



MORE EXCELLENT DRILL RESULTS AT LLAHUIN AS TESTWORK SHOWS COMMERCIAL POTENTIAL

Test hole at Cerro de Oro returns 88m at 0.53% Cu Eq; Central Porphyry returns 350m @ 0.41% Cu Eq

Highlights:

Further excellent drilling results from Llahuin Copper/Gold Project, central Chile:

- *Cerro de Oro Zone:*
 - **88m @ 0.53% Cu Equivalent* from 40m (RC-LLC-123)**
- *Central Porphyry Zone:*
 - **314m @ 0.41% Cu Equivalent from 2m (DDH-LLA-038); which includes**
 - 28m @ 0.49% Cu Equivalent from 32m
 - 26m @ 0.48% Cu Equivalent from 74m
 - 40m @ 0.50% Cu Equivalent from 154m
 - **350m @ 0.41% Cu Equivalent from 0m (DDH-LLA-040); which includes**
 - 44m @ 0.61% Cu Equivalent from 0m
 - 20m @ 0.57% Cu Equivalent from 82m
 - 48m @ 0.52% Cu Equivalent from 208m
- *Ferrocarril Zone*
 - **22m @ 0.63% Cu Equivalent from 182m (RC-LLF-134)**
 - **16m @ 0.87% Cu Equivalent from 100m (RC-LLF-136)**

Positive preliminary metallurgical studies completed for Llahuin Copper/Gold Project showing:

- sample feed type deemed to be soft;
- low unit energy requirement for crushing and grinding;
- mineralisation amenable to conventional flotation process;
- copper recoveries up to 91%;
- concentrate grading at 28-32% Cu; and
- low levels of deleterious materials in concentrate.

International mining company **Southern Hemisphere Mining Limited** (ASX: SUH, TSX-V: SH) ("Southern Hemisphere" or the "Company") is pleased to report further positive developments at its flagship **Llahuin Copper/Gold Project** ("Llahuin Project") in central Chile following the receipt of further drilling results and the completion of positive preliminary metallurgical test work.

An accelerated drilling program is continuing at the Llahuin Project with latest results highlighting the significant potential to grow the current resource inventory. Meanwhile, the preliminary metallurgical test work results support the Company's plans to progress development of the Llahuin Project under its recently established joint venture with leading North American mining group, **Lundin Mining Corporation**.



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The latest results include some outstanding broad intersections of copper/gold mineralisation, such as 314m @ 0.41% copper equivalent from 2m and 350m @ 0.41% copper equivalent from surface in the Central Porphyry Zone and 88m @ 0.53% copper equivalent from 40m from a test hole drilled in the Cerro de Oro Zone, 1km to the south.

The results from preliminary metallurgical test work indicate that the Llahuin Project mineralization is highly amenable to a conventional flotation process, with a low unit energy requirement expected for crushing/grinding and copper recoveries of up to 91 % achieved.

These characteristics, together with the ability to produce a concentrate grading 28-32% Cu with low levels of deleterious materials in concentrate, support the commercial development potential of the Llahuin Project.

