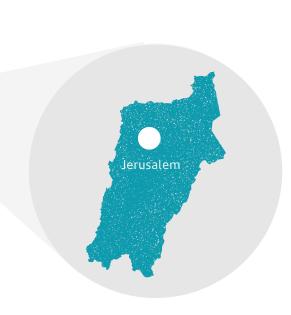
# Access

Access by paved roads.

# **Basic Follow-up Exploration**

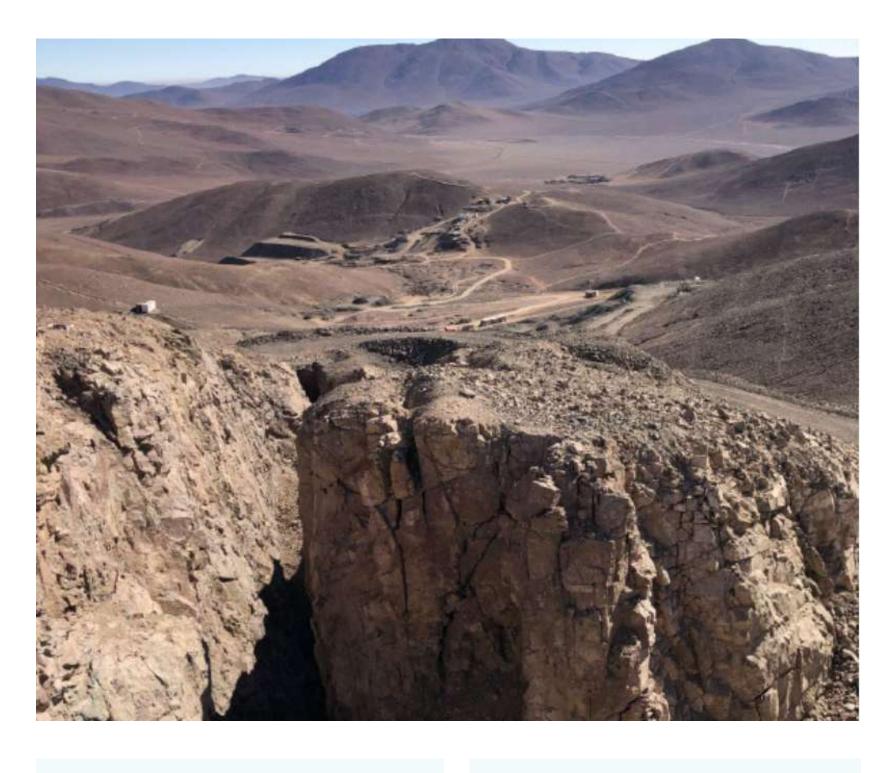
# **Principal Shareholder**

Red Mining Resources SpA.



Atacama Region

Located 47km east of the city of Chañaral and 22km northeast of the Santo Domingo IOCG deposits and 33km northeast of Mantoverde, Atacama region.



# Target

- Jerusalem Vein
- Resguardo Vein

# **Objectives**

Convert a small operating high grade Cu mine with unknown exploration potential into a major economic resource.



# **Resource Estimates**

2.5 Mt @3.53% Cu.



# **Best Drilling Intercept**

3.5m @3.5% Cu + 1.1 g/t Au.





### **Contact:** Alamiro San Francisco Vera

@: asfcomin@gmail.com

Objectives

information

Highlights

town of Monte Patria.

Project in early exploration stage,

advanced exploration stage.

**Resource Estimates** 

requiring financial support to reach the

Relevant project geological

A potential of more than 1,000MT (0.5% Cu plus Mo and Au credits) is estimated.

105Mt@ 0.35% Cu equivalent at Target 1.

Prospect located on a translithospheric

fault 45km southeast of the Andacollo

Cu-Au porphyry and 20km north of the

### **Project Operator**

Cía. Minera Campanario Minerals Ltda.

**Basic Project Information** 

Cu porphyry with Mo - Au subordinate mineralization.

### Type of resource to be extracted

Cu - Mo - Au

### **Deposit type**

Porphyry of upper Cretaceous -Paleocene age.

### (ヽ)

### **Development stage**

Basic exploration (Follow-up).



5,100 ha



DDHJS12-02: (36-324) 288m@ 0.29%Cu/ 0,10ppm Au/ 41ppm Mo Inc. (116-152) 36m@ 0.40% Cu/ 0.12ppm Au/ 62ppm Mo Inc. (232-292) 60m @ 0.33%Cu/ 0.11ppm Au/ 43ppm Mo. JO15-01: (22-650) 628m@ 0.20% Cu/ 0.039ppm Au/ 8ppm Mo Inc. (316-650) 334m@ 0.28% Cu/ 0.037ppm Au/ 10ppm Mo Inc. (316-474) 158m@ 0.33% Cu/ 0.044ppm Au/ 10ppm Mo Inc. (388-474) 86m@ 0.40%Cu/ 0,056ppm Au/ 9ppm Mo.





### Access

Year-round access by paved and dirt roads.

## **Basic Follow-up Exploration**



Coquimbo Region

Located 60km east of the city of Ovalle, in the commune of Monte Patria, Coquimbo region. This prospect is located at an average altitude of 1,200 meters above sea level.

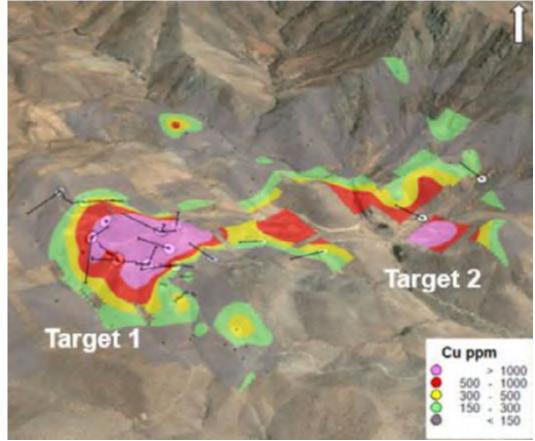
### Description of Company/ Economic Group

Company focused on the mining business.

### Target

- Information on geophysics, magnetometry and IP, drilling and soil and rock geochemistry.
- Geophysical, magnetometric and IP information, scarce drill holes and soil and rock geochemistry.





**Basic Follow-up Exploration** 



# **ANDER LEONCITO EL LOA**

Contact: Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

### **Project Operator**

Empresa Nacional de Minería (Enami)



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### **Basic Project Information**

Cu porphyry with Mo subordinate mineralization.

Type of resource to be extracted

**Development stage** 

**Property size** 

21,405 ha

Basic exploration (Follow-up).

Cu - Mo

### Relevant project geological information

The project includes 1:200,000 scale surface geology, multi-element soil geochemical sampling, IP geophysical survey and magnetometry. In addition, there are five medium depth drill holes carried out by third parties. This porphyry project has possibly the development of an associated epithermal deposit, whose location is close to the west fault and the Domeyko fault system.



Ojo Bravo

• Yuma



### $\bigcirc$ Location

### Access

Access is via the gravel road between Calama and Quebrada Blanca.



### **Best Drilling Intercept**

106m with 0,07% de Cu 17m with 15 ppm of Au

**CHILEAN MINING** Present for a sustainable future

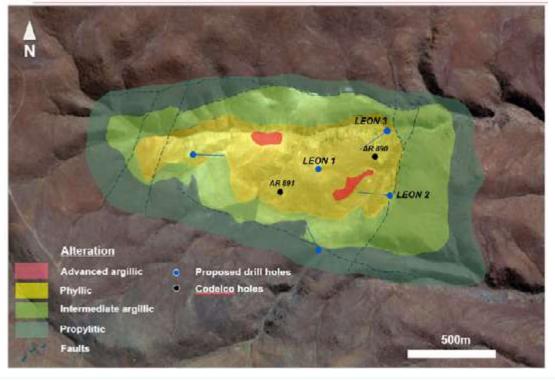
### **Basic Follow-up Exploration**



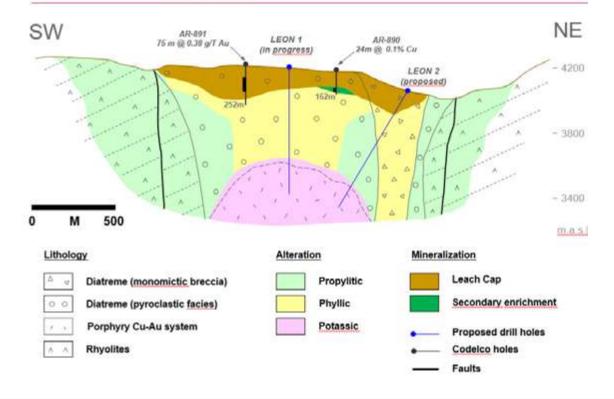
Antofagasta Region

Located on the border of the Antofagasta and Tarapaca regions, 25km and 30km from the Quebrada Blanca and Collahuasi mines.

