



# SOUTHERN HEMISPHERE mining limited

ASX : SUH

**A Growing Force in  
South American Copper**



## ***Last Piece of the Puzzle Los Rulos Copper-Gold Project, Chile***

***New project areas, New phase of drilling***

*October 2014*

## Disclaimer Notice

This presentation has been prepared by Southern Hemisphere Mining Limited (ABN 17 140 494 784) (“SUH”, “Southern Hemisphere” or the “Company”). This presentation contains certain forward – looking information and forecasts. Such forecasts, projections and information are not a guarantee of the Company’s future performance and include unknown risks and uncertainties. Accordingly, the actual results and developments may differ from those expressed or implied. SUH makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no liability for, the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission, from any information, statement or opinion contained in this presentation. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. You should conduct your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinion contained in this presentation.

## Competent/Qualified Person Statement

The information in this presentation that relates to exploration activities, exploration targets, exploration results or Mineral Resources, was prepared under the supervision of Trevor Tennant, Managing Director of SUH who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Tennant has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a “competent person” as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr. Tennant has reviewed and approved the information contained in this presentation.

**For further information regarding the projects, including a description of SUH’s quality assurance program, quality control measures, the geology, samples collected and testing procedures in respect of SUH’s projects, please refer to the Technical Reports and News Releases on the Company’s website at [www.shmining.com.au](http://www.shmining.com.au).**

## \*Copper Equivalent (“Cu Equiv”)

The copper equivalent calculations represent the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result. It is the Company’s opinion that elements considered have a reasonable potential to be recovered as evidenced in similar multi-commodity mines. Copper equivalent conversion factors and long-term price assumptions used are stated below:

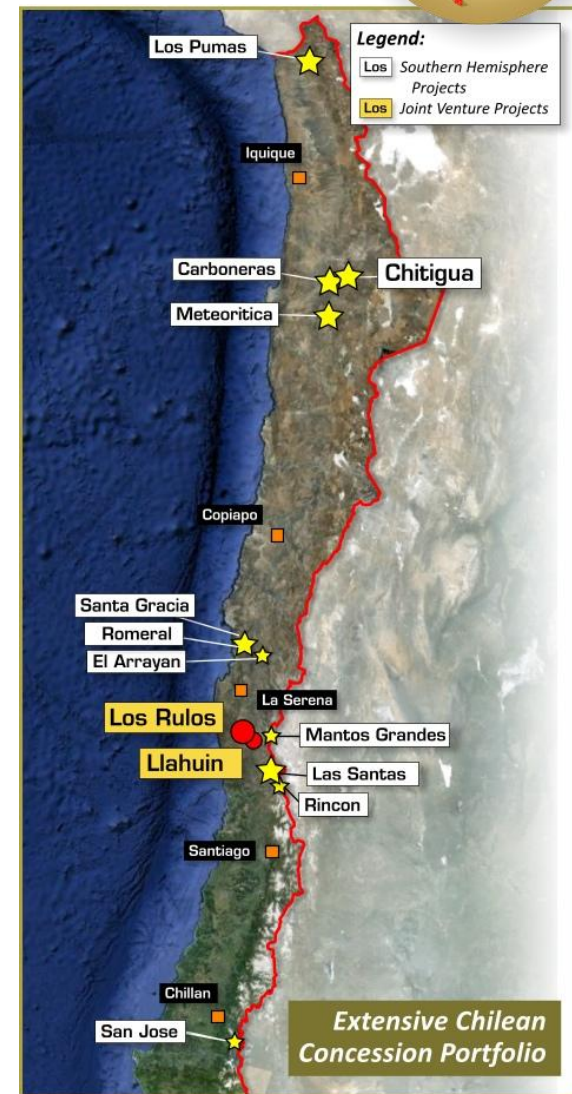
- Copper Equivalent Formula=  $\text{Cu \%} + \text{Au (g/t)} \times 0.72662 + \text{Mo\%} \times 4.412$
- Price Assumptions-Cu (US\$3.20/lb), Au (US\$1,700/oz), Mo (US\$15/lb)

# Introduction – Southern Hemisphere Mining (ASX: SUH)



- \* **Extensive portfolio** of high-quality copper prospects in Chile
- \* Strategic focus on **Central Coquimbo region**:
  - *areas of major mineralisation + world-class mines*
  - *good access and logistics*
- \* **Strong strategic partnership** with leading North American miner **Lundin Mining Corporation (TSX: LUN)**
- \* **Los Rulos Copper-Gold JV Project** the key focus
- \* **Highly leveraged to exploration success** with upcoming drilling program at Los Rulos
- \* **Llahuin JV Project** a **large-scale porphyry copper project**
- \* **Proven management team** with entrepreneurial approach and extensive experience operating in Chile
- \* **Potential left-field upside** from other strategic prospects

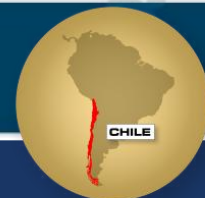
**A Growing Force in South American Copper**







# Corporate Snapshot



## Capitalisation Summary

Ordinary Shares <sup>1</sup>	248,532,950
Market Capitalisation @ \$0.066 <sup>2</sup>	Au \$16.4M
Cash <sup>3</sup>	Au \$1.5M
Debt <sup>3</sup>	Nil
Enterprise Value (Fully Diluted)	AU \$14.9M

<sup>1</sup> Excludes 3.65m options at exercise price of AU\$0.21 and expiry of December 2014 and 37.8m listed options at exercise price of AU\$0.045 and expiry of March 2016

