

**ASX Announcement**

**26 July 2024**

**Investor Webinar Presentation**

Southern Hemisphere Mining Limited ("Southern Hemisphere" or "the Company") (ASX: SUH, FWB: NK4) is pleased to announce its participation in the ShareCafe Small Cap "Hidden Gems" Webinar, to be held today from 12.30pm (AEST) / 10.30am (AWST).

Mark Stowell – Chairman will provide a progress update on upcoming exploration activities on the Company's Llahuin Copper-Gold Project.

This webinar can be viewed live via Zoom and will provide viewers with the opportunity to hear from, and engage with, a range of ASX-listed leading micro/mid cap companies.

To access further details of the event and to register at no cost, please copy with formatting and paste the following link into your internet web browser.

[https://us02web.zoom.us/webinar/register/WN\\_JyQw28TPShCdRVry42Q2dw](https://us02web.zoom.us/webinar/register/WN_JyQw28TPShCdRVry42Q2dw)

A recorded copy of the webinar will be made available following the event.

**Approved by the Board for release.**

Keith Bowker  
**Company Secretary**

**CONTACTS:**

For further information on this update or the Company generally, please visit our website at [www.shmining.com.au](http://www.shmining.com.au) or contact the Company :

[cosec@shmining.com.au](mailto:cosec@shmining.com.au)  
Telephone: +61 8 6144 0590

## BACKGROUND INFORMATION ON SOUTHERN HEMISPHERE MINING:

Southern Hemisphere Mining Limited is an experienced minerals explorer in Chile, South America. Chile is the world's leading copper-producing country and one of the most prospective regions of the world for major new copper discoveries. The Company's projects include the Llahuin Porphyry Copper-Gold Project and the Los Pumas Manganese Project, both of which were discovered by the Company.

**Llahuin Copper/Gold/Moly Project: Total Measured and Indicated Resources - JORC (2004) Compliant. As announced to the market on 18 August 2013.**

Resource (at 0.28% Cu Equiv cut-off)	Tonnes Millions	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
<b>Measured plus Indicated</b>	<b>149</b>	<b>0.29</b>	<b>0.12</b>	<b>0.008</b>	<b>0.41</b>
Inferred	20	0.20	0.19	0.005	0.36
<b>Total M+I+I</b>	<b>169</b>	<b>0.28</b>	<b>0.128</b>	<b>0.008</b>	<b>0.40</b>

**Note: \*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 natured mines. Copper equivalent conversion factors and long-term price assumptions used are stated below:

### Notes on copper recovery from historical test work

- "Recoveries of copper vary between 75% Cu and 91% Cu with the weighted average of the results being 84% Cu, which is a typically acceptable commercial level";
  - "Recoveries of gold vary between 41% Au and 57% Au, which is in line with expectations given the relatively low gold grades within the deposit"; and
  - "Flotation concentrates produced during testing contained the resource weighted average copper grade of 28% Cu and 4.9g/t Au. They also contained low levels of deleterious materials in the concentrate. Given that these tests were designed to set parameters and were not optimised, the results indicated good flotation process characteristics".
- Copper Equivalent Formula= Cu % + Au (g/t) x 0.72662 + Mo % x 4.412 Price Assumptions- Cu (\$3.20/lb), Au (\$1,700/oz), Mo (\$12.50/lb)

**Los Pumas Manganese Project: Total Measured and Indicated Resources - JORC (2012) Compliant. As announced to the market on 3 May 2023.**

Resource (at 2.5% Mn cut-off)	Tonnes	Mn %	Al%	Fe2O3%	K%	P%	SiO2%	SG%
Indicated	23,324,038	6.21	5.71	2.78	2.98	0.05	57.07	2.15
Inferred	6,940,715	6.34	5.85	3.05	2.83	0.05	54.61	2.14
<b>Indicated plus Inferred</b>	<b>30,264,753</b>	<b>6.24</b>	<b>5.74</b>	<b>2.84</b>	<b>2.95</b>	<b>0.05</b>	<b>56.50</b>	<b>2.15</b>

Total JORC Resources for the Los Pumas Manganese Project at a 2.5% Mn cut-off.

In relation to the above resources, the Company confirms that it is not aware of any new information or data that materially affects the information in the announcements, and all material assumptions and technical parameters in the announcements underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

### COMPETENT PERSON / QUALIFIED PERSON STATEMENT:

The information in this report that relates to copper and gold exploration results for the Company's Projects is based on information compiled by Mr Adam Anderson, who is a Member of The Australasian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr Anderson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which 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 Anderson is a consultant for the Company and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information, please refer to the Technical Reports and News Releases on the Company's website at [www.shmining.com.au](http://www.shmining.com.au).





# LLAHUIN – “ONE OF THE WORLD’S NEXT LONG-LIFE COPPER MINES”

**SHARE CAFÉ HIDDEN GEMS July 2024**

ASX: SUH FWB: NK4

[www.shmining.com.au](http://www.shmining.com.au)



# Disclaimer



This presentation includes certain forward-looking statements about future events and/or financial results which are forward-looking in nature and subject to risk and uncertainties. Such forward-looking statements or information, including but not limited to those respect to the development of the project, metal prices, metallurgical results and resource estimates, involve known and unknown risks, uncertainties and other factors which may cause the actual result, performance or achievements of the company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Forward-looking statements include without limitations, statements regarding the company's plans, goal or objectives and future completion of mine feasibility studies, mine development programs, capital and operating costs, production, potential mineralization, resources and reserves, exploration results and future plan, and objectives. Forward-looking statements can generally be identified by the use of forward-looking terminologies such as "may", "will", "expect", "intend", "estimate", "anticipate", "believe" or "continue" or the negative thereof or variations thereon or similar terminology. Forward-looking information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company and or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. A copper exploration company is subject to risks associated with mining in general and pre-development stage projects.

Unless otherwise indicated technical information in this presentation ("Technical Information") based on information contained in the technical reports and news releases (collectively the "disclosure documents"). Each disclosure document was prepared by or under the supervision of a qualified person. Readers are advised that mineral resources that are not mineral reserves do not have demonstrated economic viability. The Disclosure Documents are each intended to be read as a whole, and sections should not be read or relied upon out of context. The Technical Information is subject to the assumptions and qualification contained in the Disclosure Documents. All Dollar amount in this presentation are AUS Dollar unless otherwise stated. All maps and diagrams are for illustrative purposes only and no to scale.

ASX releases referred to or source of data used in this presentation are as follows:

## Llahuin Copper/Gold/Moly Project

18 July 2011, 2 Feb 2012, 3 July 2013, 15 Feb 2022, 28 April 2022, 4 Oct 2022, 8 Nov 2022, 29 Nov 2022, 18 Jan 2023, 3 Feb 2023 19 April 2023, 15 Jan 2024, 29 April 2024.

