



## MAIDEN JORC RESOURCE FOR LLAHUIN PORPHYRY COPPER PROJECT: 318,000 TONNES OF COPPER AND 307,000 OUNCES OF GOLD

*COMMENCING SCOPING STUDY ON PROJECT TARGETING PRODUCTION OF 45-50,000 tpa OF COPPER*

### Highlights:

- **Phase I Measured and Indicated Mineral Resource** for the flagship **Llahuin Porphyry Copper Project**, central Chile of **106.2 Mt grading 0.40% Cu Equivalent\***, containing:
  - **318,000 tonnes of copper and 307,000 ounces of gold**
  - **Includes 64.9Mt grading 0.42% Cu Equivalent\* in the Measured category**
- **Additional Inferred Resource of 12.2 Mt** at 0.36% Cu Equivalent.
- **Significant potential to define additional resources** with further drilling at the **Llahuin Porphyry Zone** and the **Cerro Zone**, located approximately 1 km to the south.
- **Actively pursuing additional project areas within 10-15 km radius** of Llahuin as part of a **Central Hub Satellite Strategy** to increase resource tonnage and grade.
- **Commencing Scoping Study** to assess the potential for an **operation targeting the production of 45-50,000 tpa of copper metal plus gold credits at competitive operating costs.**

International mining company **Southern Hemisphere Mining Limited** (ASX: SUH, TSX-V: SH) ("Southern Hemisphere" or the "Company") is pleased to announce a maiden Measured and Indicated Mineral Resource totalling **106.2 million tonnes grading 0.40% copper equivalent\*** for its flagship **Llahuin Porphyry Copper Project**, located 250 km north of Santiago in central Chile.

The maiden JORC and NI 43-101 compliant Mineral Resource – which is estimated to contain **318,000 tonnes of copper and 307,000 ounces of gold** within the Measured and Indicated categories – has been achieved within just 10 months of the Company securing an option agreement over the project and commencing exploration drilling.

It provides a strong foundation for the Company's plans to develop a substantial copper-gold operation in central Chile, underpinning the immediate commencement of a Scoping Study.



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The maiden Mineral Resource, which was independently estimated by Andes Mining Services, is based on a total of 81 drill holes, including 14,728 m of Reverse Circulation (“RC”) Drilling and 6,991 m of Diamond Drilling (“DD”), most of which has been focused within the Llahuin Porphyry Zone, which covers a footprint of approximately 400 m by 450 m.

Some drilling has also been conducted in the Cerro Zone, which has a similar footprint to the Llahuin Porphyry Zone, and is located approximately 1 km to the south of the Porphyry Zone. The maiden Mineral Resource encompasses both of these zones, although there is significant potential to further enhance the resource with additional drilling – both in the Porphyry Zone and the Cerro Zone.

Southern Hemisphere’s Managing Director, Mr Trevor Tennant, said the maiden resource was an outstanding result, providing a very strong foundation to the Company’s ambitions to develop a significant copper-gold operation in central Chile.

“We were attracted to Llahuin by its favourable location and logistics – just 17 km from the mining town of Combarbala and 56 km from the Pan-American Highway and at an elevation of 1,300m – and its potential to deliver a sizeable resource relatively quickly” Mr Tennant said.

“So far it has more than lived up to expectations, delivering a very significant maiden resource containing 318,000 tonnes of copper and over 307,000 ounces of gold within the Porphyry and the Cerro Zones” he added. “At current metal prices, this equates to a metal inventory with substantial in-ground value”.

“What is particularly encouraging is that there is immediate potential to extend the resource with further drilling in both the zones. In addition, we have developed and implemented a Central Hub Satellite Strategy to target and secure additional projects within a 10-15 km radius of Llahuin which could provide opportunities to increase both the resource tonnage and grade”.

“We look forward to reporting further developments as part of this Central Hub Satellite Strategy in the near future and to updating the market on our drilling and exploration plans moving forward.”

Mr Tennant said the Phase I Mineral Resource was more than sufficient to justify the immediate commencement of a Scoping Study. “Our objective will be to define an operation capable of producing 45-50,000 tpa of copper metal plus gold credits at world competitive operating costs,” he said.

### **Mineral Resource Statement**

The Llahuin Mineral Resource statement was completed by Andes Mining Services and is confined to two zones within the Llahuin Project area: the Llahuin Porphyry Zone and the nearby Cerro Zone.