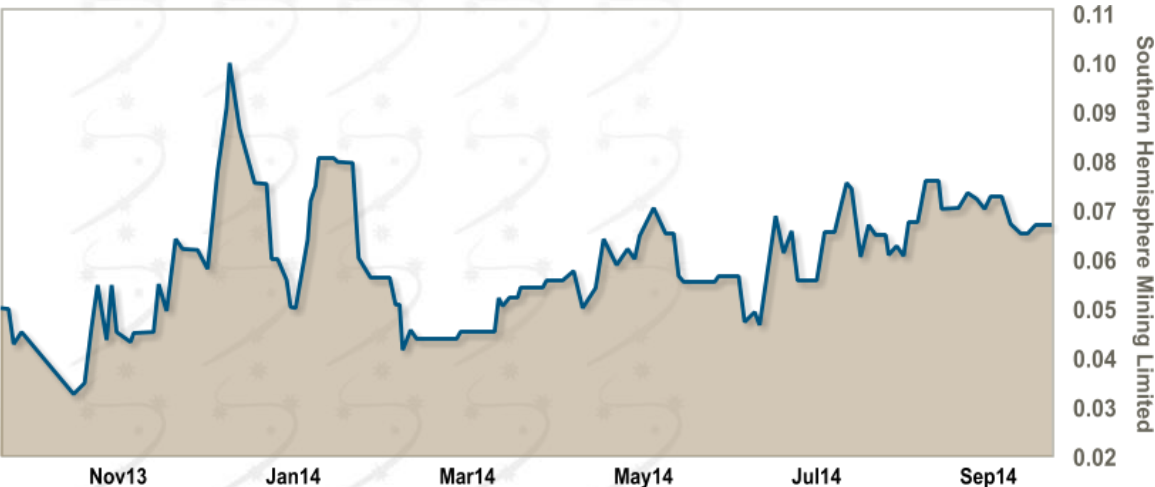
<sup>2</sup> As of September 16, 2014

<sup>3</sup> As of August 31, 2014

## Board of Directors

John Tarrant	<i>Non-Executive Chairman</i>
Trevor Tennant	<i>Managing Director</i>
James Pearson	<i>Executive Director</i>
Andrew Richards	<i>Non-Executive Director</i>
Andrés Hevia	<i>Non-Executive Director</i>
Paul McRae	<i>Non-Executive Director</i>

## ASX: SUH 12 Month Share Price Performance



## Top Shareholders

Trevor Tennant	11.4%
Genesis Investment Management	10.0%
Lundin Mining Corporation	8.0%
Ice Cold Investments Pty Ltd	5.5%
James Pearson	5.2%

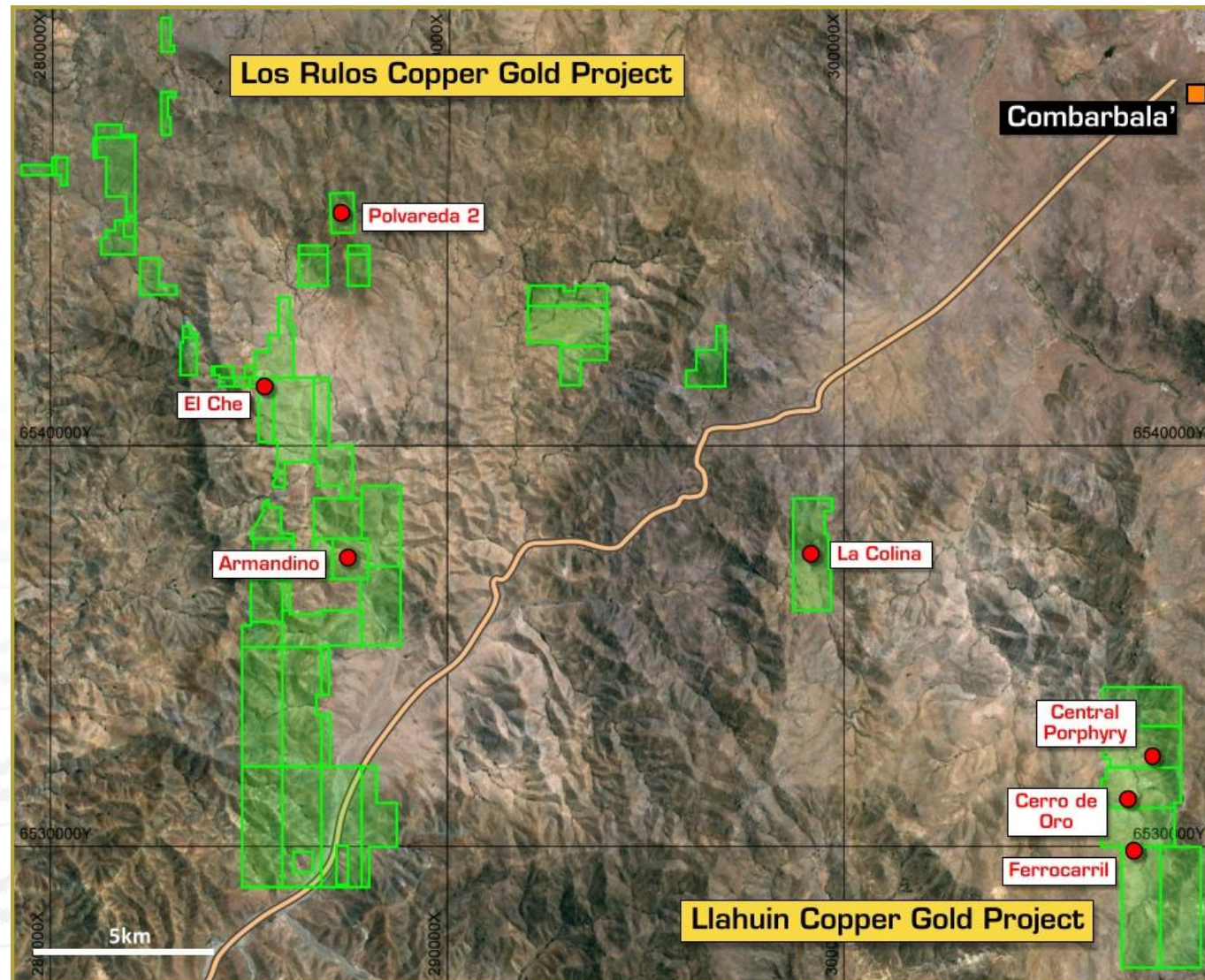
## Consolidated holdings (% of total)

Top 5 shareholders	40.1%
Top 20 shareholders	68.0%



# The Big Picture – Coquimbo Region, Central Chile

- \* SUH and JV partner **Lundin Mining** are building a dominant copper-gold mineral concession holding on the lower Coastal Cordillera in the **Coquimbo region of central Chile**
- \* The SUH/Lundin JV's have rights or option agreements over approximately **14km<sup>2</sup>** at the **Llahuin Project** and **45km<sup>2</sup>** at the **Los Rulos Project**