Llahuin Copper/Gold/Moly Project: Total Measured and Indicated Resources - JORC (2004) Compliant. As announced to the market on 18 August 2013

## Los Pumas Manganese Battery Metals Project:

Total Measured and Indicated Resources - JORC (2012) Compliant. As announced to the market on 3 May 2023

ASX release 25 March 2011 - Resources & ASX 2 February 2011 – PEA Coffey Mining and SNC Lavlin

A large low grade indicated and inferred resource of 264mt @ 2.4% Mn (resource published ASX 10 May 2010 – Coffey Mining)

ASX 23 March 2023

## Lago Lithium Brine Project

ASX 13 July 2023 -Lago Lithium Project

The Company confirms in this presentation that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

# LARGE COPPER/GOLD MINE EMERGING IN CHILE

Llahuin is Southern Hemisphere Mining's flagship copper/gold project, located 350km North of Santiago, Chile

**Los Pumas**  
Battery Metals  
Manganese Project

**Llahuin**  
Copper Gold Moly Project  
680,000t CuEq Resource

**Lago**  
Lithium Brine  
Project

- **LLAHUIN COPPER/GOLD PROJECT(100%)**
- **Flagship project: Increasing open pit copper-gold resources to 20+ year mine life -plus underground targets**
- **Large porphyry system, with enormous growth potential to be of interest to majors/mid tiers**
- **LAGO LITHIUM BRINE PROJECT (100%)**
- **Exploration advancing**
- **LOS PUMAS BATTERY MANGANESE (100%)**
- **Off-take partner engagement in progress for equity funding to advance to DFS for Manganese, Metallurgical Manganese and/or HPMSM product**



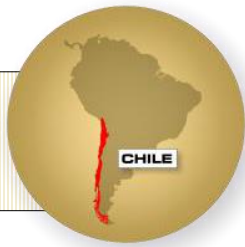
# Board and Management: Our Team Knows Copper Mining

Over 40 years combined mine discovery, development and / or operating experience internationally; including two of the world's more significant copper mines; Dikulushi - located in DRC Africa & Grasberg Mine - located in West Papua

<b>Mark Stowell</b> B.Bus CA	<b>Chairman</b>	Internationally experienced resource sector executive. Founding Chairman of Mawson West Ltd; an international copper producer & explorer which completed an IPO on the Toronto Stock Exchange in one of the largest base metal IPO's of 2011. A founder of Incremental Petroleum Limited and Anvil Mining Ltd.
<b>David Frances</b> BSc Geol (Hons)	<b>Director</b>	Managing Director of Province Resources Ltd (ASX:PRL). Mr. Frances led Mawson West (TSX: MWE) from 2006 – 2012; he was instrumental in developing into a significant international copper producer, developer, & explorer in the DRC.
<b>Natalie Dawson</b> B.Com CPA MBA	<b>Director</b>	Significant Australian & international experience as a Director / CFO / Major Projects Commercial Director Experience includes boots on the ground - West Papua Grasberg copper/ gold mine, multi-national publicly listed companies (Including: Rio Tinto, MacMahon, Clough Engineering).
<b>Richard Caldwell</b> B.Ec LLB F.Fin	<b>Director</b>	Formerly Head of Corporate Finance & Equity Capital Markets at StoneBridge, Head of Equity Capital Markets at Burdett Buckeridge & Young; before holding several senior management positions with Citibank Sydney, JP Morgan London.
<b>Adam Anderson</b> B.Sc Geol (Hons) MAusIMM	<b>Exploration Manager</b>	Australian and international expertise including; discovery team on the Golden Cities gold project in Australia, taking the project to prefeasibility; Certej Deeps Gold Porphyry in Romania, planning and drilling the discovery hole which ultimately saw the resource increase from 2Mozs to over 4Mozs; and responsible for seven JORC compliant copper resources in the DRC for Mawson West and others.



# Capital Structure



## Summary

Fully paid ordinary shares	736,240,044
Unlisted options (mgt)	13,750,000
Unlisted Opts (broker) (10c, 17/06/27)	1,000,000
Cash and receivables*	~\$7.7m
Market cap at \$0.03	\$22m

### Substantial Shareholders

Pictet Asset Mgt (Singapore) Pte Ltd 9.8%

Merchant Holdings Pty Ltd (mgt) 9.4%

Others: 6.5% and 5%

### Notes

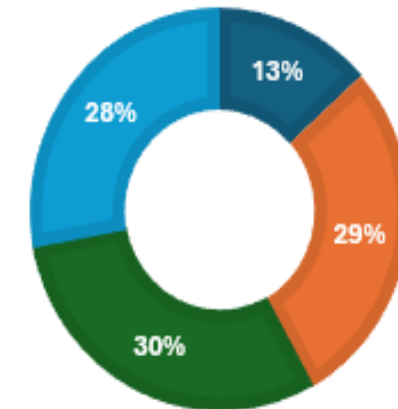
Unlisted Options Exercisable Nil (Performance KPI) , Expiry 30 Jul '26