A copper cut-off grade of 0.24% Cu was selected to report the resource as it is considered to have a reasonable likelihood of being economic. The Measured, Indicated and Inferred Resources are tabulated below:



<b>TOTAL MEASURED RESOURCES</b>					
<b>Cu Cutoff</b>	<b>Tonnes million</b>	<b>Cu %</b>	<b>Au g/t</b>	<b>Mo %</b>	<b>Cu Equ*.</b>
0.16	104.2	0.28	0.08	0.0069	0.37
0.20	92.8	0.29	0.08	0.0070	0.38
0.24	64.9	0.32	0.09	0.0073	0.42
0.28	42.1	0.36	0.11	0.0074	0.47

<b>TOTAL INDICATED RESOURCES</b>					
<b>Cu Cutoff</b>	<b>Tonnes million</b>	<b>Cu %</b>	<b>Au g/t</b>	<b>Mo %</b>	<b>Cu Equ*.</b>
0.16	101.4	0.24	0.09	**	0.33
0.20	93.6	0.24	0.09		0.33
0.24	41.3	0.28	0.09		0.37
0.28	18.1	0.31	0.08		0.41

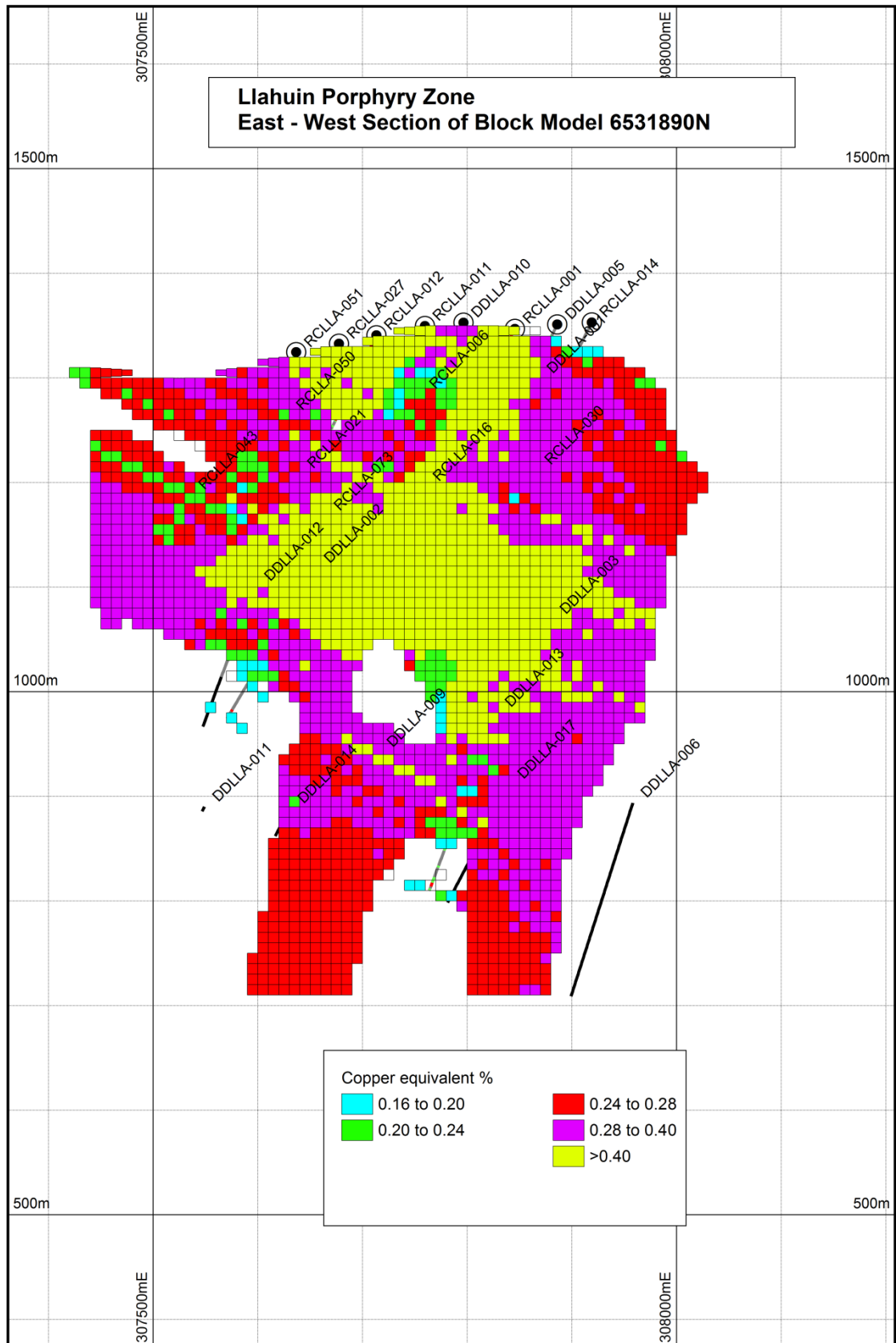
<b>TOTAL MEASURED AND INDICATED RESOURCES</b>					
<b>Cu Cutoff</b>	<b>Tonnes million</b>	<b>Cu %</b>	<b>Au g/t</b>	<b>Mo %</b>	<b>Cu Equ*.</b>
0.16	205.6	0.26	0.09	**	0.35
0.20	186.4	0.27	0.09		0.35
0.24	106.2	0.30	0.09		0.40
0.28	60.2	0.34	0.10		0.45