# Los Rulos Copper-Gold Joint Venture Project

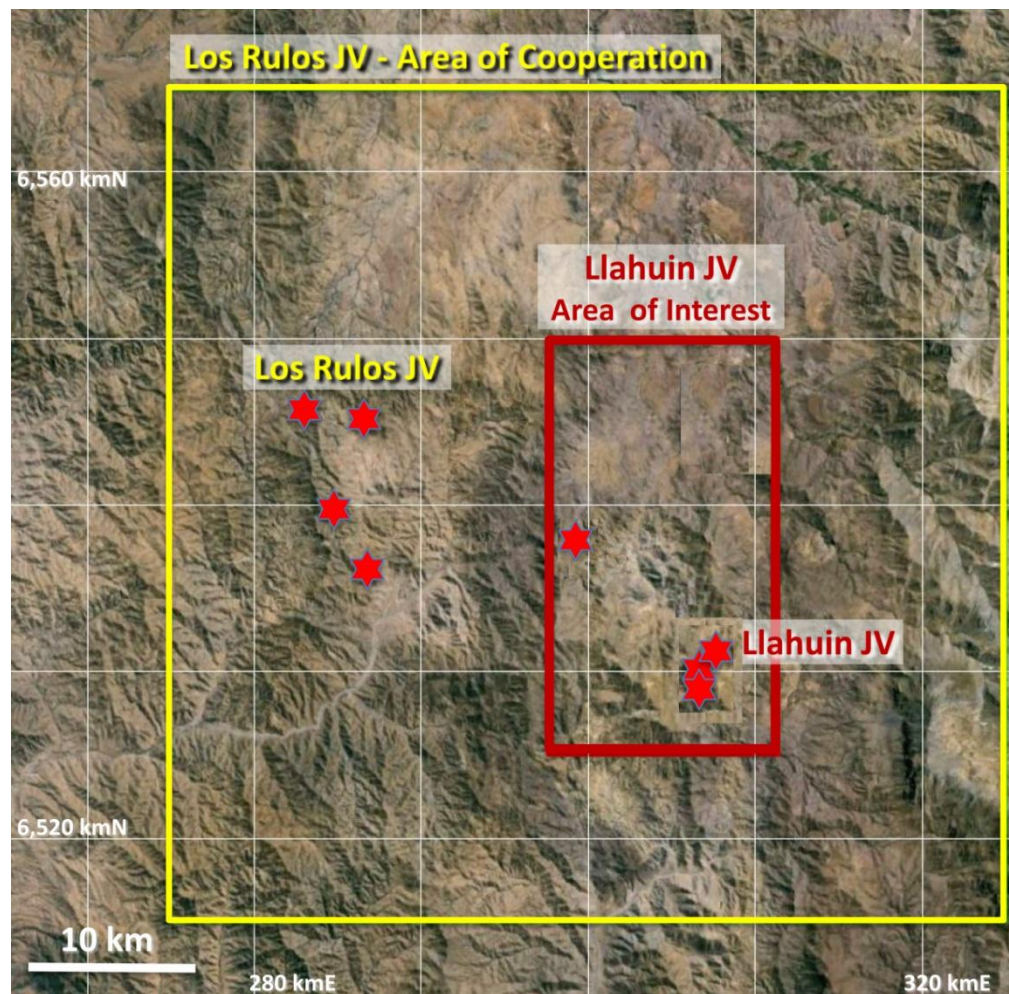
## \* Los Rulos 50/50 JV – Second JV with Lundin Mining

- Builds on existing Strategic Alliance and first JV with Lundin Mining for Llahuin Project
- SUH is the project operator
- \$1M+ in operator's fees received by SUH to date (both JVs)

## \* Minera Los Rulos an incorporated joint venture company – acquires and explores prospects within a 50 km by 50 km Area of Co-operation in the Coquimbo region

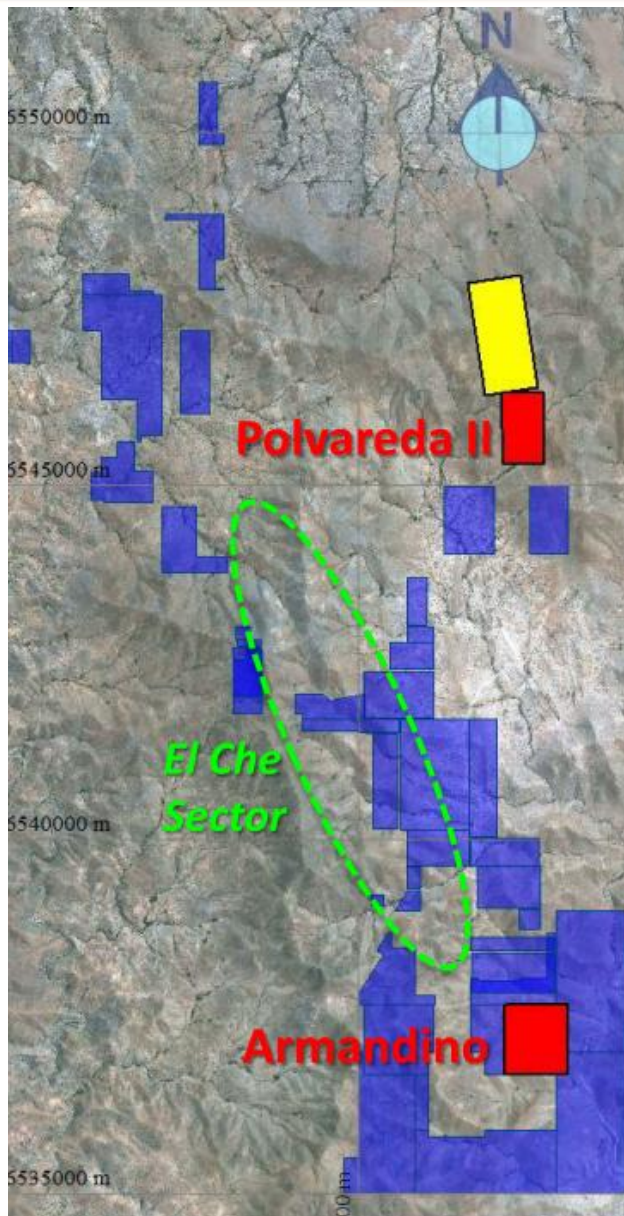
### \* Key terms:

- Lundin Mining holds and funds a **50% interest** in Minera Los Rulos
- After two years, Lundin Mining has the option to acquire a further **15% equity** (65% in total) via cash payment to SUH