Currency is AUD

\* Cash at 30 June \$4.6m and net VAT refund net-ref March 24 Quarterly report

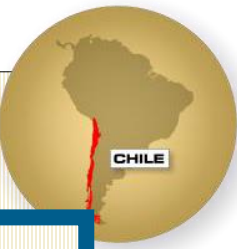
## SHAREHOLDER DISTRIBUTION

■ Board & Mgt ■ Institutions ■ Top 20 ■ Retail





# Llahuin Copper-Gold: Straight Forward Investment Metrics

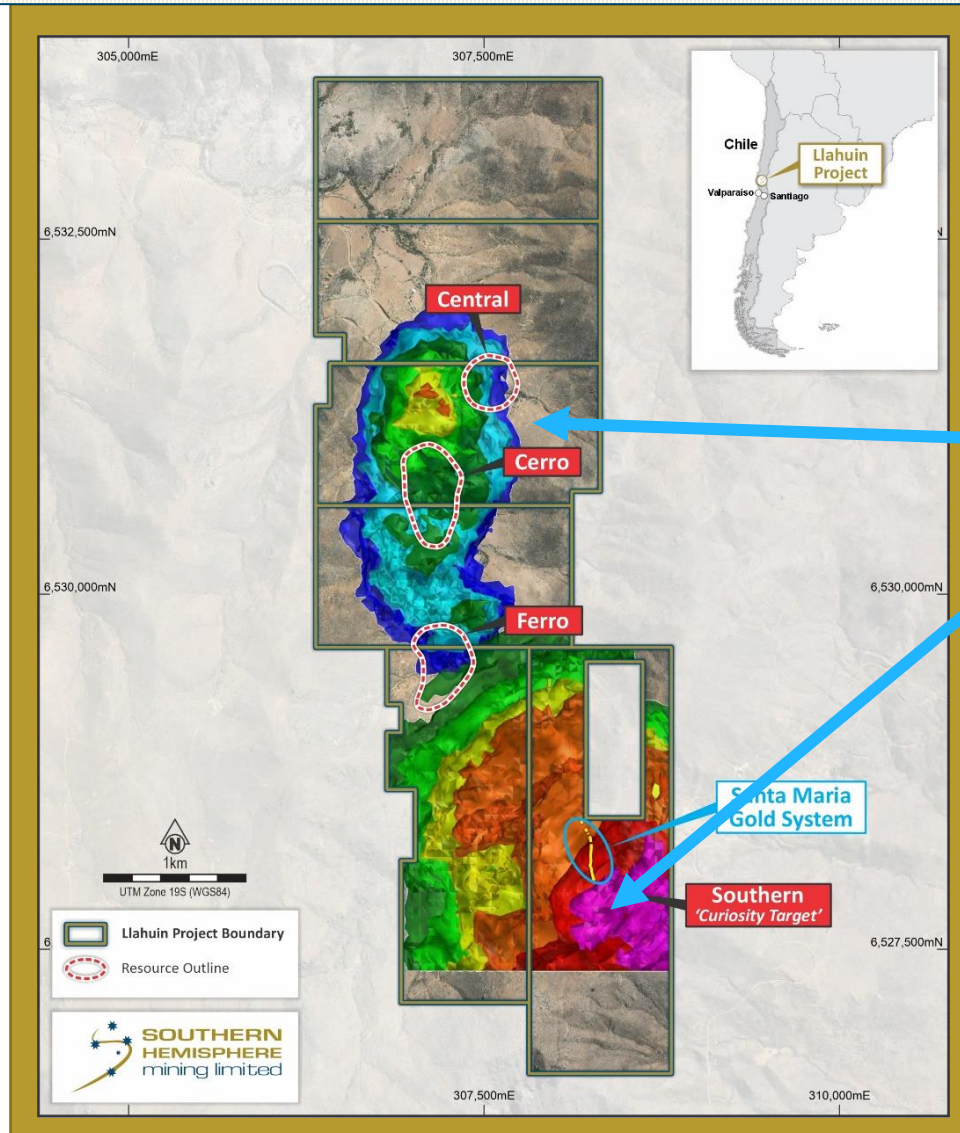


- ✓ **Chile has an International Credit Rating of A**
  - ✓ **Excellent Location**
    - ❖ Low altitude at 1,300m
    - ❖ ~5km to grid power, 200km to Coquimbo Port
    - ❖ Combarbala town 24km (13,000popn), Santiago 350km
    - ❖ Sealed airstrip 20km
    - ❖ A historical railway traverses the property