### Leoncito - Copper & Gold





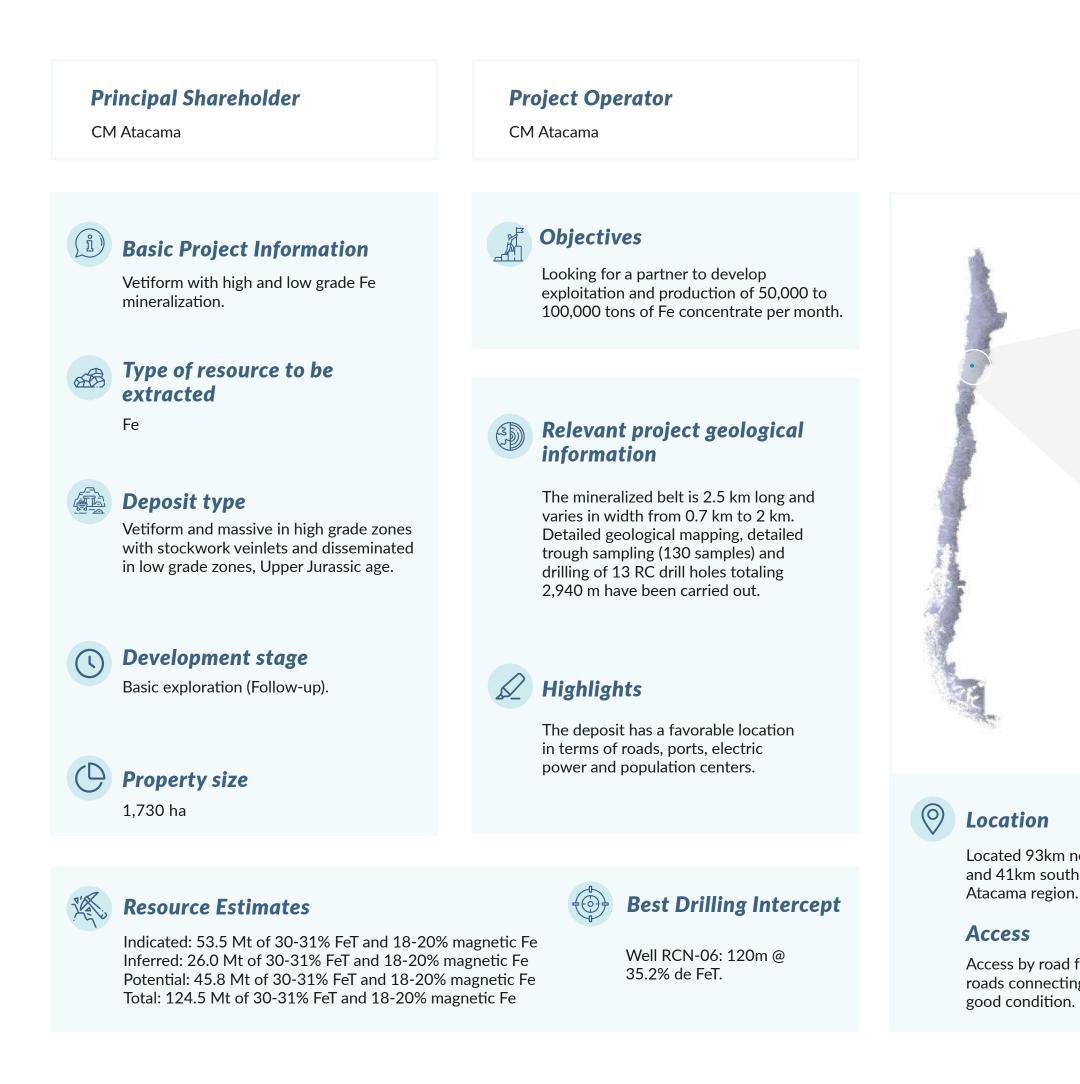




# **LOS NEGRITOS**

### **Contact:** Pablo Rodo

@: pablorodo@gmail.com



## **Basic Follow-up Exploration**





Atacama Region

Located 93km northeast of the city of Copiapó and 41km southeast of the town of Inca de Oro,

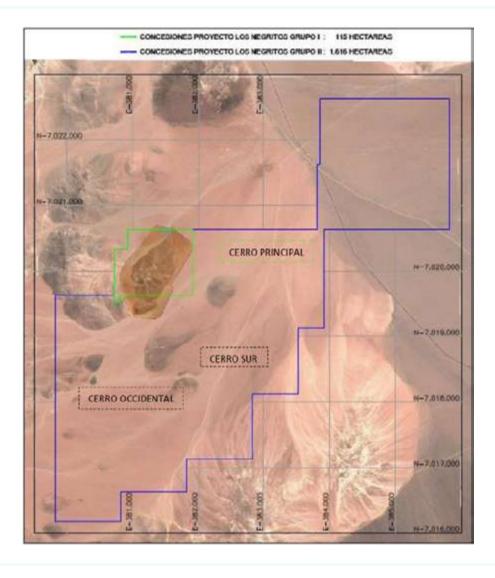
Access by road from Copiapo all year round. The roads connecting the deposit are paved and in



Compañía Minera Atacama SpA main objective is the development of exploration, evaluation and exploitation of mineral resources.

### Target

- Cerro Principal is 1,200m long and about 500 m wide.
- Cerro Sur
- Western Hills

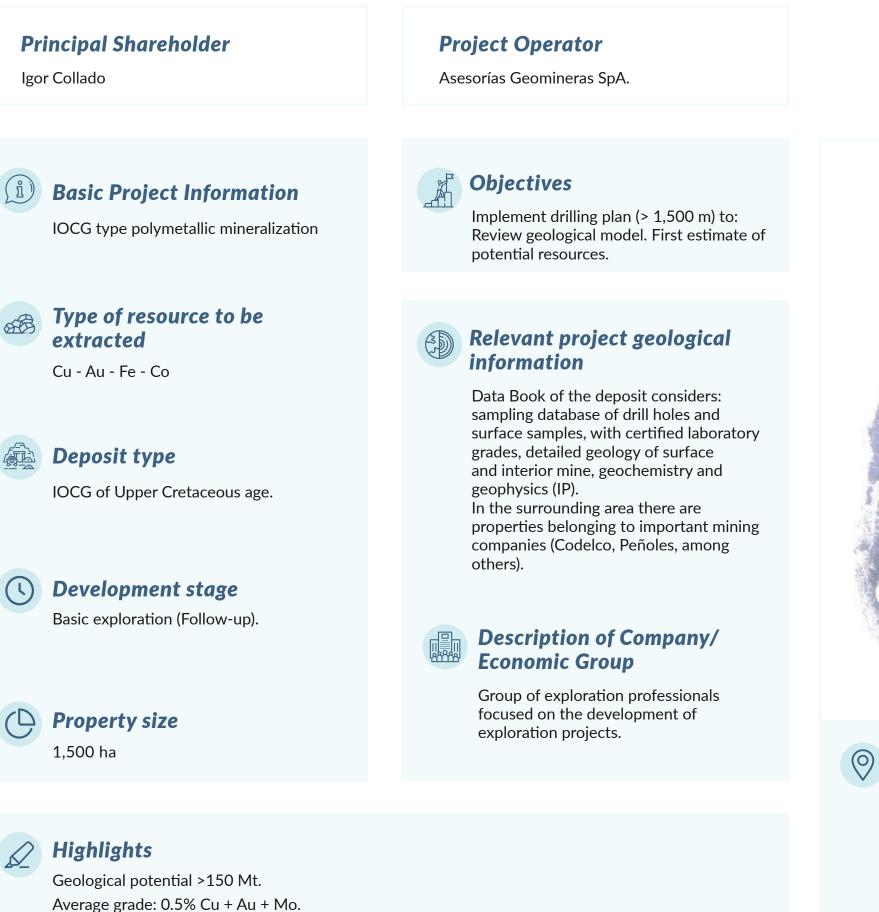




# **LOS RULOS**

### **Contact:** Igor Collado

@: igor.collado@gmail.com



Located in a Historic Mining District, where there is little small and medium scale mining development. Close to mineral buying powers, ports and supply centers.



### Location

region.

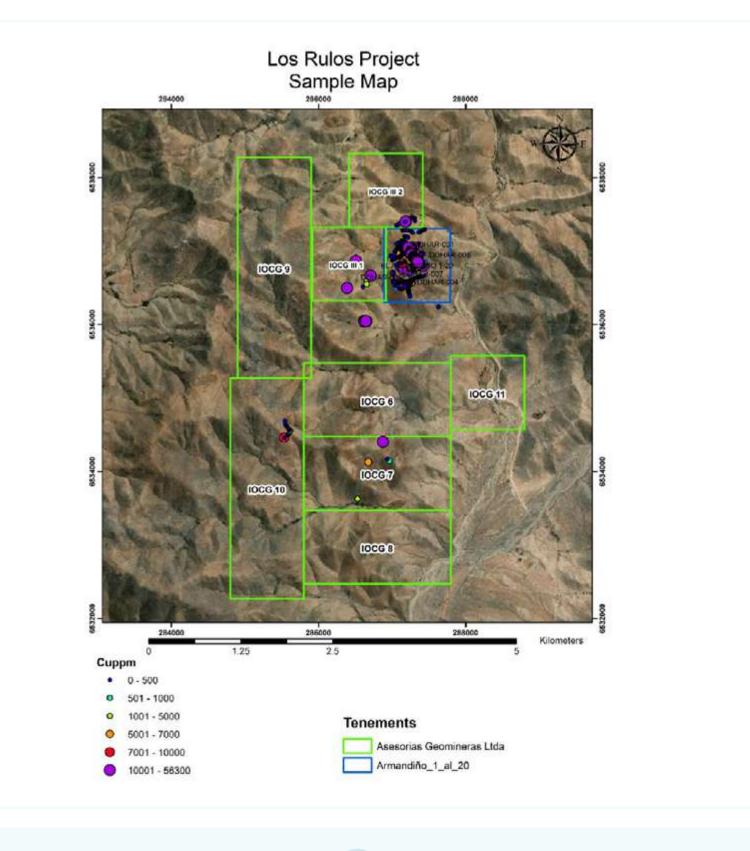
### Access

### **Basic Follow-up Exploration**



Located 35km from the town of Combarbala and 243km from the city of La Serena, Coquimbo

Year-round access on paved and stone aggregate roads in good condition.



Target

- Cu Oxidized + Cu Enrichment Surface Zone
- Sulphide Cu Surface Zone (Primary) and Enrichment Zone.