# Los Rulos Copper-Gold Joint Venture Project



## Los Rulos

- \* Los Rulos area hosts numerous copper occurrences and extensive calc-silicate alteration in two linear north-east trending zones
- \* JV has targeted 3 concession sectors:
  - **Polvareda 2** – *Held under share purchase option*
  - **Armandiño** – *Held under option arrangement*
  - **El Che Sector** – *Acquired at no cost to JV*
- \* Geophysics (IP/Magnetic surveys), extensive regional sampling and geological mapping completed at Polvareda 2, Armandino and El Che
- \* Initial drilling program completed which tested Polvareda 2 and Armandino in **August 2014**
- \* Drilling paused to allow for key adjacent acquisition, **Polvareda 1, to be finalised.**
- \* Drilling to resume in **October 2014**



# Los Rulos Project – Initial Scout Drilling

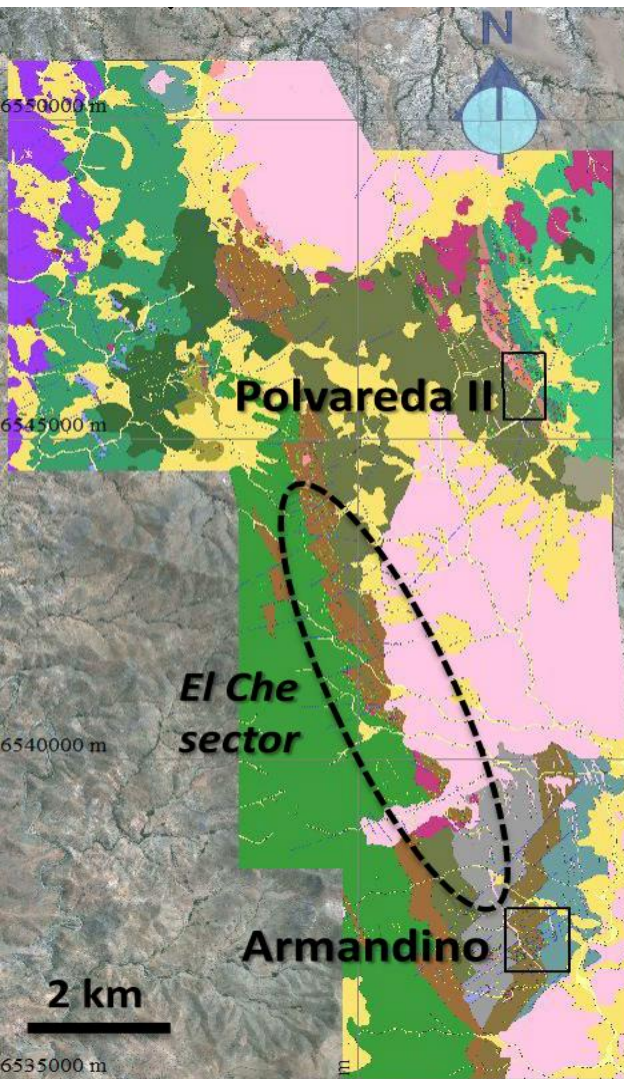
- \* Six diamond drill holes (~1,300m) were completed during **August 2014** testing **Polvareda 2** and **Armandiño**. Results included:
  - 45m @ 0.31% Cu including: 12m @ 0.61% Cu (Polvareda 2) – peak intercept 1.51% Cu
  - 8m @ 0.47% Cu (Polvareda 2)
  - 7m @ 0.57% Cu (Armandino)
  - 5m @ 0.53% Cu (Armandino)
- \* Drilling identified an extensive and widespread mineralised structure: the result of a complex geological event and includes numerous folds and faults
- \* Analysis from this initial program will assist in targeting subsequent drill holes
- \* Approved JV budget of **4,000m**. 2,700m slated for the **Polvareda 1 Prospect**.
- \* Drill rig on standby.



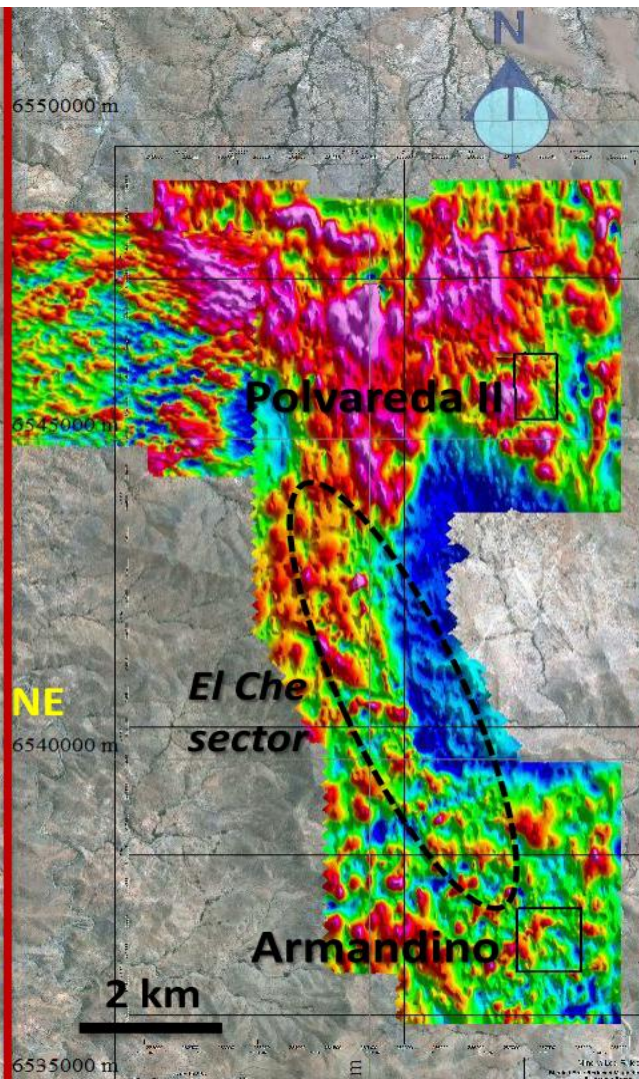
DDH P2-001 at 110.85m: Garnet skarn with strong epidotic retrograde magnetite / chalcopyrite / pyrite