    - ❖ Not in a water vulnerable area (minimal ESG impact)
  - ✓ **ESG**
    - ❖ Low population area
    - ❖ Long term community agreement in place
    - ❖ Local workforce
- Map Showing Llahuin location in relation to Santiago and Andacollo*  
*Copper mine (Teck)*



# Llahuin Copper/Gold Project-680,000 tonnes Copper Equivalent

M+I+I and Growing- 3D litho-geochem target models shown-below and south of resources outlined



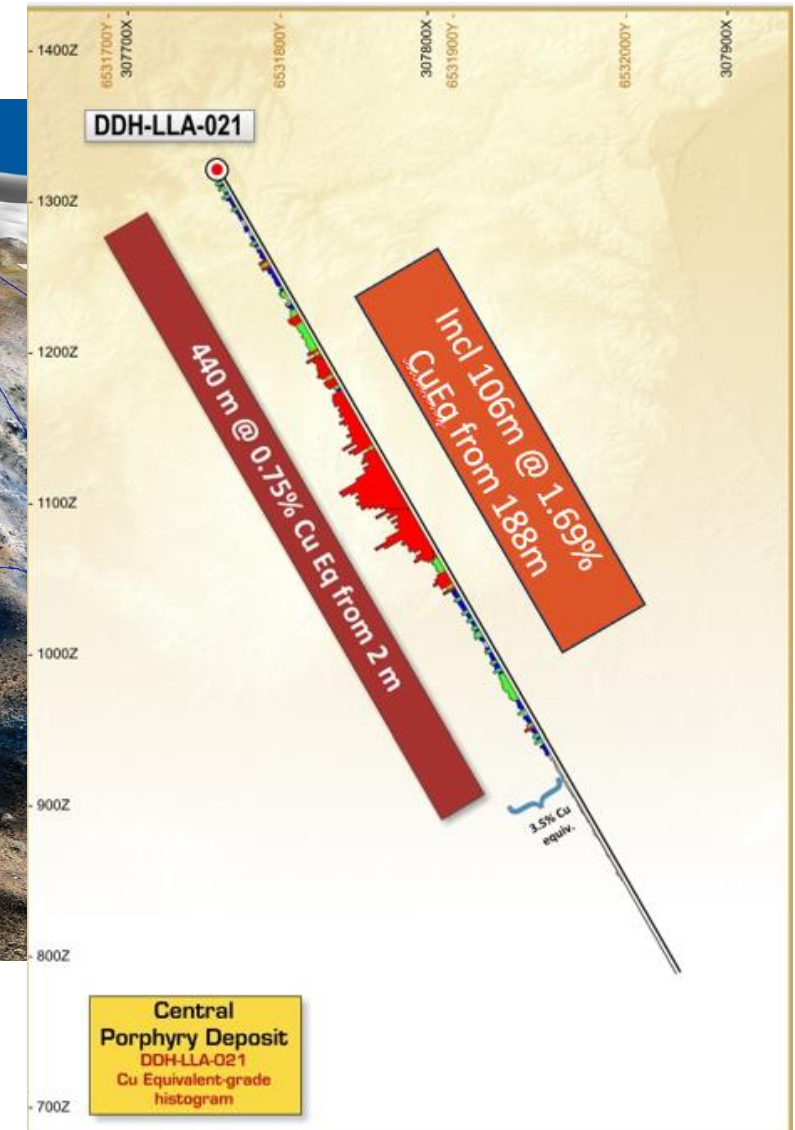
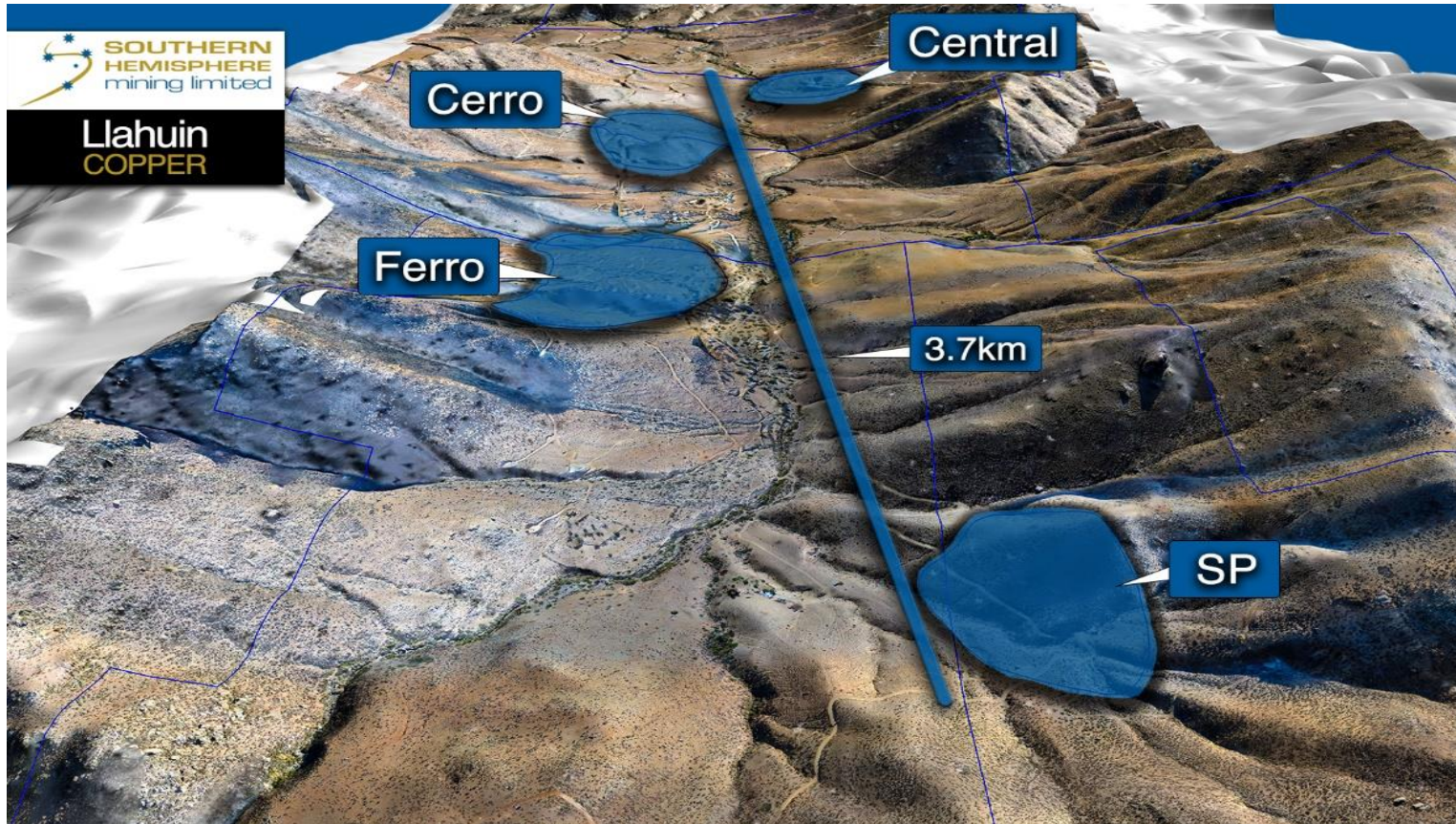
**1. Geochemistry works-+2000 samples, Cerro-Ferro link over 1.9km strike**

