

# LLAHUIN DRILLING EXTENDS HIGH-GRADE CORE FROM SURFACE: UPDATED RESOURCE ON TRACK FOR MAY 2013

Further drilling confirms Ferrocarril Zone contains a dioritic porphyry similar to the Central Porphyry

# **Highlights:** Additional excellent higher grade results from recent diamond drill holes at the Llahuin Central Porphyry Zone, with significant results including: FROM SURFACE: 314m @ 0.47% Cu Equivalent\* from surface (DDH-LLA-042); including 0 36m @ 1.00% Cu Equivalent from 6m 312m @ 0.44% Cu Equivalent from surface (DDH-LLA-047); including 0 94m @ 0.55% Cu Equivalent from surface ALSO: 146m @ 0.46% Cu Equivalent from 2m (DDH-LLA-041); including Ο 32m @ 0.62% Cu Equivalent from 6m 34m @ 1.49% Cu Equivalent from 416m (DDH-LLA-043), and Ο 208m @ 0.42% Cu Equivalent from 116m (DDH-LLA-045), including: 116m @ 0.53% Cu Equivalent from 116m. Higher grade core has potential to enhance project economics by delivering highgrade feed during the initial stages of production. Work to commence on upgraded resource estimate for Llahuin Project in April 2013. Recent reverse circulation drill results from the Ferrocarril Zone confirm the presence of a dioritic porphyry similar to the Central Porphyry:

- 34m @ 0.41% Cu Equivalent from 54m (RC-LLF-150)
- 20m @ 0.41% Cu Equivalent from 100m (RC-LLF-151)
- o 12m @ 0.53% Cu Equivalent from 18m (RC-LLF-152)

Southern Hemisphere Mining Limited (ASX: SUH, TSX-V: SH) ("Southern Hemisphere" or the "Company") is pleased to advise that work will commence on an updated resource estimate for its flagship **Llahuin Copper/Gold Project** ("Llahuin Project") in central Chile in early April as drilling continues to expand and enhance the Llahuin Project.

The Company has received further excellent diamond drill results extending the higher grade core within the Central Porphyry Zone.



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A recent review of the results received to date highlights the strategic importance of this higher grade core. It has the potential to provide higher grade feed during the initial stages of production, is easily accessible, close to surface and requires no pre-strip, thereby enhancing the Llahuin Project economics.

Recent drilling has also added further weight to the emerging Ferrocarril Zone, which is located approximately 2km south of the Central Porphyry Zone, with results confirming the presence of a dioritic porphyry similar to the Central Porphyry Zone.

The majority of drilling to date has been in the Central Porphyry Zone, but further drilling, which is being undertaken by the Llahuin Joint Venture ("Joint Venture") between the Company and Lundin Mining Corporation, a leading North American base metals miner, includes the Ferrocarril Zone and Cerro de Oro Zone; which is located approximately 1km south of the Central Porphyry Zone.



Commenting on the excellent progress to-date Southern Hemisphere's Managing Director, Mr Trevor Tennant, said:

"The Llahuin Joint Venture is progressing well with several key project milestones achieved in the past four months, since the completion of the Joint Venture, in addition to the excellent results from the accelerated drill campaign."

Llahuin continues to emerge as a large-scale porphyry copper project. Other key project milestones achieved recently have included a 30-year easement agreement with the local Llahuin community and completion of Llahuin Amapola concession ownership, which had been held under option arrangements."

"Also, further detailed IP and ground magnetic surveys have been completed as well as first pass metallurgical testwork that gave excellent results in terms of copper recoveries, concentrate grade and low work index."

The Llahuin Project is located at an altitude of 1,300m within the coastal cordillera in the Coquimbo region of central Chile, with approximate straight line distances of 250km north of Santiago and 17km south of the mining town of Combarbala.

#### **Resource Update**

Work on a resource update for the Llahuin Project is planned to commence in April following a drill data cutoff at the end of March 2013. The last resource estimate update was based on 33,812m of drilling, following a mid-August 2012 drill data cut-off (refer ASX and TSX-V News Release dated September 10, 2012).