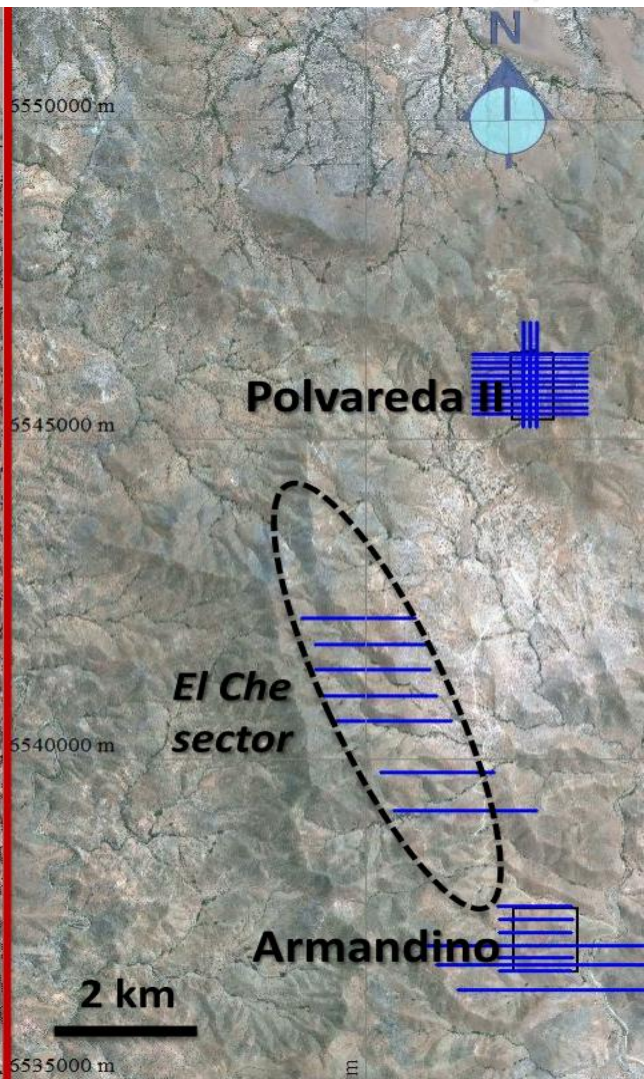
# Los Rulos Project – Field Work



*In-House Mapping*



*Magnetics Coverage*



*IP/Res Coverage*



# Polvareda 2 Prospect – Los Rulos JV

## Attractions of Polvareda 2 Prospect

- Located ~25 km NW of Llahuin Project and ~26 km west of the established regional mining town of Combarbala at a low 1,000m elevation
- Adjacent to **Polvareda 1**, a high grade operating copper skarn mine (300-400 tpd production)
- **Extensive surface copper** with widespread mineralisation and historical pirquinero mining
- **Favourable geology**
- Along with initial drilling, surface sampling program returned encouraging results.

Highlights included:

*5.0m @ 5.55% Cu; 3.38 g/t Au*

*5.0m @ 4.65% Cu; 0.40 g/t Au*

*5.0m @ 3.20% Cu; 1.64 g/t Au*

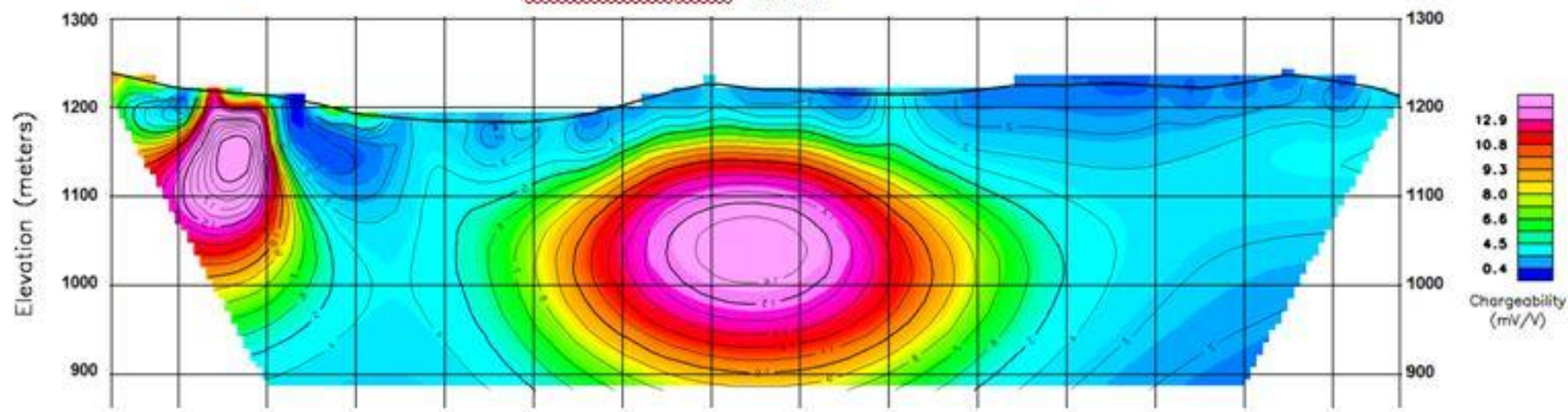
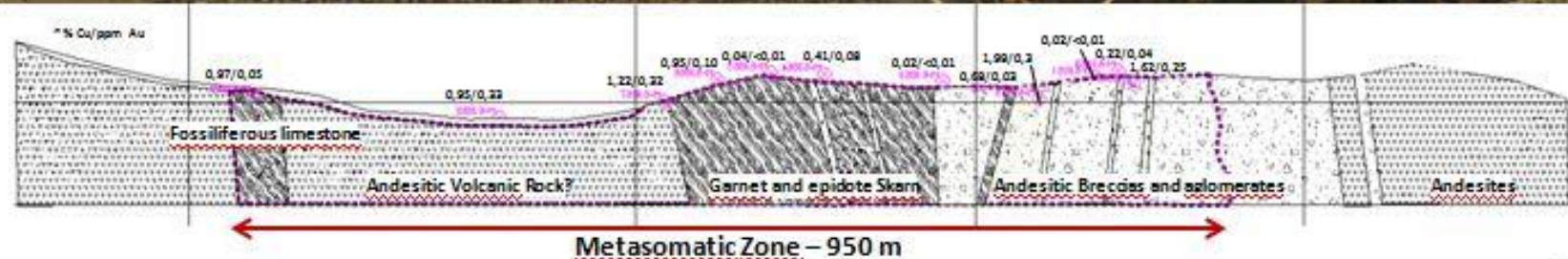
- ★ **Strong geophysical responses (IP)** to assist in drill targeting
- ★ Good infrastructure and access