<b>TOTAL INFERRED RESOURCES</b>					
<b>Cu Cutoff</b>	<b>Tonnes million</b>	<b>Cu %</b>	<b>Au g/t</b>	<b>Mo %</b>	<b>Cu Equ*.</b>
0.16	46.4	0.23	0.05	0.0068	0.31
0.20	45.2	0.23	0.05	0.0069	0.32
0.24	12.2	0.27	0.06	0.0077	0.36
0.28	5.1	0.30	0.07	0.0087	0.40

\*\* Molybdenum results only available for Measured Category at the date of the resource estimate – 3 April 2012.



**Section showing Copper Equivalent Block Grades**



## Compliance

The independent 43-101 compliant resource estimate and statement for the Llahuin Porphyry Copper Project was completed by Mr Ian Dreyer, Principal Geologist of Andes Mining Services SAC, based in Lima Peru. Mr Dreyer has visited the project area and conducted independent resource determinations in compliance with the Canadian National Instrument 43-101 (NI 43-101).

In summary, Mr Dreyer states that the Llahuin Mineral Resource has been estimated by Ordinary Kriging within a 0.15% Cu grade shell, as this is a natural break in the grade population. Mineralisation occurs in all lithologies except the eastern diorite. There is a clear trend of grade alignment along pre-existing layering within the volcanic sequence and this is supported by well structured variography.

The model has been estimated into 10m (X) x 10m (Y) x 10m (Z) parent cells utilising 2m composites. A minimum of 2 composites and a maximum of 16 composites are required to populate a cell with an estimate. There has been no capping of grades.

The Cerro Zone, although outcropping and drilled systematically, has been classified as Indicated as this zone requires more detailed logging, mapping, and drilling to elevate it to Measured status.

The Llahuin Porphyry is classified as Measured where drilled on a 50x50m grid, which is the core of the deposit. Indicated Resource is for drilling on a wider spacing than 50x50m and up to 100x100m. The majority of the Inferred Resource has been projected a further 100-200m at depth on the basis of recent deep diamond drill hole results and variography.

The full NI 43-101 Technical Report for the resource statement will be lodged on SEDAR and posted on Southern Hemisphere's website at [www.shmining.com.au](http://www.shmining.com.au) within 45 days of this News Release.

## Resource Drilling Programme

The Company commenced drilling at the Llahuin property in June 2011 and as at 23 March 2012 had completed a total of 14,728 metres of RC in 81 holes and 6,991 metres of DD in 17 holes, as summarised below:

Area	RC Holes	RC Metres	DD Holes	DD Metres
Llahuin Porphyry Zone	60	10,959	17	6,991
Llahuin Cerro Zone	14	2,716		
North of Llahuin Porphyry	7	1,053		

All drill hole locations for the Llahuin resource drilling programmes are available on the Company's website at [www.shmining.com.au](http://www.shmining.com.au).