The September 2012 resource included a higher grade core Measured Resource of 51Mt at 0.5% Cu Eq being 51Mt at 0.38% Cu; 0.12 Au g/t and 0.007% Mo using an 0.36% Cu Eq cut off. The new May 2013 resource update is expected to include approximately 13,000m of additional drilling, being a 38% increase.





Fig 1. - Central Porphyry Zone - Composite Long Section showing Central Core and High Grade Mineralisation at









*Fig 2. - Higher Grade Central Core Drill Traces at holes DDH-LLA-042 and DDH-LLA-047* 



Hole	Intersect m	From	% Cu	g/t Au	% Cu Eq*
DDH-LLA-041	146m	2m	0.41	0.07	0.46
includes	32m	6m	0.53	0.12	0.62
	28m	44m	0.45	0.08	0.51
	22m	76m	0.51	0.06	0.55
DDH-LLA-042	314m	surface	0.43	0.06	0.47
includes	36m	6m	0.94	0.08	1.00
	30m	42m	0.49	0.11	0.57
DDH-LLA-043	58m	182m	0.25	0.24	0.43
	30m	294m	0.36	0.28	0.56
	34m	416m	0.95	0.75	1.49
DDH-LLA-045	8m	surface	0.40	0.11	0.47
	208m	116m	0.36	0.07	0.42
includes	116m	116m	0.45	0.11	0.53
DDH-LLA-046	24m	252m	0.36	0.25	0.54
DDH-LLA-047	312m	surface	0.40	0.06	0.44
includes	94m	surface	0.50	0.06	0.55

Fig 3. - Key Highlights from recent Drilling at the Central Porphyry Zone include:

## Fig 4. – Location of Recent Llahuin Central Core drill holes



All drill hole locations for the Llahuin Project resource drilling programs to date are available on the Company's website at <u>www.shmining.com.au</u>.





### Ferrocarril Zone

A Reverse Circulation drill rig has been used to probe the Ferrocarril Zone with results from the three recently completed drill holes summarised below:

Hole	Intersect m	From	% Cu	g/t Au	% Cu Eq*
RC-LLF-150	34m	54m	0.28	0.18	0.41
RC-LLF-151	20m	100m	0.33	0.10	0.41
RC-LLF-152	12m	18m	0.41	0.17	0.53

These probe holes are helping to define the boundaries of the Ferrocarril dioritic porphyry. Also, one 400m diamond drill hole has been sunk at the Ferrocarril Zone with results currently awaited.

#### Geology

Refer to the July 18, 2011 ASX and TSX-V News Release for Llahuin Project geological information.

### \*Copper Equivalent ("Cu Equivalent" or "Cu Eq")

The copper equivalent calculations represent the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. Only gold and copper analysis results have been taken into account in the current copper equivalent calculation. 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) x 0.72662 Price Assumptions- Cu (US\$3.40/lb), Au (US\$1,700/oz)

### Significant Intercepts

Other holes and intercepts in this News Release that are not highlighted were insignificant or generally had a copper equivalent of less than 0.24%. Anomalous intercepts of less than 10m and 0.40% copper equivalent were also not reported as highlights.

#### **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 core from diamond drill holes was halved and each 2m interval of halved core submitted for analysis. Analysis was undertaken using fire assay (for gold analysis) with an atomic absorption spectrometry finish. 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

Mr Trevor Tennant is a Fellow 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 has reviewed the current drilling results and consents to the inclusion of exploration results and other such information in this News Release in the form and context in which it appears.

#### **About Southern Hemisphere Mining Limited**

Southern Hemisphere Mining Limited is listed on the Australian Stock Exchange (ASX Code "**SUH**") and the Toronto Stock Exchange –Venture (TSX-V Code "**SH**"). Southern Hemisphere has accumulated a diverse portfolio of assets in **Chile, South America**. The Company's focus is the **Llahuin Copper/Gold Project** which is being developed in conjunction with **Lundin Mining Corporation** (TSX: LUN, OMX: LUMI). The Company also holds the **100% owned Chitigua Project**, which is subject to a farm-in option agreement with Anglo American. This 172 km<sup>2</sup> property located on the prestigious Western Fault which hosts Chile's largest copper porphyry deposits. Further details on Southern Hemisphere can be found at <u>www.shmining.com.au</u>