*Polvareda 2 - looking south from Polvareda 1*



# Polvareda 2 Prospect – Los Rulos JV



## Attractions of Armandiño Prospect

- ✦ Located ~20km NNW of Llahuin and ~26 km south of Combarbala at a low 700m elevation
- ✦ Favourable geology, large alteration systems and high grade copper-gold skarns
- ✦ Channel sampling returned encouraging results with highlights including:
  - 5m @ 5.63% Cu, 0.42 g/t Au
  - 5m @ 2.49% Cu, 0.65 g/t Au
  - 5m @ 2.36% Cu, 0.54 g/t Au
- ✦ Widespread mineralisation and small scale pirquinero mining – both current and historical (current production rates up to 70 tonnes per day at **1.8% Cu** and **0.75 g/t Au**)
- ✦ **Strong geophysical response** to assist in drill targeting
- ✦ Good infrastructure and access

Armandino – Adit to Pirquinero mine





# **El Che Sector – Los Rulos JV**

- ✦ The **El Che Sector** is situated in the centre of the Los Rulos area on the west side of a central plutonic body within a garnet rich alteration zone in steeply dipping volcano-sedimentary units
- ✦ Located ~24km west of Combarbala at a low 900m elevation
- ✦ Channel sampling at El Che has returned **elevated copper values** and indicated high grade areas along the east west ridges that extend north south for ~5kms