### **Best Drilling Intercept**

9m @0.57 Cu% / 0.07ppm Au / 197ppm Co

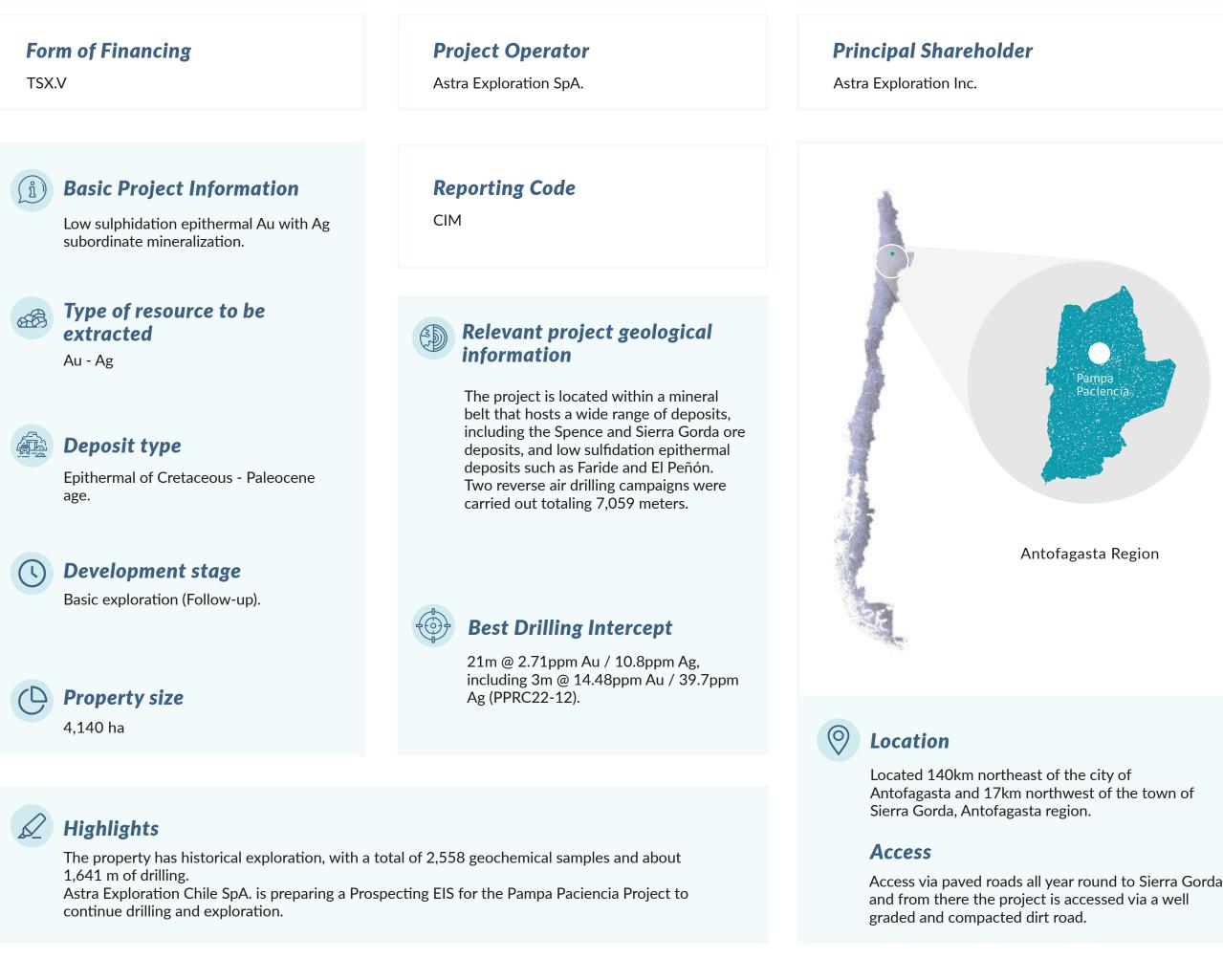
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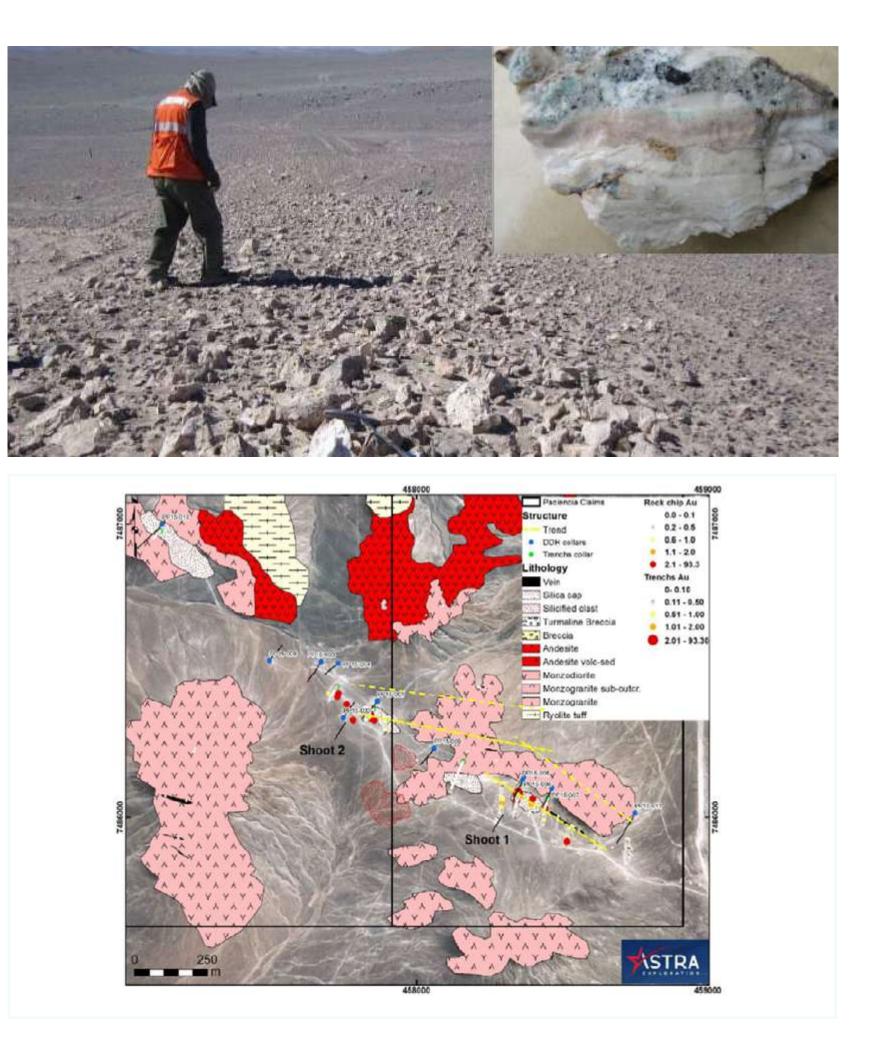
# **ANDER PAMPA PACIENCIA**

### **Contact:** Roberto Alarcón

@: roberto.alarcon@astra-exploration.com



### **Basic Follow-up Exploration**



**Basic Follow-up Exploration** 





**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

### **Project Operator**

Empresa Nacional de Minería (Enami)



**Basic Project Information** 

IOCG type polymetallic mineralization.



### Type of resource to be extracted

Cu - Au - Fe



### **Development stage**

Basic exploration (Follow-up).



9,300 ha

### **Project Description**

The geological model interpreted according to the information from drill holes, trenches and subway workings, shows a strong structural control of the mineralization, oriented N 70° W, being possible to identify numerous mineralized bodies of different thicknesses and depths, both intercalated and stockwork type veinlets.



### **Relevant project geological** information

The deposit presents a tabular geometry, in a mineralized strip recognized by drill holes for approximately 700 m in a N70°W/80°S direction and for approximately 250 m in the down dip direction, with a power varying between 10 and 60 m. In the interior of the mineralized belt there are bodies with higher intensity of mineralization that form a macro banding of the mineralized structure. Slight changes of direction of the structural system may be responsible for the formation of mineralized nails. Prospect located in intrusive and volcanic rocks, with a marked structural control of the mineralization.



### Highlights

The prospect is located on the main branch of the Atacama Fault System (AFS), which concentrates most of the Cu, Fe and Au deposits along the strip of the Coastal Range.



### **Best Drilling Intercept**

Presence of anomalous magnetite mineralization in reverse air drilling carried out in 2009, and CuS content over 0.3%.



### Location

 $\bigcirc$ 

region.

### Access

by road C-139.

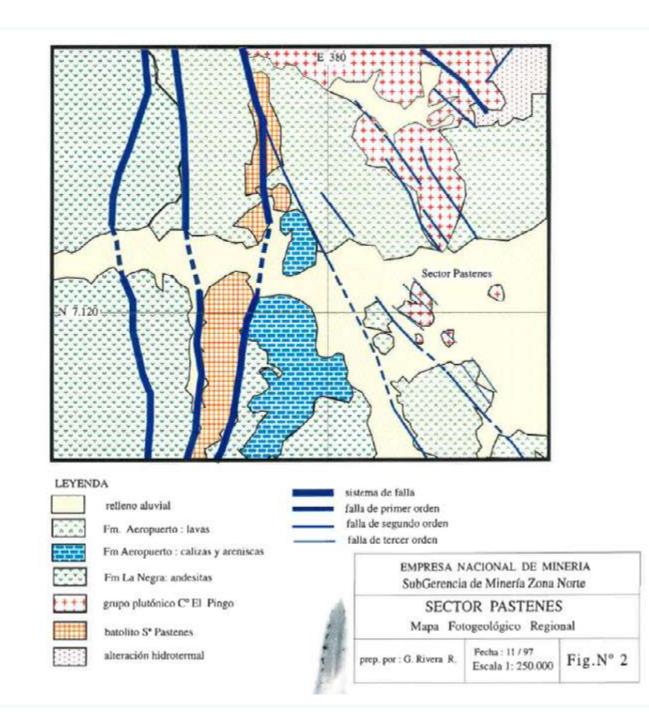
### **Basic Follow-up Exploration**



Atacama Region

It is located 60km northeast of the city of Chañaral and 70km southeast of Taltal, in the Pampa Capitana sector, commune and province of Chañaral, Atacama

Access from Diego de Almagro by route 5N, 17km of paved road, then secondary road C-147 for 17 km, then 6km by bichofita road C-125, and finally 16km





- Continuity of Veta Pastenes.
- Exploratory drilling in the IP anomaly detected in the northern part of the prospect.