**-3D Target Models to drill for major expansion at higher grades, particularly deeper**

**8. AI and modern tools used to advance location of higher grade mineralised zones for drilling for major resource growth commencing Sept 2024**



# The Llahuin Valley Hosts a Cluster of Copper/Gold Deposits With More to Discover





# Top Drill Results and Rock Chip Samples

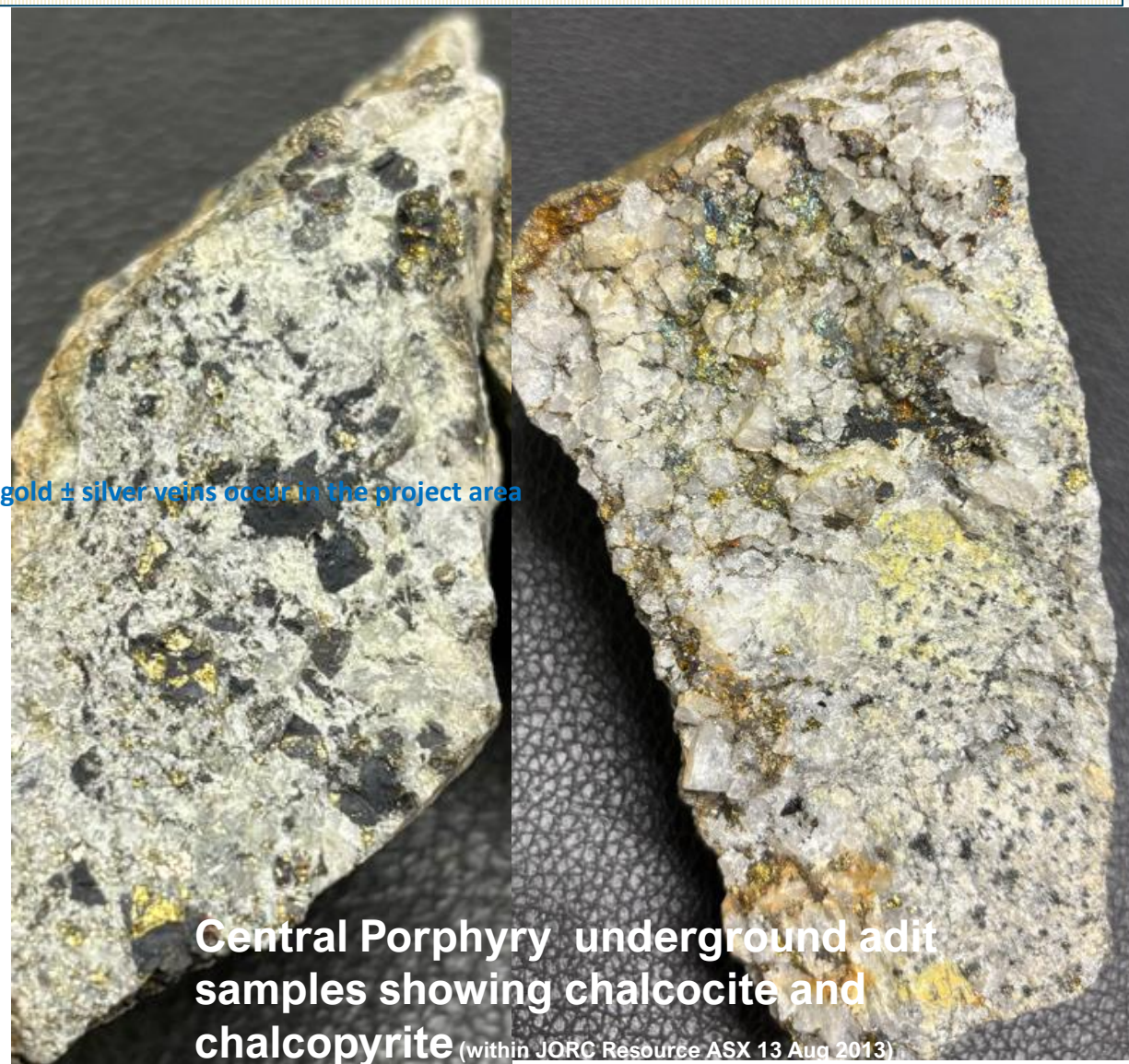


HOLE ID	From	To	Width m	CuEq %	LOC
21LHRC003	0	90	90	0.62%	CENTRAL
21LHRC009	0	69	69	0.47%	CERRO
DDHLLA021	2	440	438	0.75%	CENTRAL
Incl	182	288	106	1.69%	CENTRAL Higher grade at depth
DDHLLA025	102	468	366	0.63%	CENTRAL
DDHLLA026	168	422	254	0.52%	CENTRAL
DDHLLA027	70	396	326	0.56%	CENTRAL
DDHLLA043	416	450	34	1.49%	CENTRAL Higher grade at depth
23LHRC027	0	156	156	0.51%	CERRO
23LHRC028	32	168	136	0.47%	CERRO
23LHRC042	0	48	48	0.45%	FERRO

Several veins in areas outside known resources demonstrate very high-grade copper  $\pm$  gold  $\pm$  silver veins occur in the project area

Sample ID	WGS Easting	WGS Northing	RL	Cu %	Au_ppm	Ag_ppm
22LHR000092	307803	6531901	1382	17.5	0.23	2
22LHR000105	306685	6530575	1503	16.58	0.94	1
22LHR000106	306686	6530666	1491	16.27	1.13	4
22LHR000087	307826	6532092	1437	11.3	0.84	8
22LHR000088	307898	6532089	1458	6.99	0.46	2
22LHR000090	307837	6532105	1447	4.88	0.53	2
22LHR000184	306542	6531924	1354	4.12	0.36	1495
22LHR000086	307591	6532644	1326	4.12	0.7	238
22LHR000013	307913	6528823	1544	3.15	0.06	22
22LHR000183	306558	6531935	1356	2.74	0.58	1045
22LHR000158	306889	6531811	1336	2.43	4.39	345
22LHR000214	306694	6532311	1287	1.66	4.53	3
22LHR000103	307430	6532136	1318	1.39	6	24

Ref ASX 2.3.2023



Central Porphyry underground adit samples showing chalcocite and chalcopyrite (within JORC Resource ASX 13 Aug 2013)



# Mineral Resource Estimate Independently Certified 2013, Upgrade in Progress for H1 2025



Total Measured and Indicated Resources at Llahuin Cu-Au-Mo Project					
Cu Equiv % Cutoff	Tonnes Million	Cu %	Au g/t	Mo %	Cu Equiv %
0.26	173	0.28	0.12	0.007	0.39
0.28	149	0.29	0.12	0.008	0.41
0.30	127	0.3	0.13	0.008	0.43

Total Inferred Resources at Llahuin Cu-Au-Mo Project					
Cu Equiv % Cutoff	Tonnes Million	Cu %	Au g/t	Mo %	Cu Equiv %
0.26	26	0.19	0.17	0.005	0.34
0.28	20	0.20	0.19	0.005	0.36
0.30	15	0.21	0.21	0.005	0.38

Totals Resources per Zone at Llahuin Cu-Au-Mo Project				
Zone	Measured (Mt)	Indicated (Mt)	Total Mea + Ind (Mt)	Inferred (Mt)
Central Porphyry	101.2 @ 0.43%	7.3 @ 0.34%	108.5 @ 0.42%	2.8 @ 0.32%
Cerro de Oro	10.8 @ 0.39%	15.2 @ 0.38%	26.0 @ 0.38%	15.6 @ 0.37%
Ferrocarril		14.4 @ 0.37%	14.4 @ 0.37%	1.5 @ 0.34%
<b>Total</b>	<b>112 @ 0.42%</b>	<b>37 @ 0.37%</b>	<b>149 @ 0.41%</b>	<b>20 @ 0.36%</b>

Zone tonnage at 0.28% CuEq Cutoff included in Resource Estimate - Grades are shown in Cu Equiv %

Contained Metal Summary at Llahuin Cu-Au-Mo Project				
Resource Category	Copper (t)	Cu %	Gold oz	Au g/t
Measured	344,000	0.31	433,000	0.12
Indicated	86,000	0.23	165,000	0.14
Inferred	40,000	0.20	119,000	0.19

Higher Grade Core Resources at Llahuin (Measured + Indicated Cat)					
Cu Equiv % Cutoff	Tonnes Million	Cu %	Au g/t	Mo %	Cu Equiv %
0.34	70.6	0.34	0.14	0.008	0.48
0.36	60.3	0.35	0.15	0.008	0.50
0.38	52.0	0.37	0.16	0.008	0.52

Refer to SUH August 2013 ASX Release

- Total Copper tonnes: 686,000t CuEq
- Measured Indicated and Inferred at 0.28% cut-off\*
- From surface, open pit style mining and growing
- *Resource upgrade in progress, due H1 2025 to include all work and drilling since 2013*

# Llahuin Central Deposit 108mt @ 0.42% CuEq Measured and Indicated



## Resource drilling complete for open pit mining

- ✓ ~1:1 Strip ratio, ore from surface
- ✓ Defined depth of drilling limit (open pit) ~400m vertical