Surface sampling programme returned encouraging results .Highlights include

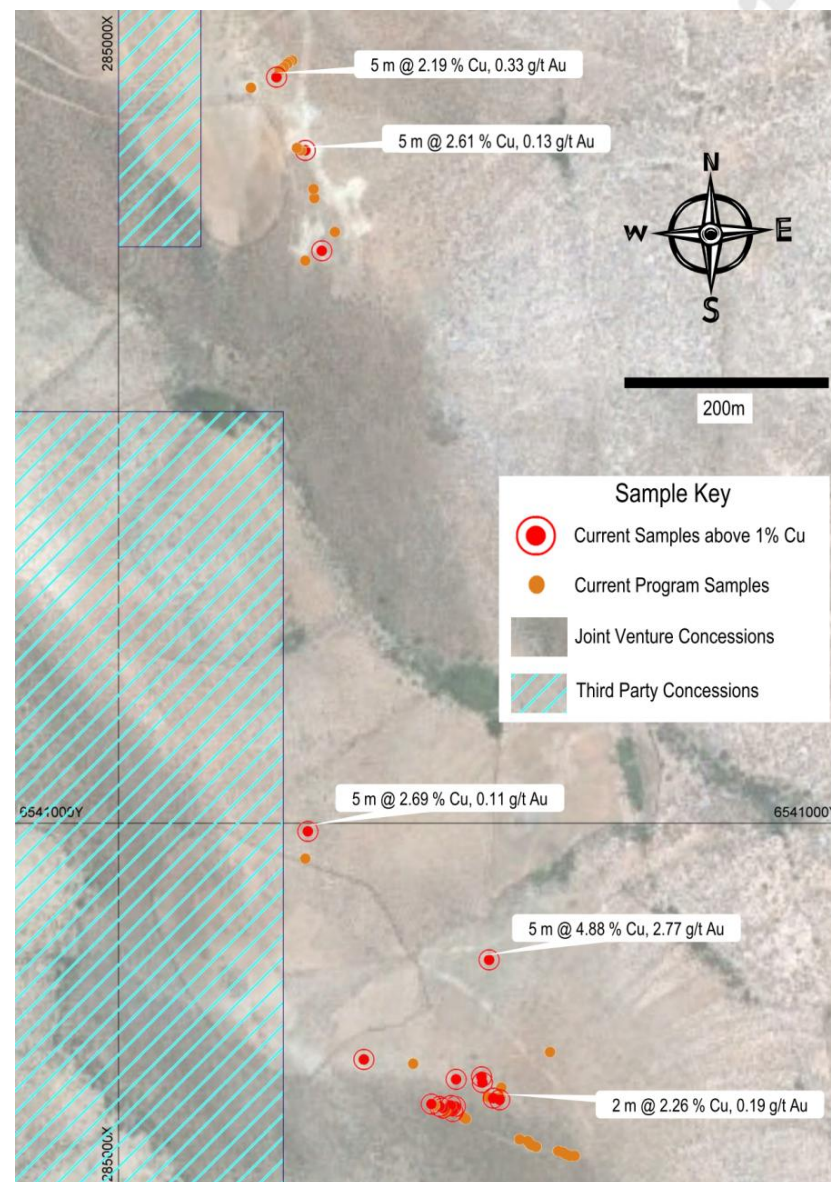
*5.0m @ 4.88% Cu; 2.77 g/t Au*

*5.0m @ 2.69% Cu; 0.11 g/t Au*

*5.0m @ 2.61% Cu; 0.13 g/t Au*

*5.0m @ 2.19% Cu; 0.33 g/t Au*

*2.0m @ 2.26% Cu; 0.19 g/t Au*



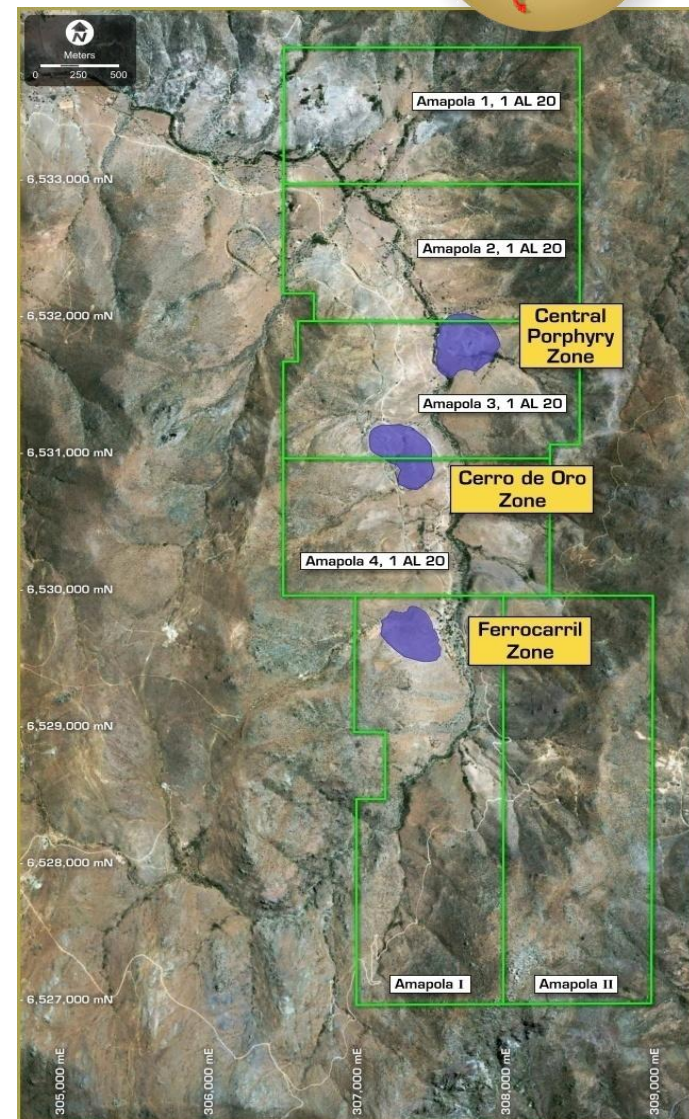
# **Llahuin Copper-Gold Project**



- ★ **Joint Venture** with **Lundin Mining** – Lundin Mining earning up to 75% JV equity by spending up to US\$35M
  - ★ Key logistical advantages: low elevation plus close to infrastructure
  - ★ Six granted Concession Areas covering ~14 sq km:
    - *Plus applications over adjoining ~37 sq km area*
  - ★ **30-year Easement Agreement** signed with Local Community
  - ★ **Higher Grade Core** of **60Mt** grading **0.50% Cu Equiv**:
    - *Corresponds to more than 4 years higher grade feed*
- (Full **149Mt** Measured and Indicated Resource below):

**Llahuin Mineral Resource – July 2013**

	Tonnes M	Cu %	Au g/t	MO %	Cu Equiv %
Measured	112	0.31	0.12	0.008	0.42
Indicated	37	0.23	0.14	0.007	0.37
Measured + Indicated	149	0.29	0.12	0.008	0.41
Inferred	20	0.20	0.19	0.005	0.36



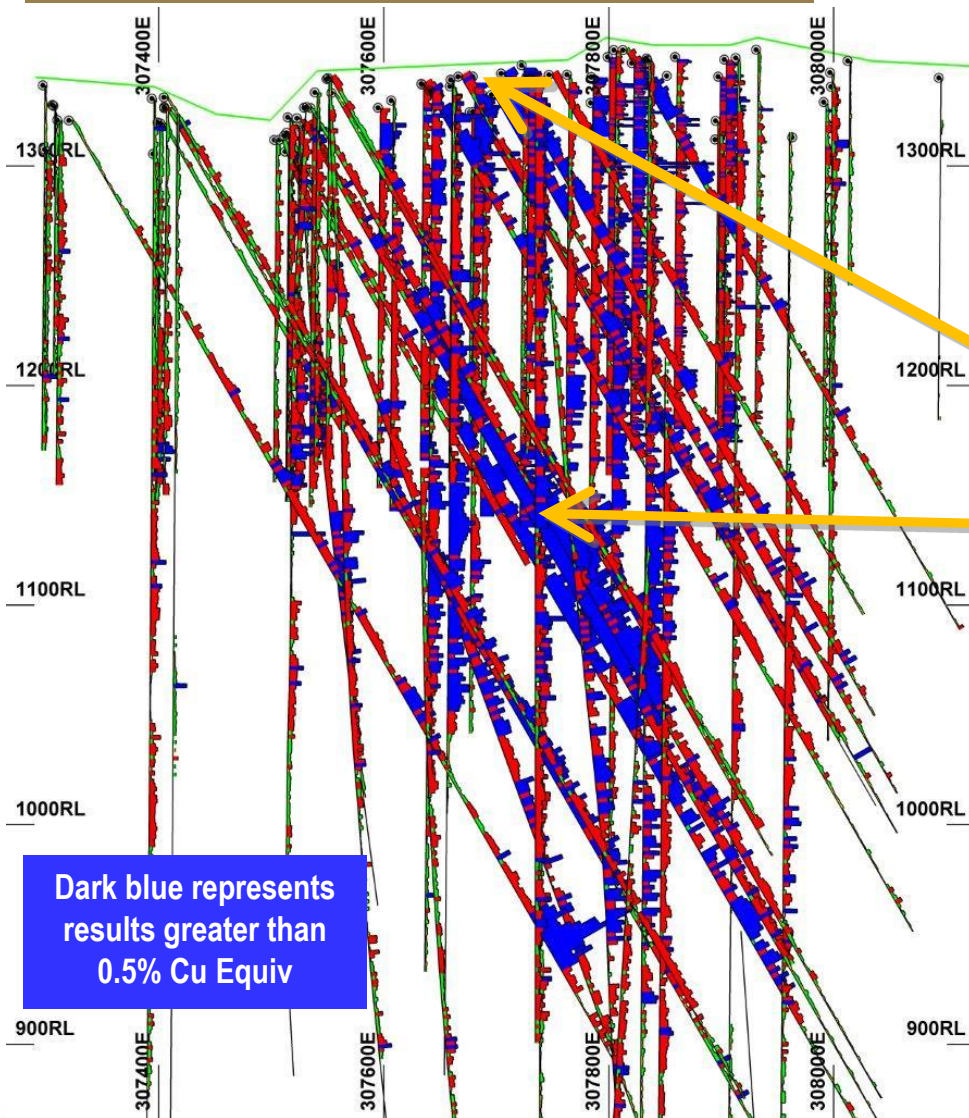




# Llahuin Project – Central Porphyry Zone



## Central Core – Composite Long Section



## Drilling

- ★ Drilling to date **54,520m (29k at Central Porphyry)**
  - Reverse Circulation Drilling – **33,732m in 188 holes**
  - Diamond Core Drilling – **20,788m in 59 holes**
- ★ Environmental application received to allows further drilling

High grade mineralisation at surface (no pre-strip)

High grade Central Core

DDH-LLA-021:

**440m @ 0.75% Cu Equiv** from 2m, including:

**208m @ 1.20% Cu Equiv** from 108m

DDH-LLA-025:

**366m @ 0.63% Cu Equiv** from 102m

DDH-LLA-026:

**254m @ 0.52% Cu Equiv** from 168m

DDH-LLA-027:

**326m @ 0.56% Cu Equiv** from 70m, including:

**128m @ 0.80% Cu Equiv** from 200m

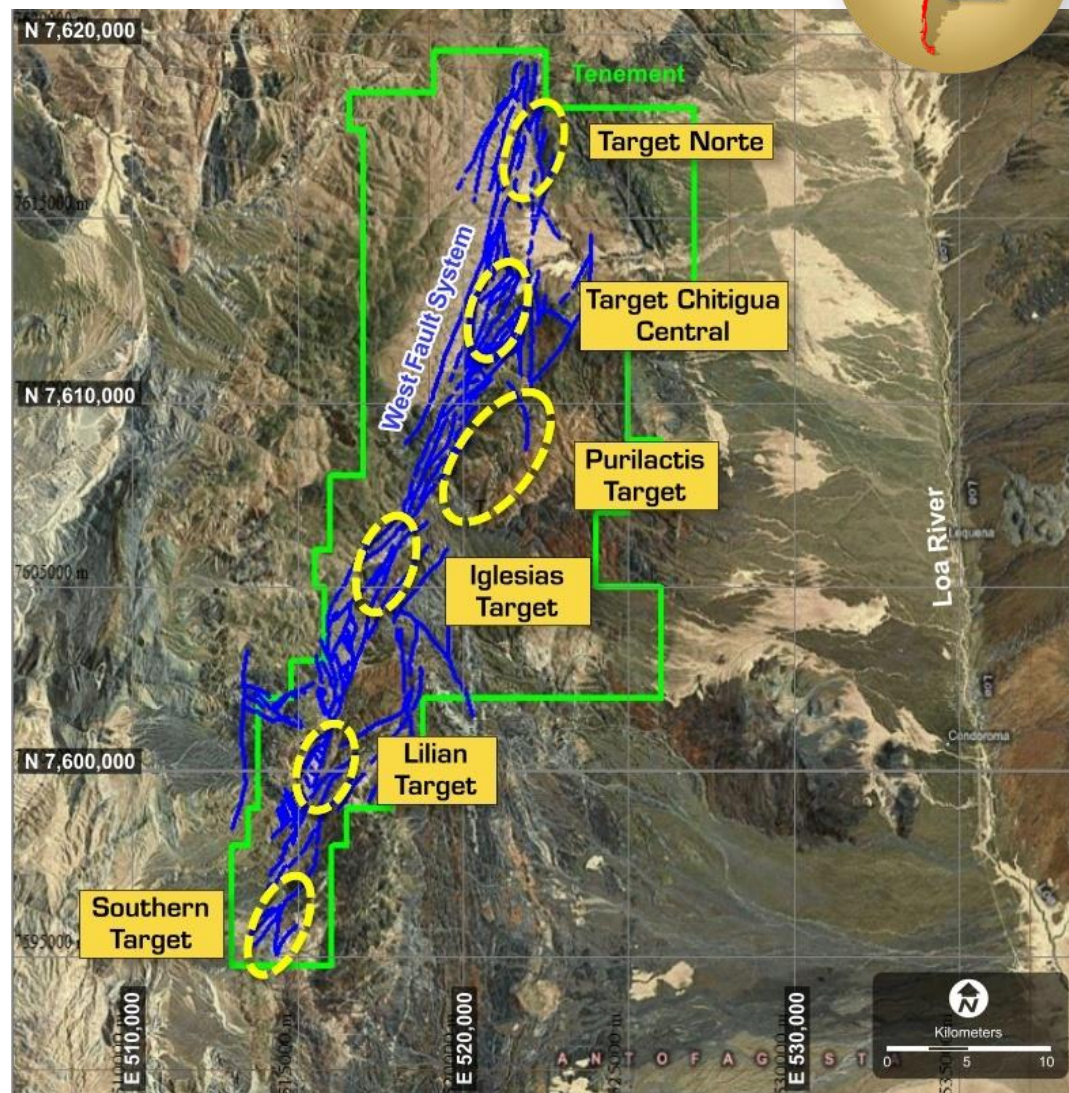




# Chitigua Copper Project



- \* Chitigua Project covers **172km<sup>2</sup>**, 90 km north of the mining town of Calama
- \* Chitigua contains **55 km** strike length of the famous **Western Fault** regional structure and comprises a large porphyry target
- \* Porphyry discoveries on the **Western Fault** include large scale deposits such as **Chuquicamata** and **Escondida**
- \* Anglo (former JV partner) completed helimag survey, detailed geological mapping, geochemical surveys and **3,000m drilling**
- \* Confidentiality Agreement signed with **Tier 1 Mining Company**







# Additional Project Pipeline – SUH 100%



- ★ SUH has 10 additional, defined, 100%-owned areas in Chile, prospective for copper and gold mineralisation, including:

## **El Arrayan\*\***

Good copper oxide potential, RC drilling returned **17m @ 2.03%Cu**, **7m @ 1.63% Cu** and **19m @ 0.60% Cu**

## **Romeral\*\***

Early stage project with no drilling. Located in prolific Atacama Fault

## **Mantos Grandes**

High grade copper-gold skarns, Joint ventured in FY2014. SUH received \$350k in option payments and gained value of limited exploration works funded by then JV partner

## **Rincon**

Early-stage project gaining significant interest

## **Las Santas**

Limited drilling

**\*\* These Projects are subject to a non-binding Letter of Intent with a Chilean based venture capital fund – due diligence underway**

- ★ **Los Pumas Manganese project**





# Summary – Reasons to Invest in SUH



- \* The **Los Rulos JV** is ~20km north west of Llahuin with multiple exploration skarn / IOCG targets that hold promise of **higher grade resources** evidenced by scout drilling, geophysics, detailed mapping and extensive porphyry mining
- \* **Los Rulos Project** is an exciting regional play. Despite historic and ongoing small scale mining, surprisingly the area remains largely untested by modern exploration techniques
- \* **Llahuin JV Project** emerging as a **large scale porphyry copper project**
- \* Sound strategies to develop opportunities with **joint venture partners** and **defray exploration costs**:
  - SUH is earning fees as **JV operator**
  - **Exploration spend exceeds the Company's own contribution**
  - Pursuing opportunities with the Company's **additional 100%-owned projects**
- \* **Proven management team** with extensive experience of exploration and working in Chile
- \* **Copper-gold focus** in areas of major mineralisation and world class mines in Chile

**A Growing Force in South American Copper**





# SOUTHERN HEMISPHERE mining limited

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