**Additional Comments** 

Zone with interesting IP anomalies in the northern sector of the prospect, with drilling expected soon.



### **Resource Estimates**

The total geological resource corresponds to 9,889,139 tons with an average grade of 0.60% total copper, 0.14% soluble copper, 0.46% insoluble copper, 0.12 g/t gold and 17.1% iron. For calculation purposes, a density of 3.0 t/m3 has been used.





### **Contact:** Alamiro San Francisco Vera

### @: asfcomin@gmail.com

### **Project Operator**

Cía. Minera Campanario Minerals Ltda.

**Basic Project Information** 

Mesothermal Co mantle.

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### Type of resource to be extracted

Co

### **Deposit type**

Volcano-sedimentary continental and marine rocks of Triassic and Jurassic age, together with intrusive rocks of Jurassic age.

### **Development stage**

Basic exploration (Follow-up).

### 0 **Property size**

Highlights

900 ha



### Objectives

For sale or looking for an investment partner.

### Relevant project geological information

The mineralization is located in a rocky metamorphosed rock of N 10°E/30°W attitude of 1,400m in height. Cobaltite is found in veinlets and disseminated, erythrite as a decomposition of cobaltite and disseminated chalcopyrite associated with cobaltite, located on a translithospheric fault. Important potential of estimated cobaltiferous ore, the geological experience indicates a superficial expression of a more important mineral event at depth, so the probability of finding greater resources with an adequate exploration is high.



### **Description of Company**/ **Economic Group**

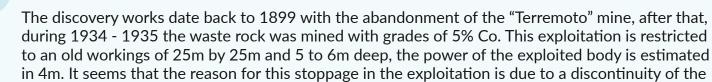
Company focused on the mining business.



Valparaiso region.

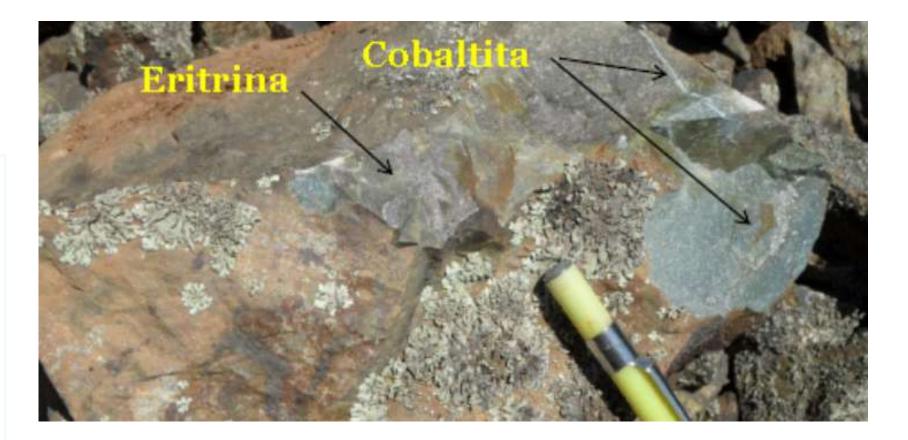
### Access

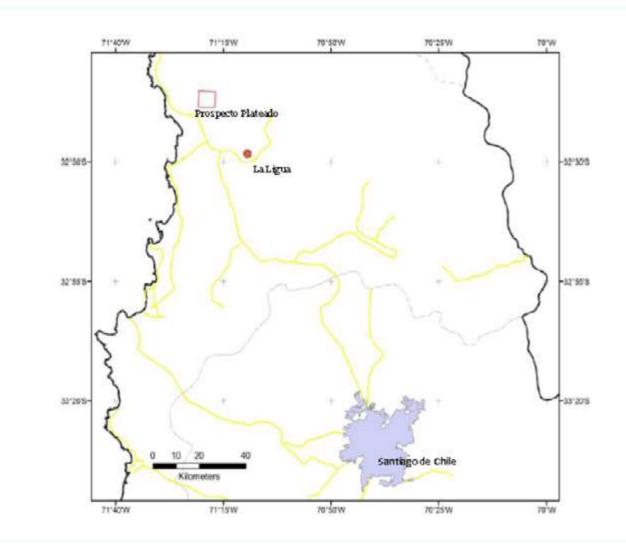
Year-round access by paved roads.



mineralization and the lack of an adequate exploration.

### **Basic Follow-up Exploration**







Valparaíso Region

Located 130km northwest of the city of Santiago and 30km northwest of the city of La Ligua,





### **Contact:** Alamiro San Francisco Vera

### @: asfcomin@gmail.com

### **Project Operator**

Cía. Minera Campanario Minerals Ltda.

### **Basic Project Information**

Cu porphyry Cu with Mo subordinate mineralization.

### Type of resource to be extracted

Cu - Mo

### **Deposit type**

Porphyry of lower - Upper Cretaceous age.

### (い)

### **Development stage**

Basic exploration (Follow-up).

### $(\bigcirc$ **Property size**

4,000 ha

### **Best Drilling Intercept**

SA19-07 (3m-104m) 101m@780ppm Cu - 13ppm Mo, (66m-104m) 38m@1245ppm Cu - 25ppm Mo (98m-104m) 6m@ 4074ppm Cu - 6ppm Mo (162m-200m) 38m@329ppm Cu - 5ppm Mo.



### Objectives

Project in early exploration stage, requiring financial support to reach the advanced exploration stage.

### Relevant project geological information

Existence of monzodioritic, monzonitic, syenitic and andesitic porphyries intrude intrusive rocks and volcanites of the Quebrada Marquesa Formation, generating hydrothermal alteration and stockworks of Qz - Cu veinlets. Structurally, the area of interest is located in the northeast continuity of the El Culén and Los Mantos faults, with a length of 4km and width of 2.7km.



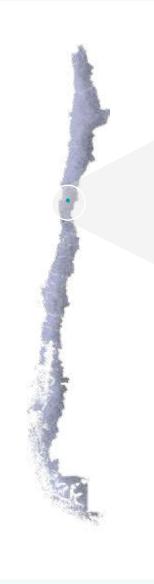
### Target

• Information on geophysical magnetometry and IP, drilling and rock geochemistry.



### **Description of Company**/ **Economic Group**

Company focused on the mining business.



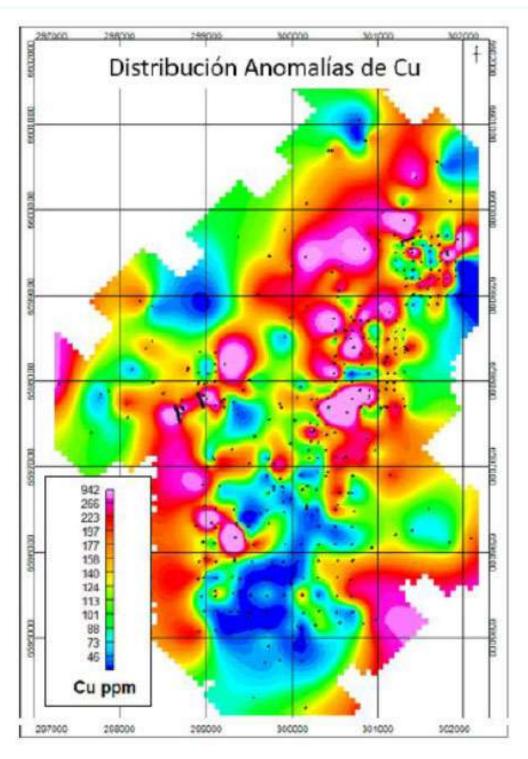
### Location

### Access

Year-round access by paved and dirt roads.

### **Basic Follow-up Exploration**







Coquimbo Region

Located 17km southeast of the city of Ovalle and 50km south of the Andacollo Cu-Au porphyry, Coquimbo region. The prospect is at an average altitude of 500 meters above sea level.