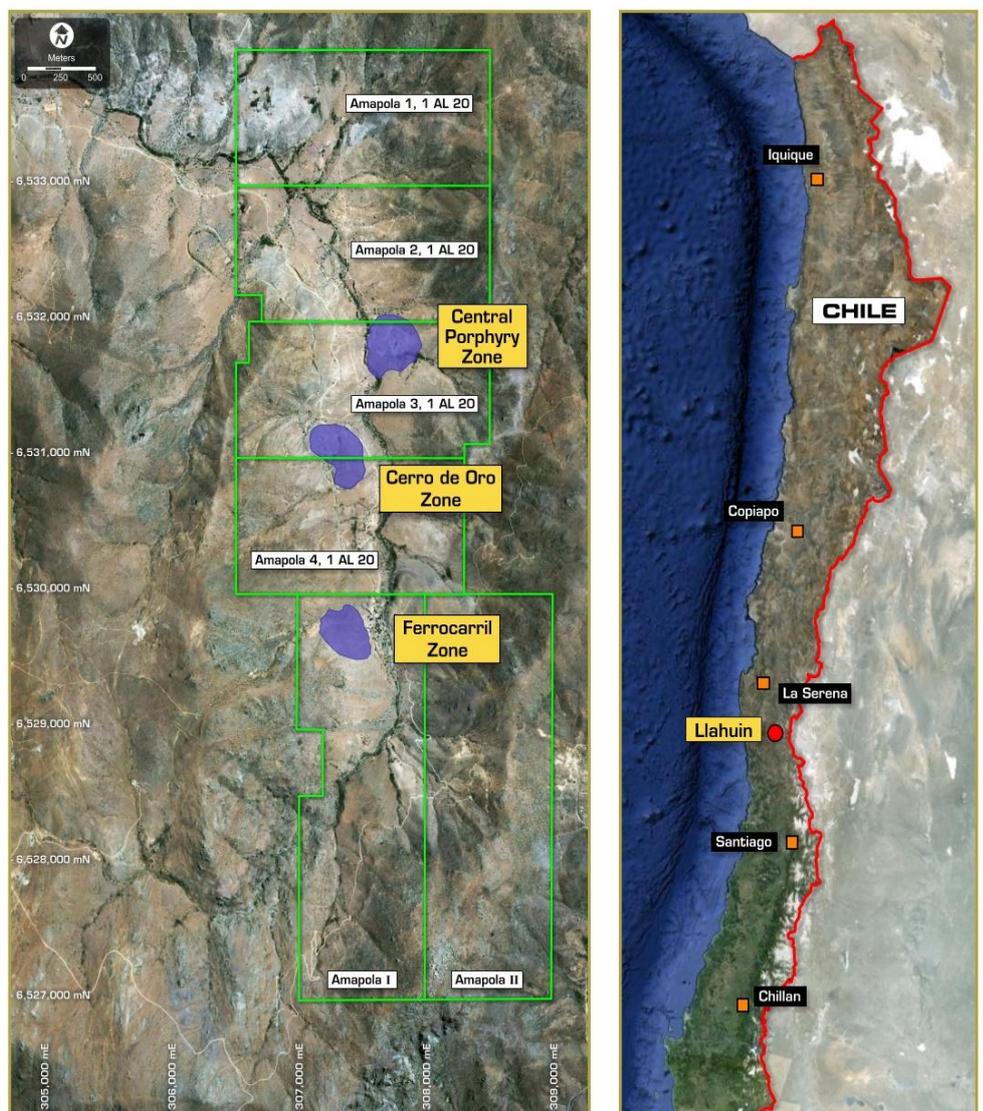
Commenting on the latest developments, Southern Hemisphere’s Managing Director, Mr. Trevor Tennant, said:

“We have started the New Year very strongly with an accelerated drill campaign at the Llahuin Project under the work plan agreed with our joint venture partner, Lundin Mining Corporation. The latest results from drilling are excellent and continue to highlight the significant upside potential within the key zones of mineralisation.

“In addition, the early stage results from metallurgical test work, which will be improved upon with optimization in the next stage of metallurgical test work, indicate the comparative advantages of low unit energy requirements, high copper recoveries and commercially attractive concentrate grades.

“We are looking forward to what should be a defining year for Southern Hemisphere and the Llahuin Project, which we expect to continue to develop as one of the more significant emerging mid-tier copper-gold opportunities in Chile.”

Figure 1 – Location Map showing the Llahuin Project Exploitation Licenses



METALLURGY

The Company commissioned Mr. Raul Marcelo Villouta, a Chilean metallurgical engineer with more than 40 years' experience, to design an initial metallurgical program that would test the work index and flotation characteristics of Llahuin Project feed in rougher and cleaner float cells and closed loop flotation tests.