## Highlight Drill Results

\*Note higher grades at depth

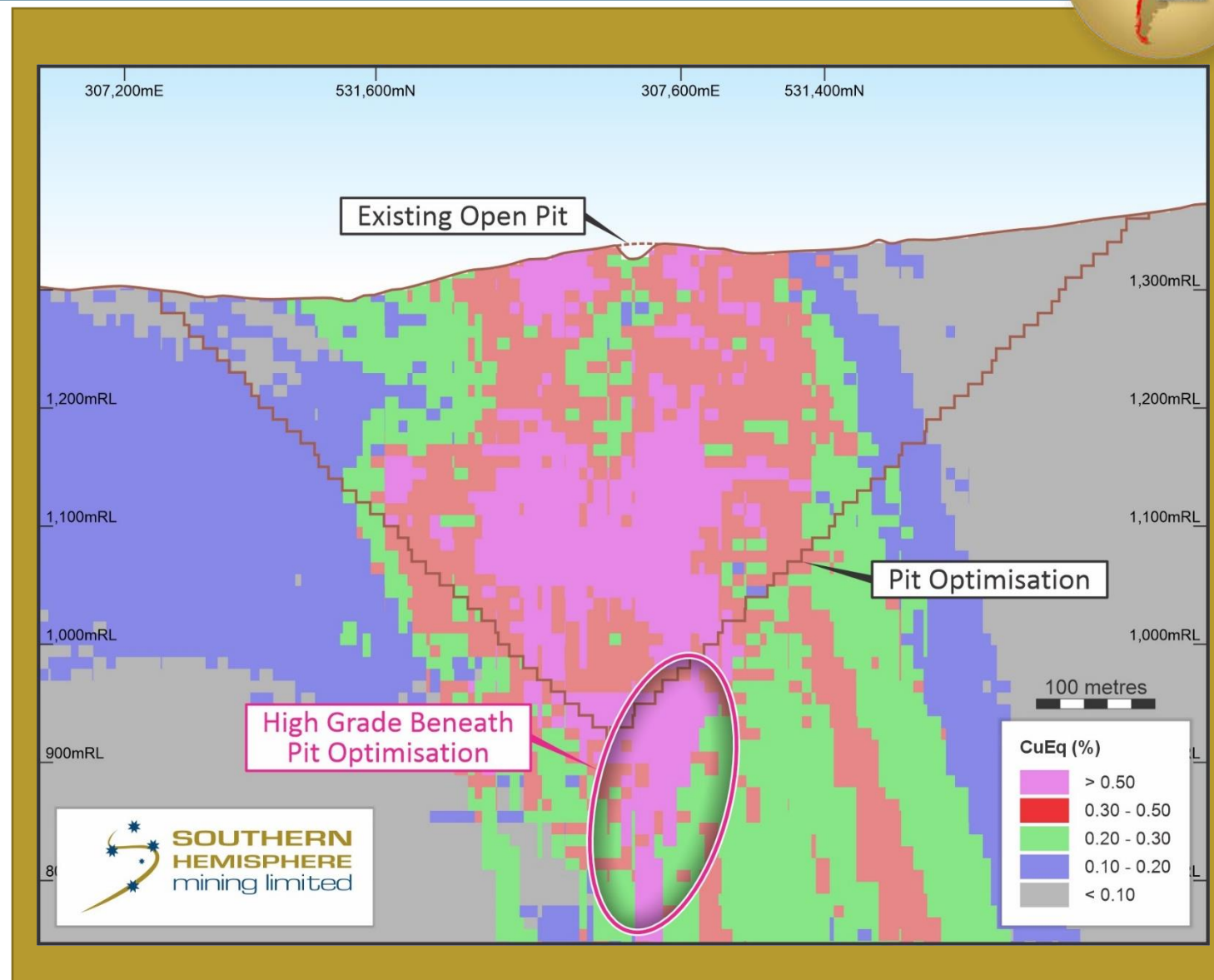
RC-LLA-010: 496m @ 0.45%CuEq from surface, incl 126m @ 0.7% CuEq from 210m

DDH-LLA-021: 440m @ 0.75% CuEq from 2m, incl: 106m @ 1.69% CuEq from 182m

DDH-LLA-025: 366m @ 0.63% CuEq from 102m

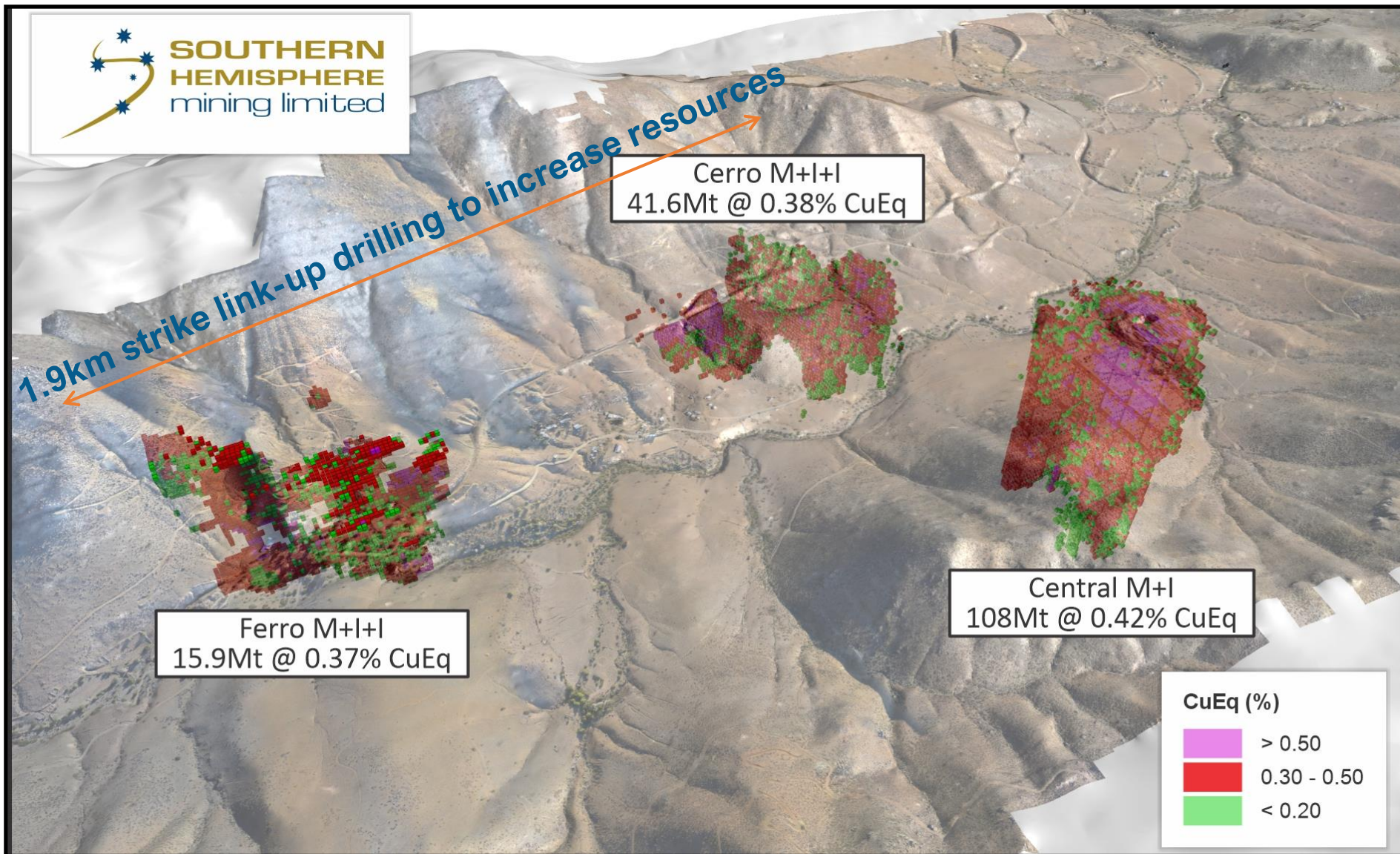
DDH-LLA-026: 326m @ 0.56% CuEq from 70m, incl:

126m @ 0.80% CuEq from 200m





# Llahuin Block Model 2013 and Topography-Good Mining Configuration





# Southern Porphyry Curiosity Target- Large 1-2km Wide



- 3D soil geochemical footprint modelling has identified two large drill targets at the Llahuin Copper-Gold porphyry system
- The Curiosity target at Southern Porphyry is located 550m below the Santa Maria epithermal vein system
- Workings and diameter of over 1km expanding to over 2km diameter at depth
- Deep drill testing of the Curiosity target looming
- Two near surface targets at Cerro and Ferro are confirmed by drilling
- Further data acquisition and modelling is in progress
- 3D drone magnetic inversion completed, further supporting the targets (shown in grey)

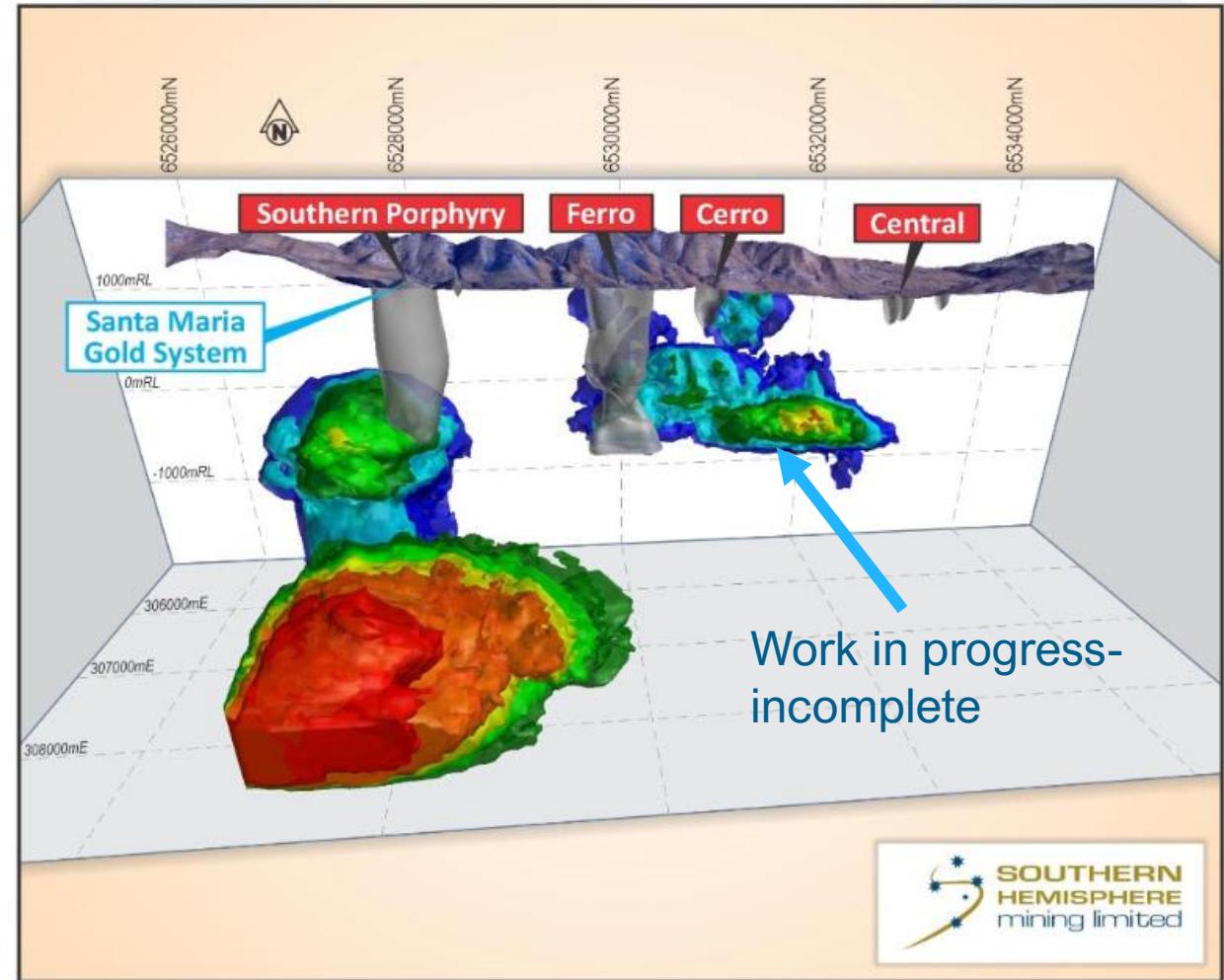


Figure 1. 3D view showing geochemical footprint models thematically colour scaled from blue (moderate probability) through to reds and magentas (high probability). Drone magnetic inversion models are in silver grey.

# Cerro-Ferro Large Target- 2km length below ore blocks



Cerro-Ferro Modelling is working as it is identifying resources where we have JORC resources. Significant further sampling is in progress to improve the drill targets for open pit and depth