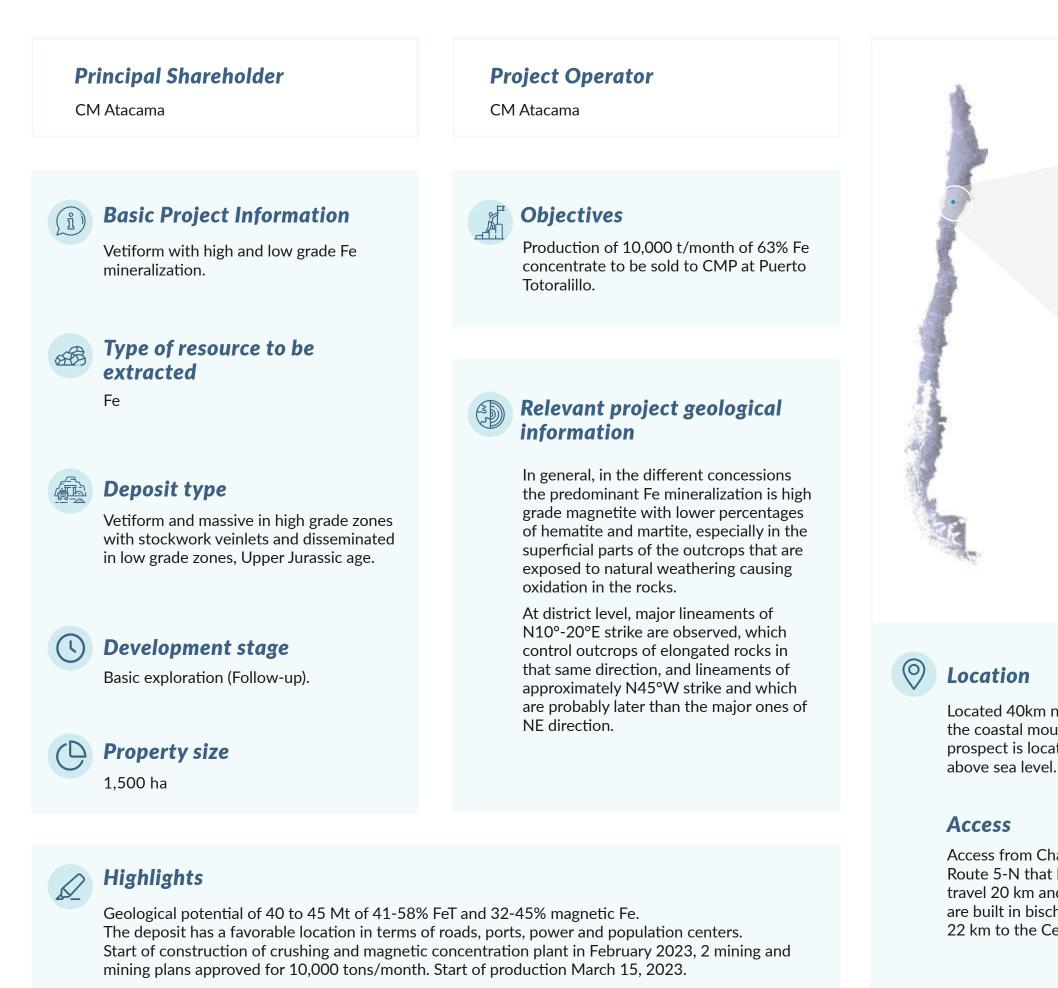
**Basic Generative Exploration** 



# **TESORO NEGRO**

### **Contact:** Pablo Rodo

@: pablorodo@gmail.com



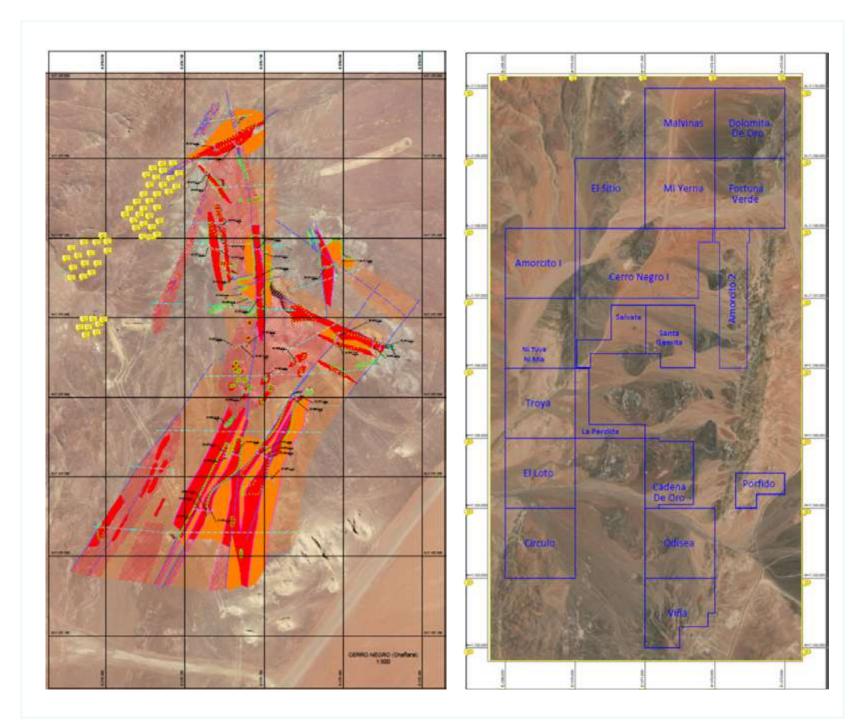
### **Basic Follow-up Exploration**



Atacama Region

Located 40km northeast of the city of Chañaral on the coastal mountain range, Atacama region. This prospect is located at an altitude of 910 meters

Access from Chañaral is easy all year round along Route 5-N that leads to the city of Antofagasta, then travel 20 km and take Route C-145 or C-125, which are built in bischofite, along this route you will travel 22 km to the Cerro Negro Chañaral project.



Target

- Cerro Negro I, 300m long and about 250m wide.
- Cadena de Oro Concession / Pirulita Concession.
- San Alberto Concession.



### **Description of Company**/ **Economic Group**

Compañía Minera Atacama SpA main objective is the development of exploration, evaluation and exploitation of mineral resources.



# **TRES PUNTAS**

**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

### **Project Operator**

Empresa Nacional de Minería (Enami)



**Basic Project Information** 

Low sulphidation epithermal Cu.

Type of resource to be extracted Cu

**Deposit type** 

Epithermal of Miocene age.



### **Development stage**

Basic exploration (Follow-up).

### $\bigcirc$ **Property size**

4,500 ha

### **Project Description**

Prospect has geological mapping at a scale of 1:10,000, construction of 3.6 km of trenches - roads and the collection of 192 soil samples. It presents sampling campaign information with a total of 113 rock-chip samples. Additionally, it presents construction of trenches, access roads and a geophysical survey of 9 CSAMT 2D lines covering the project area, in addition to petrographic and geochronological studies. This stage ended with the drilling of three reverse air boreholes.

### Relevant project geological information

In a 2.5km x 1.5km area of AA alteration characterized by Qz-alunite with two zones of Steam Heated and opaline silica, with greater development of the latter in the south. The argillic alteration is present in parts of the system, affecting the base of domes. As for the epithermal system, it presents a potential for gold, copper and molybdenum exploration.



### **Best Drilling Intercept**

It has 6 drillings carried out in 2 seasons, one of which showed 8m of 0,35g/t Au (well RDH-TRP-002), from 252m (including 2m de 0,58g/t Au), while the well RDH-TRP-006 cut 2m of 0,16g/t Au from 126m and 0,11g/t Au from 196m.



### $(\mathbf{0})$ Location

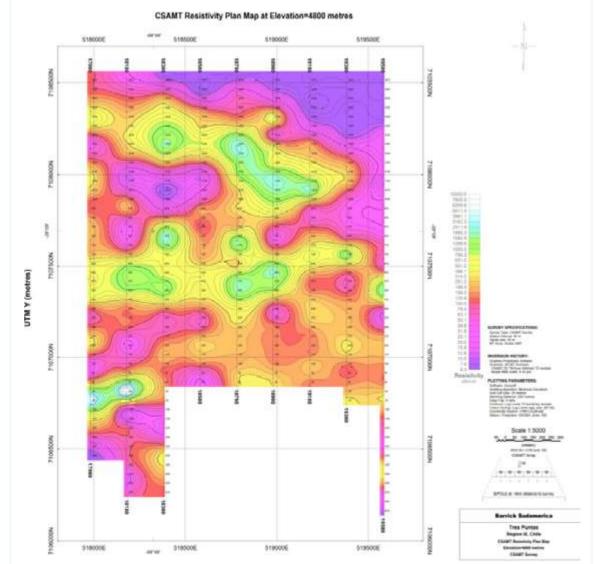
### Access

## **Basic Follow-up Exploration**



Atacama Region





Located 90km east of El Salvador mine, Atacama region. The prospect is located at an altitude between 4,900 to 5,300 meters above sea level.

Access from Diego de Almagro, by asphalt route C-163, and then using the network of gravel roads to the Salares Norte project.