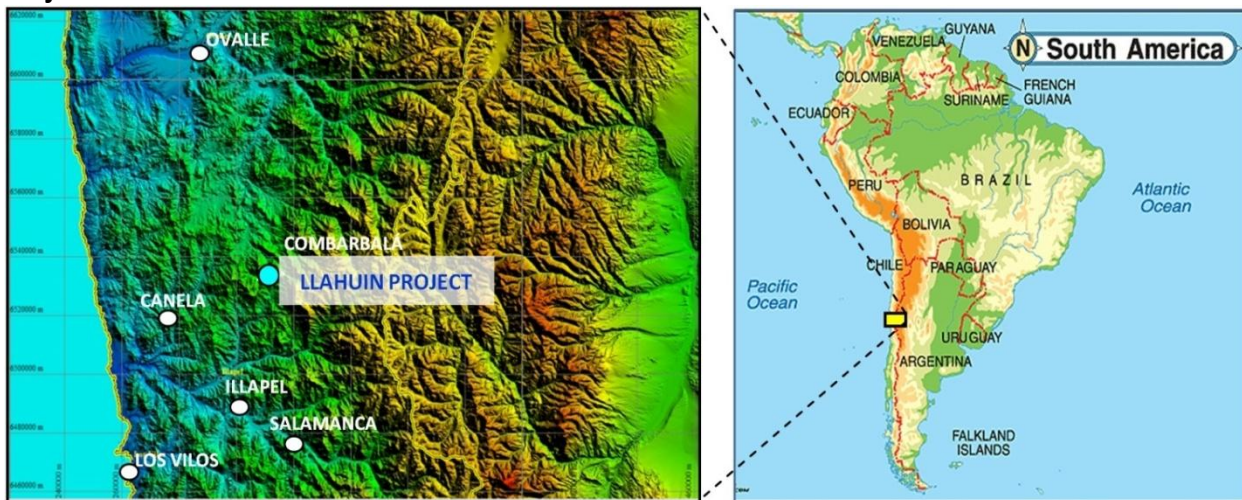


## Llahuin Geology

The Llahuin Porphyry Copper System comprises a series of porphyritic intrusions, medium to fine grained, dioritic and monzonitic composition that intrude volcanic rocks of the Marquesa Formation (Cretaceous), which today are strongly brecciated, mineralized and silicified as hornfels. The higher grade part of the system has intense potassic alteration, as evidenced by intense secondary biotite disseminated and veinlets. The potassic alteration is accompanied by quartz stockwork, and magnetite stockwork. The higher grade mineralization corresponds to chalcopyrite-bornite-molybdenite, in some cases accompanied by pyrite.

The mineralization consists of two main zones: the Llahuin Porphyry Copper Zone, and the Cerro Zone, which is located 1km to the south of the Porphyry. The surface expression of the Cerro Zone has been drilled but the underlying intrusive has yet to be tested.

## Project Location



## Project Area

The Llahuin Porphyry Copper Project is held by a subsidiary of the Company under an Option to Purchase Agreement, which has been duly executed and constitutes the legal, valid and binding obligations of each party. The concessions, which cover an area of 7.72 km<sup>2</sup>, are at an elevation of approximately 1,300 m, are located some 240 km north of the Chilean capital of Santiago, 17 km south of the town of Combarbala and only 56 km from the coast and Pan-American Highway.

## \*Copper Equivalent (“Equ”)

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:

Copper Equivalent Formula=  $Cu \% + Au (g/t) \times 0.72662 + Mo \% \times 4.412$

Price Assumptions- Cu (US\$3.40/lb), Au (US\$1,700/oz), Mo (US\$15/lb)

## Sampling and Analysis Procedures

5kg samples were taken from each two metre interval. The samples are derived from riffle splitting each intercept. The samples were sent to Andes Analytical Assay Ltda (Chile) in Santiago for sample preparation and analysis. Duplicate samples were taken on a 1 in 20 basis. The cores from DD holes were halved and each 2m interval of halved core submitted for analysis.

Analysis was undertaken using atomic absorption spectrometry methods. Andes Analytical Assay Ltda (Chile) is an independent full service commercial laboratory accredited under ISO 9001:2008. Standard samples and repeat analyses were used by the laboratory to provide checks on the assay results.

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### Competent Person / Qualified Person Statement

*Trevor Tennant (Managing Director - Southern Hemisphere), a Member of the Australasian Institute of Mining and Metallurgy, is a 'Competent Person' as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and is a 'Qualified Person' under National Instrument 43-101 - 'Standards of Disclosure for Mineral Projects'.*

*Mr. Tennant was responsible for the design and conduct of this resource drilling campaign, supervised the preparation of the technical information in this release and has the relevant experience and competence of the subject matter.*

*Mr. Tennant consents to the inclusion of exploration results and other such information in this News Release in the form and context in which it appears.*

### Mineral Resources and Reporting

*Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*



Information in this News Release relating to mineral resources is based on information compiled by Mr. Ian Dreyer, a Fellow of the Australian Institute of Mining and Metallurgy (Qualified Person / Competent Person).

Mr. Dreyer is an independent resource consultant and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code 2004).

Mr. Dreyer consents to the inclusion in this News Release of the matters based on his information in the form and context in which it appears.

#### Caution Regarding Forward-Looking Information

This News Release contains “forward-looking information” within the meaning of applicable securities legislation. Forward-looking information contained in this News Release may include, but is not limited to, the estimation and realization of resources at the Llahuin Copper project, the viability, recoverability and processing of such resources.

Such forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from those expressed or implied by such forward-looking information, including but not limited to the risk that further funding may be required, but unavailable, for the ongoing development of the Company’s projects; changes in government regulations, policies or legislation; fluctuations or decreases in commodity prices; the possibility that required permits may not be obtained; uncertainty in the estimation or economic viability of mineral resources; general risks associated with the feasibility and development of the Llahuin project; unexpected capital or operating cost increases; as well as those factors disclosed in the Company’s Annual Information Form for the year ended June 30, 2011 filed at [www.sedar.com](http://www.sedar.com).

The Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable. Assumptions have been made regarding, among other things: the Company’s ability to carry on its exploration and development activities. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used.

There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