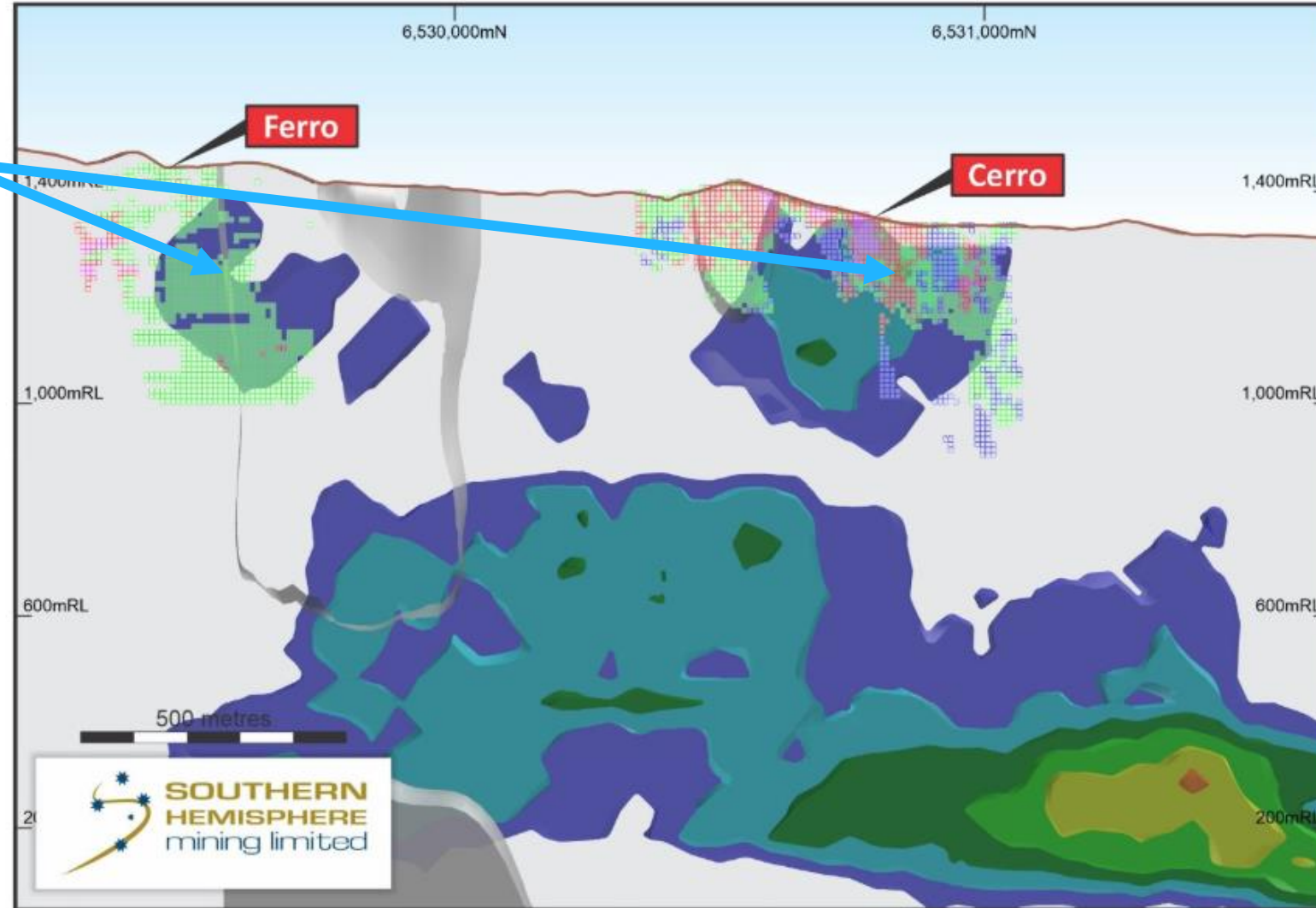


Figure 5. Long section of Ferro and Cerro, showing the thematically coloured footprint models, drone magnetic and current Mineral Resources.



# Clear Direction Forward



## Open Pit Resources Expansion

- Drilling a major expansion of the Llahuin resource towards a ~20+ year open pit style mine. +12 years already in M+I+I resources
- Studies in progress to refine modelling of current mineralised zones for potential increase in grade and fewer tonnes

## High Grade Copper Feeder Zones

- Underground style high grade copper/gold target is significant: ~6km copper corridor
- AI, Geophysics, and Geochem in progress to refine targets and define new targets
- Diamond holes to intersect potential high grade feeder zones with chalcocite/chalcopyrite
  - Below current Cerro-Ferro deposits ~800m depth, and
  - Large Southern Porphyry Curiosity copper gold target ~550m depth

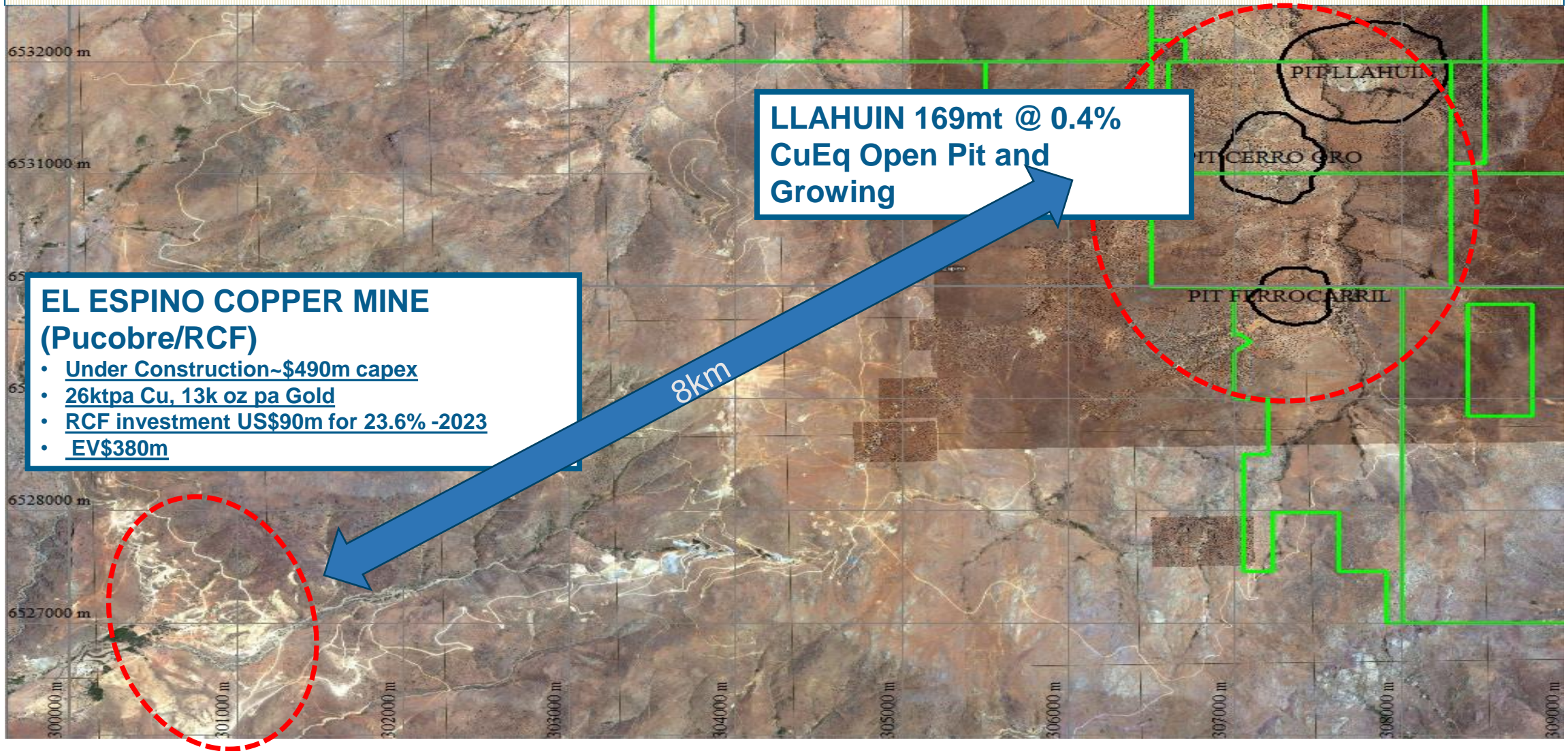
***Targeting expansion to scale of key interest to majors/mid tier***





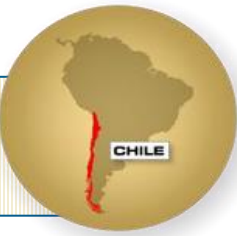
# Llahuin Region Emerging

## New El Espino Copper Mine in Construction 8km West of Llahuin





# Thankyou



For more News  
from Southern  
Hemisphere  
Mining Limited  
please visit our  
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