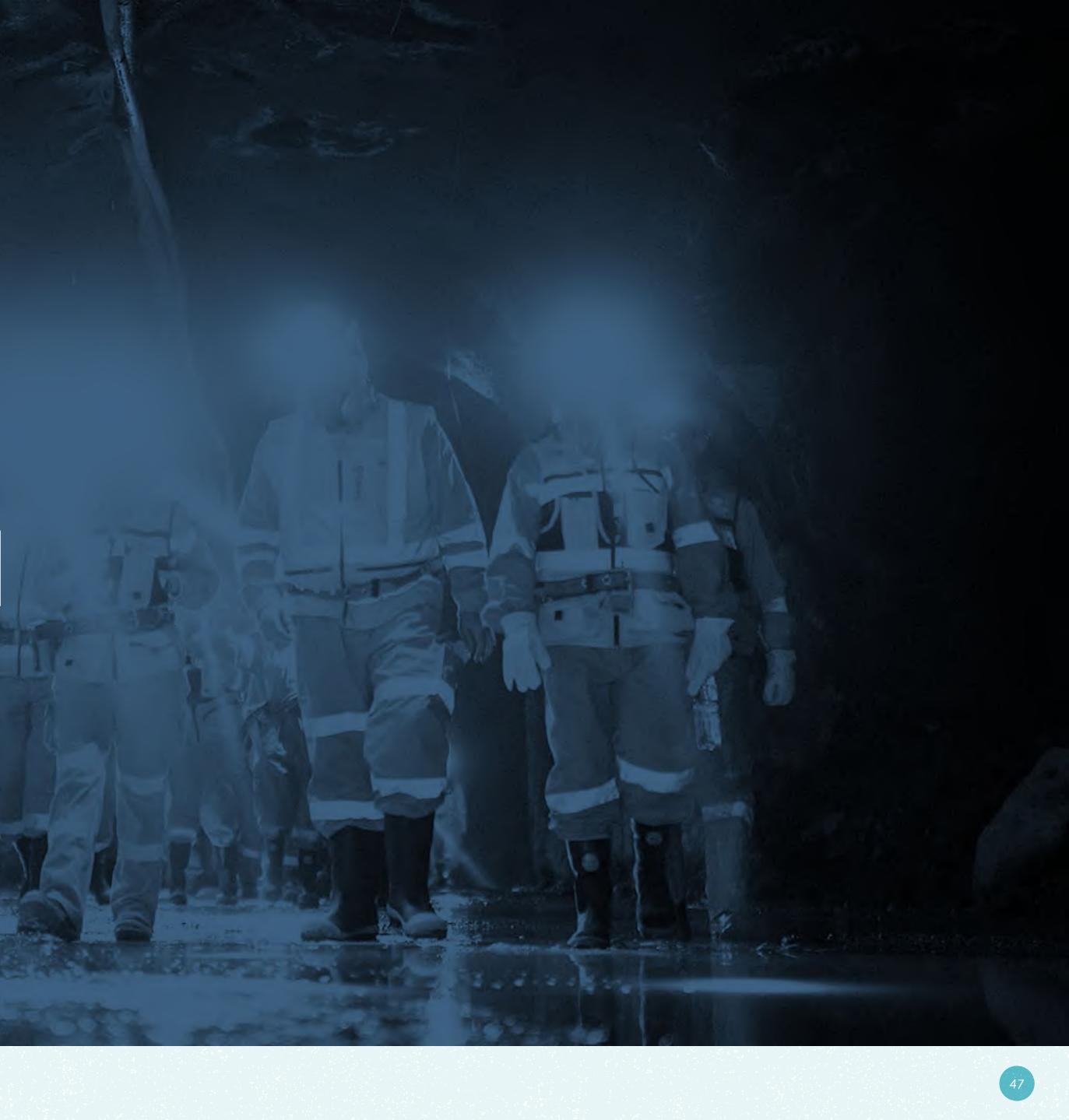
• Potential to contain low grade epithermal Au-Ag and/or Au-Cu deposits, which in the Maricunga belt correspond to deposits with resources of not less than 200Mt with 0.5 - 5 gr/t Au.



Recognition of favorable structures and lithologies in the prospect area with porphyry copper potential at depth. Geochemistry from the analysis of rock samples indicates anomalous Au values.

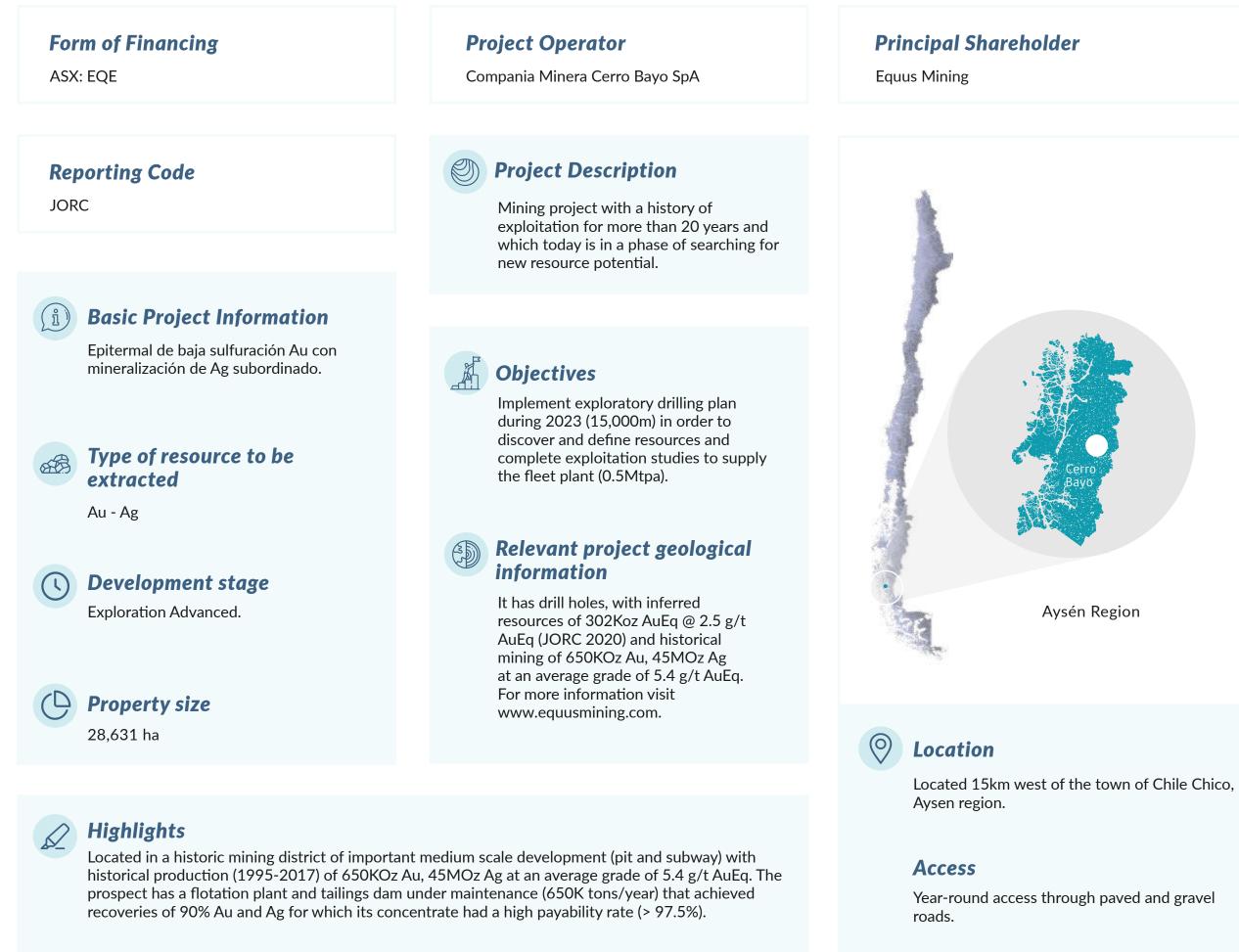


# Advanced EXPLORATION PROJECTS

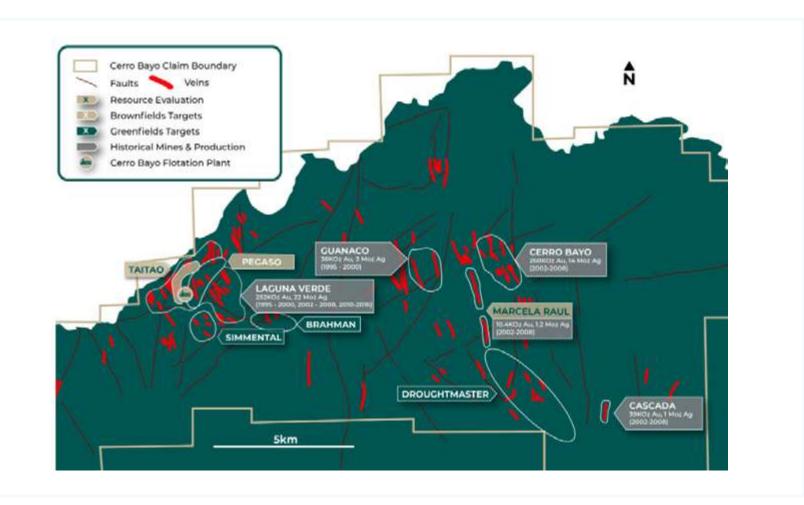


# **CERRO BAYO**

*@*: rtapia@equusmining.com **Contact:** Richard Tapia



### **Advanced Exploration**





Mining experience with a focus on exploration and with a high professional challenge to develop in the medium term a new operational process of exploitation.



### **Best Drilling Intercept**

New exploration target named Appaloosa: DDH Intercepts 8.76m @ 8.05g/t AuEq (4.9 g/t Au, 237.4 g/t Ag), 4.14m @ 17.9 g/t AuEq (11.0 g/t Au, 520.0 g/t Ag).



• Appaloosa Fault, Guanaco, Droughtmaster.



### **Resource Estimates**

Taitao: 302Koz AuEq @ 2.5 g/t AuEq (JORC 2020) Marcela-Raul Mine: 73.0 Koz AuEq @ 6.3 g/t AuEq (NI-43.101 2017).



### **Description of Company**/ **Economic Group**

Group of professionals focused on the development of mining projects.

**Additional Comments** 

The Cerro Bayo project will give a new economic boom to the town of Chile Chico.





**Contact:** Gonzalo Vergara S. / gvergaras@enami.cl Antonio Videka S. / avideka@enami.cl Francisco Encina V. / fencina@enami.cl

### **Project Operator**

Empresa Nacional de Minería (Enami)



**Basic Project Information** 

IOCG type polymetallic mineralization.

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Type of resource to be extracted

**Development stage** 

Exploration Advanced.

Cu - Au - Fe

### Relevant project geological information

exploitation by parceling system.

**Project Description** 

Drilling intercepts irregular ore bodies that have a tendency to follow lithological limits, however it is the structures present that restrict mineralization. Oxide and sulphide levels are not in contact.

Prospect in advanced exploration, and in



### **Resource Estimates**

28 Mt of 0.81% oxides and 16 Mt of 0.84% total copper, for sulfides, both with 24% Total Fe.



Highlights

### Location

Located 30km northwest of the city of Diego de Almagro, in the municipality of Chañaral. The reference UTM coordinates are N 7,103,500m and E 374,500m, with an average altitude of 1,230 masl, Atacama region.

### Access

road C-139.

The prospect is located on the main branch of the Atacama Fault System (AFS), which concentrates most of the Cu, Fe and Au deposits along the strip of the Coastal Range.

**CHILEAN MINING** Present for a sustainable future

## **Advanced Exploration**



Atacama Region

Access from Diego de Almagro by route 5N, 17km of asphalt road, then secondary road C-147 for 17 km, then 6km by bichofita road C-125, and finally 5km by



### Target

- Exploration in the southwest sector to evaluate the lateral continuity of the deposit's copper oxide mineralization through northeast structures that cut and limit it.
- Exploration in the southeast sector, to evaluate the lateral continuity of the copper mineralization of the deposit, from the northwest faults that drive the mineralization and the NE faults that cut it.
- Exploration of the northern sector to evaluate the longitudinal continuity of the copper oxide bodies of the deposit located in the northwest area. It is also intended to explore the continuity at depth of the Cu sulfide bodies.

### **Additional Comments**

Location on the Atacama fault system.



# **LOS AZULES**

Contact: Mario Valdés B.

@: mvaldes@carmenbajo.cl

### **Project Operator**

Compañía Minera Sali Hochschild S.A.



### **Basic Project Information**

Cu hydrothermal breccias with Mo subordinate mineralization.



### Type of resource to be extracted

Cu - Mo



### **Deposit type**

Hydrothermal breccia of Paleocene age.



### **Development stage**

Exploration Advanced.



### **Property size**

720 ha



### Highlights

Estimated potential of 30 Mt.



### **Relevant project geological** information

Presence of small-scale historical mining in the oxidation zone. It has surface mapping, surface geochemical sampling, IP geophysical profiling and partially drilled. This prospect considers hydrothermal breccias with Cu-Mo mineralization and a Cu-Mo target in a cluster of quartztourmaline hydrothermal breccias.



### **Best Drilling Intercept**

Over the total campaign of 2,500 meters carried out by the company, 42m@0.89% CuT, 24m@1.05% CuT, 12M@2.53% CuT for copper stand out. For molybdenum, 110m@685 ppm Mo, 52m@849 ppm Mo with peaks of 4887 ppm and 2700 ppm Mo.



### Location

Located 45km from the city of Copiapo, with an average altitude of 1,850 meters above sea level, in the Atacama region.

### Access

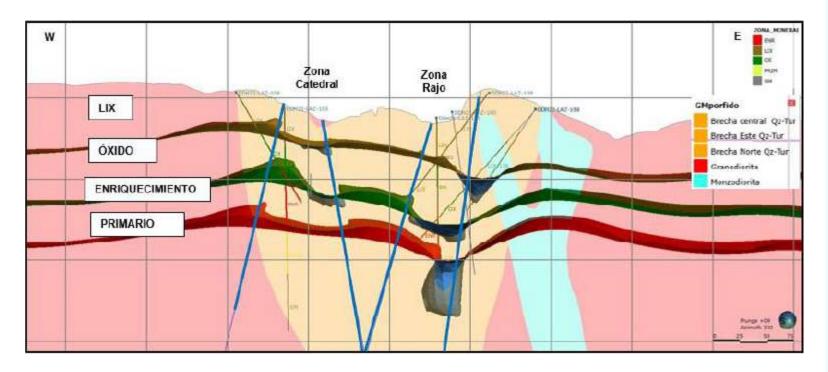
towards Los Azules.

### **Advanced Exploration**



Atacama Region





Expedited access throughout the year by paved road and bichofita. From Copiapó, you arrive by international road (route C-17), after 16 km you must take the road to Paso San Francisco to route C-365, where you must travel 26 km to route C-367. 26 km to route C-367 towards Los Azules.

**Basic Generative Exploration** 

**Basic Follow-up Exploration** 





**Contact:** Lorenzo Barrera @: lorenzo.barrera@edrsilver.com

### Form of Financing

New York-Toronto

### **Project Operator**

Endeavour Silver (Minera Plata Carina SpA)

**Basic Project Information** 

Low sulphidation epithermal Au with Ag subordinate mineralization.

Type of resource to be extracted

Au - Ag

**Development stage** Exploration Advanced.

**Property size** (Ļ) 7,000 ha

**Objectives** 

Redesign geophysical exploration with new CSAMT survey of NE direction and drilling of new targets.

### Relevant project geological information

1:5,000 hydrothermal alteration area geological survey; 677 soil samples; 742 rock samples; 840 Terraspec samples; 7 CSAMT profiles for 35km; 123 km ground magnetic; 12 radiometric dating; 71 Petrography and Calcography samples; 20 DDH drill holes for 9,094m; Environmental Management Plan.

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### **Best Drilling Intercept**

1m@4.5 Au ppm; 6m@0.92 Au ppm and 3.62 Ag ppm; 10m@0.6 Au ppm and 6 Ag ppm; 33m@0.44 Au ppm and 8.8 Ag ppm.



(0) Location

Antofagasta region.

### Access

pipeline.

### Highlights

Advanced exploration with 20 DDH drill holes with a total of 9,094m drilled. High sulfidation deposit with hydrothermal alteration zone of vuggy silica, hydrothermal breccias and blind mantiform bodies. The area of hydrothermal alteration (potassic alunite) covers an area of 3x2km. The total target area covers an area of 5x4km, so almost 50% of the area is located under young volcanic cover without hydrothermal alteration.

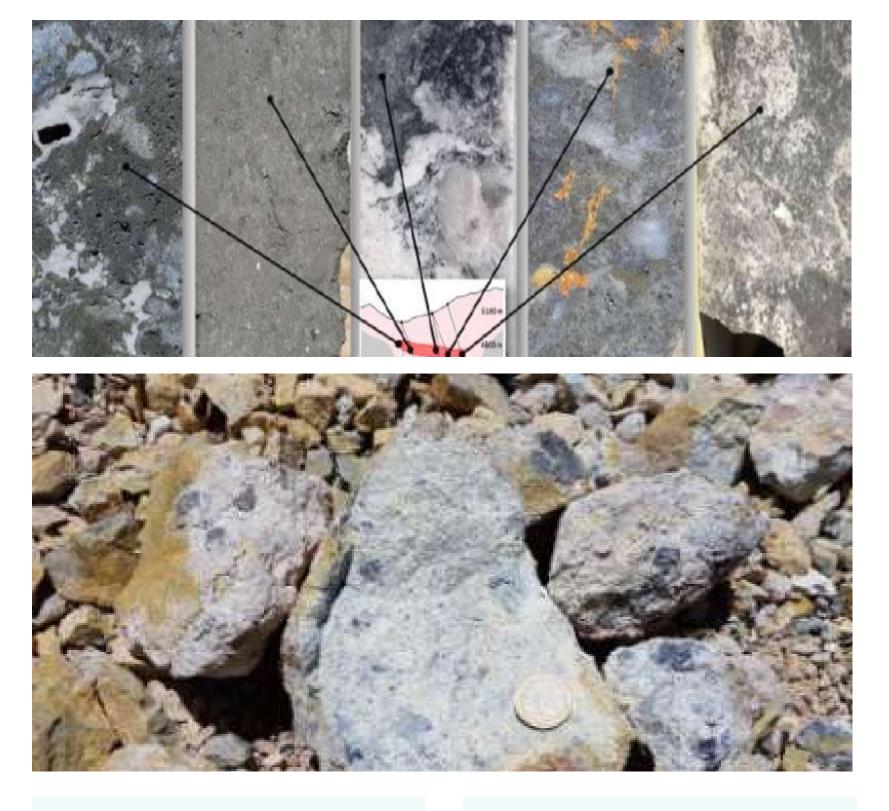
### **Advanced Exploration**



Antofagasta Region

Located 75km inland from San Pedro de Atacama. at an altitude of 5,100 meters above sea level,

5km from Paso de Jama highway and gas



### Target

- Deep hydrothermal breccia bodies.
- Au-Ag mineralized mantle with vuggy silica development.
- Areas covered by recent volcanism.



### **Description of Company**/ **Economic Group**

Production-Exploration Company with experience in epithermal deposits.



# Mining PRE-DEVELOPMENT PROJECTS

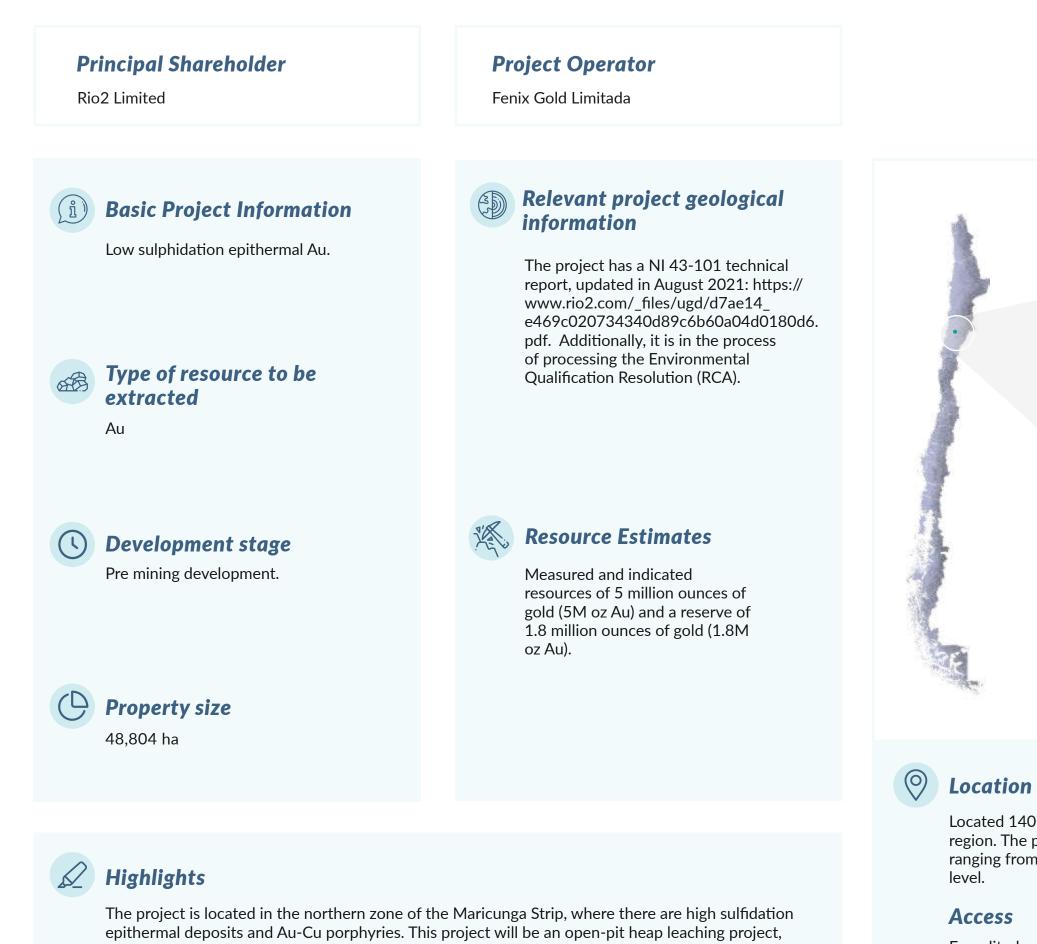






**Contact:** Isabel Condori

@: isabel.condori@rio2.com



Expedited year-round access by paved roads, route CH-31 and stone aggregate roads.

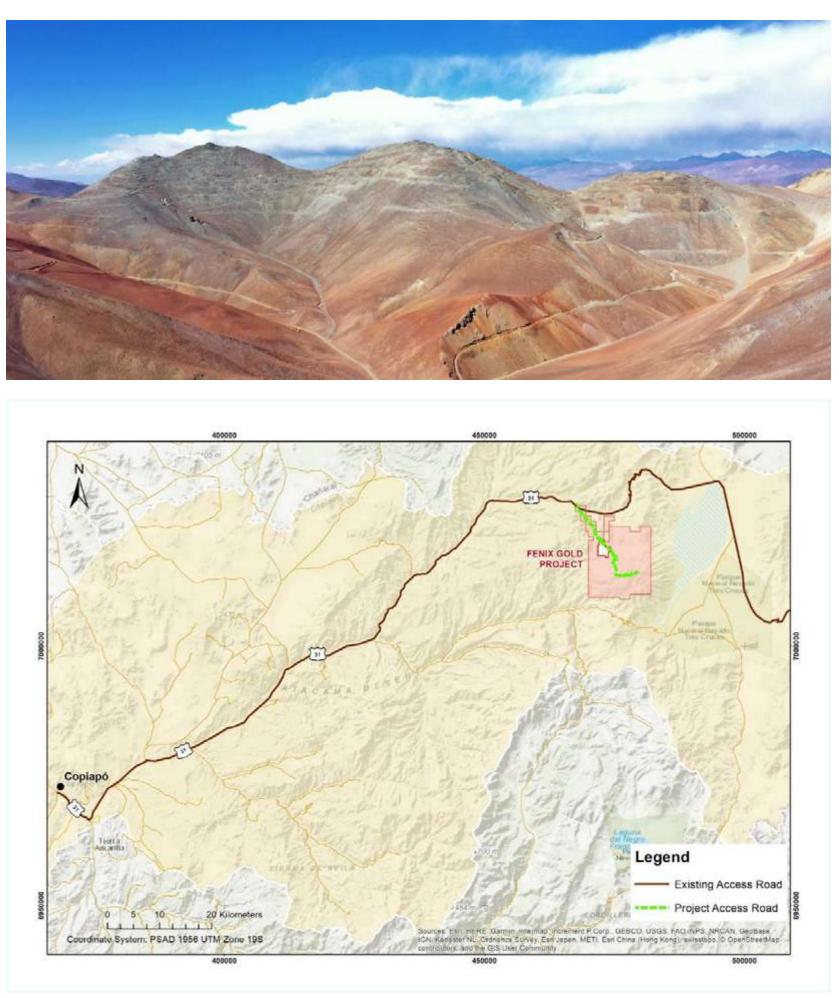
where gold will be recovered by the activated carbon method.

### **Mining Pre-development**



Atacama Region

Located 140km northeast of Copiapo, Atacama region. The prospect has an average altitude ranging from 4,300 to 4,900 meters above sea







**Contact:** Thomas Eggers @: teggers@kuraminerals.com

### Form of Financing

ASX

### **Project Operator**

Golden Rim Resources

**Objectives** 

### **Basic Project Information**

Intermediate sulphidation polymetallic epithermal Zn with Ag - Au - Pb subordinate mineralization.

### Type of resource to be extracted

Zn - Ag - Pb - Au

### **Deposit type**

Polymetallic epithermal, Eocene -Oligocene age.

### (し)

(Ď

### **Development stage**

Pre mining development.

### **Property size**

3,900 ha

## that will process 460 kt/a.

In addition, none of the silver oxides [approximately 296 kt at 99 g/t] have been included in the feasibility and will be stacked for future processing.

The mining sequence would start with a

3-year open pit (processing 400 kt/a of

Pb/Zn sulfide and Ag-rich mixed ores),

followed by a 5.5-year subway mining



### **Relevant project geological** information

Since 2005, the area has been systematically explored with a focus on developing a Zn-Ag-Pb-Au Tier-2 project.

Of the four hydrothermal cells defined to date, only one has been evaluated in detail, which is Patricia (2.4 Mt @8% ZnEq.).

Patricia (2.4 Mt @8% ZnEq).

The FS identified many areas where both throughput and mine life could be significantly increased with new surface drilling.



### $\bigcirc$ Location

above sea level.

### Access

the project area.



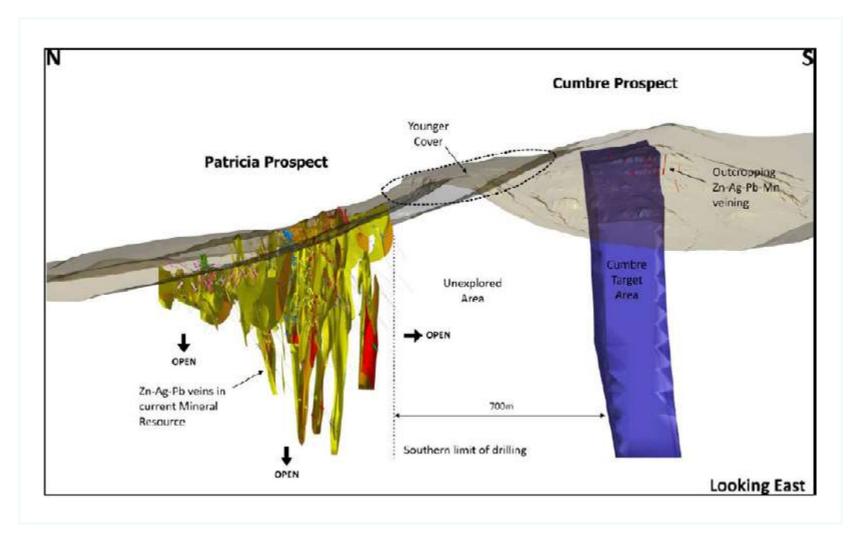
### Highlights

Positive results in the feasibility study (FS) conducted by Golder in 2013 to initiate a medium size operation (1,200 t/d), where the base case financial model contemplates a CAPEX of 66.5 MUSD, a payback of 4.3 years with an IRR of 17.6% and an NPV of 62.9 MUSD. Resources remain open at depth, along strike to the SE (geophysical), to the W, where a 150 m distant hole intercepted 2 m @9.4% Zn, 2.7% Pb, 96 g/t Ag and 0.1 g/t Au and S.

### **Mining Pre-development**

Located 120km northeast of the city of Iquique, Tarapacá region. At an altitude of 3,700 meters

Main access along route A-16 to the intersection with CH-5, then to the town of Huara, continuing along route A-15 to the N to the town of Chusmisa, and finally 30 km to the E along a secondary road to



### Target

- Patricia (epithermal polymetallic system - intermediate sulfidation systems based on fluid inclusions and mineralogy).
- Summit (epithermal polymetallic system - intermediate sulfidation systems based on fluid inclusions and mineralogy).
- La Rosa (similar geologic characteristics to Patricia with intense argillic alteration, Py and Cu oxides).
- Doris (presence of fractures with secondary Cu mineralization, suggesting high grade mineralization).

### 1

### **Resource Estimates**

In 2017: JORC - 2012, estimated 2.4 Mt @5% Zn, 1.4% Pb, 88 g/t Ag and 0.3 g/t Au (8% ZnEq), with 50% of the resources as Measured and Indicated.



### **Description of Company**/ **Economic Group**

Golden Rim Resources is developing advanced gold projects in West Africa. The company plans to sell its interest in the Paguanta project in Chile to focus its exploration activities in West Africa.



# GLOSSARY

RCA	Resolution of environmental qualification
DIA	Environmental impact statement
EIA	Environmental impact assessment
SEIA	Environmental impact assessment services
MUS\$	millions of US dollars
Mt	Million of metric tonnes
kt	thousands of metric tons
t	metric tons
Moz	million ounces
ha	Hectares
m <sup>2</sup>	square meters
km²	square kilometers
g/t	grams per tonne
%	Percentage

ppm	parts per million
ppb	parts per billion
km	kilometers
m	meters
Cu eq.	equivalent copper
Au eq.	equivalent gold
Zn eq	equivalent zinc
IP	induced polarization
DDH	diamond drill hole
RC	reverse circulation
ICP	Inductively coupled plasma mass spect
masl	Meters above sea level
IOCG	Iron Ore Copper and Gold deposit



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# 2023 Edition

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# InvestChile

FOREIGN INVESTMENT PROMOTION AGENCY

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