ASMIN INDUSTRIAL LTDA, a metallurgical process laboratory based in Santiago Chile, was contracted to conduct the program test work. The results of the program are summarized below:

Results of the closed loop flotation tests on diamond drill samples:

Sample	% of resource	Feed grade % Cu	Feed grade g/t Au	Cu Recovery %	Au Recovery %	Concentrate grade % Cu	Concentrate grade g/t Au
UGM-01	37	0.46	0.142	85	47	32	6.1
UGM-02	11	0.44	0.150	91	57	31	8.8
UGM-03/06	11	0.28	0.067	75	52	16	2.6
UGM-04	13	0.33	0.046	81	41	28	2.3
UGM-09	16	0.33	0.066	88	41	26	3.4
TOTAL/WT AV.	88	0.39	0.106	84	47	28	4.9

The metallurgical test work indicates that the Llahuin Project mineralization is highly amenable to a conventional flotation process.

Recoveries of copper vary between 75% Cu and 91% Cu with the weighted average of the results being greater than 84% Cu, which is a typically acceptable commercial level. Recoveries of gold vary between 41% Au and 57% Au, which was in line with expectations given the relatively low gold grades within the deposit.

Work Index testing was completed on six samples to determine possible future power requirements in the crushing/grinding process. Power consumption varied between 11.74 and 14.84 kWh/t with the majority of the results being below 12.49kWh/t, which is generally considered to be low/moderate consumption.

Flotation concentrates produced during testing contained the resource weighted average copper grade of 28% Cu and 4.9 g/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 optimized, the results indicated good flotation process characteristics.

The next stage, larger scale metallurgical test work, is now planned to more accurately study the metallurgical parameters, process conditions and a mineralogical analysis of the concentrates so as to optimize the key variables.

DRILL RESULTS

As announced on January 11, 2013, following the Christmas break an accelerated drilling program has resumed at the Llahuin Project, under the joint venture option arrangements with Lundin Mining Corporation, with two diamond drill rigs and one reverse circulation drill rig.

Highlights of recent drilling results are provided below:



Cerro de Oro Zone

At the Cerro de Oro Zone, a vertical hole, RC-LLC-123, was drilled to test the breccia zone. This hole yielded excellent results with an intercept of 88m from 40m with a copper equivalent grade of 0.53%, as summarized below:

Hole ID	Intersect m	From	% Cu	g/t Au	% Cu Eq*
RC-LLC-123	88	40	0.46	0.11	0.53

An additional diamond drill hole is now planned to further test this interesting zone.

Central Porphyry Zone

At the Central Porphyry Zone, a program was designed to completely define the higher grade core zone. DDH-LLA-037 tested the eastern limits.

Hole ID	Intersect m	From	% Cu	g/t Au	% Cu Eq*
DDH-LLA-037	10	52	0.42	0.04	0.45
	34	270	0.36	0.04	0.39

DDH-LLA-038 tested the western limits:

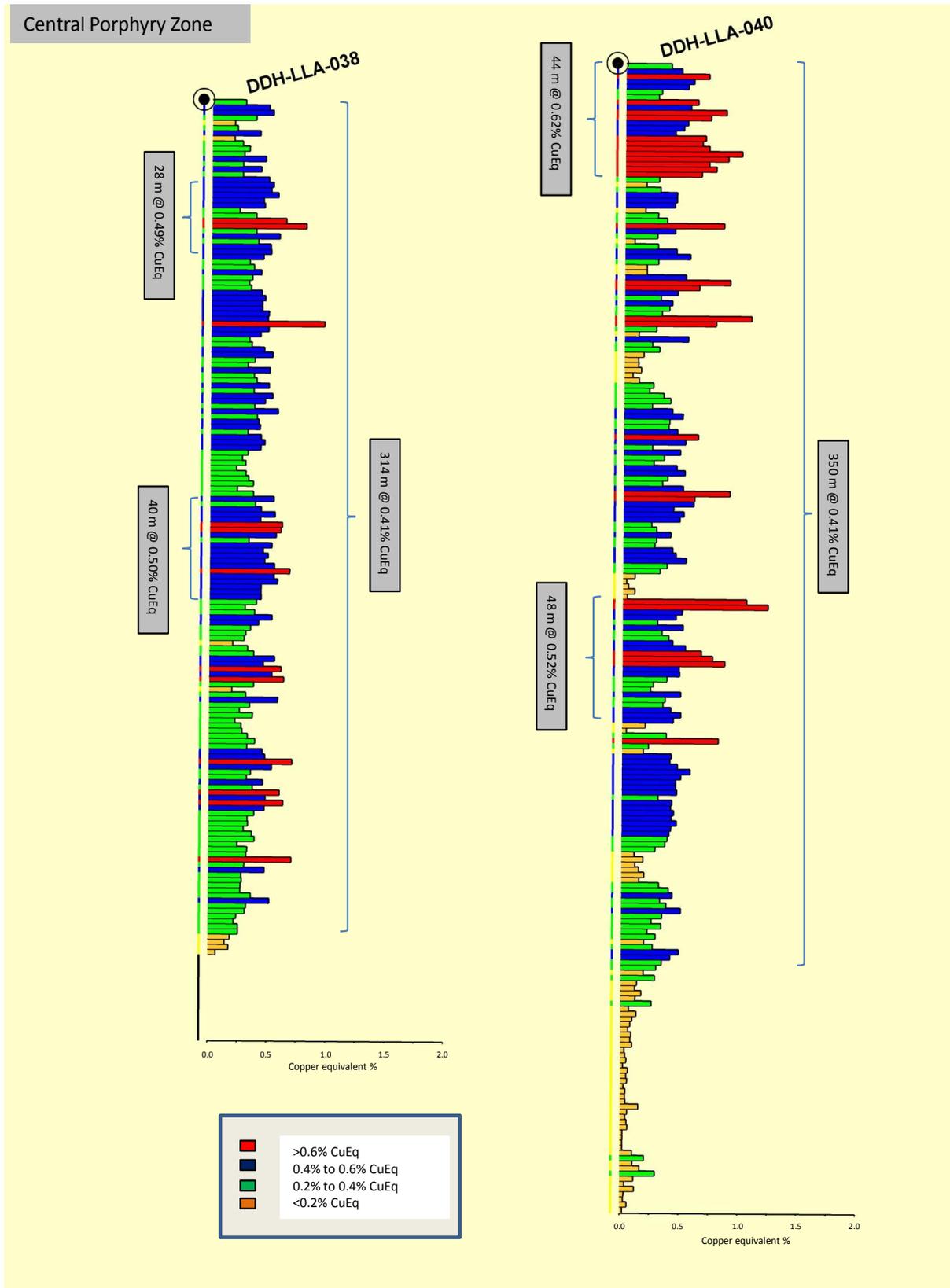
Hole	Intersect m	From	% Cu	g/t Au	% Cu Eq*
DDH-LLA-038	314	2	0.37	0.06	0.41
includes	28	32	0.47	0.03	0.49
includes	26	74	0.43	0.07	0.48
includes	32	104	0.39	0.06	0.43
includes	40	154	0.44	0.09	0.50
includes	16	214	0.45	0.05	0.46
includes	48	252	0.39	0.07	0.43

DDH-LLA-040 tested the central section:

Hole	Intersect m	From	% Cu	g/t Au	% Cu Eq*
DDH-LLA-040	350	0	0.37	0.06	0.41
includes	44	0	0.54	0.09	0.61
includes	20	82	0.53	0.07	0.57
includes	44	134	0.41	0.08	0.46
includes	48	208	0.49	0.04	0.52
includes	36	268	0.38	0.08	0.43



Figure 2 – DDH-LLA-038 & DDH-LLA-040 Drill Traces



Ferrocarril

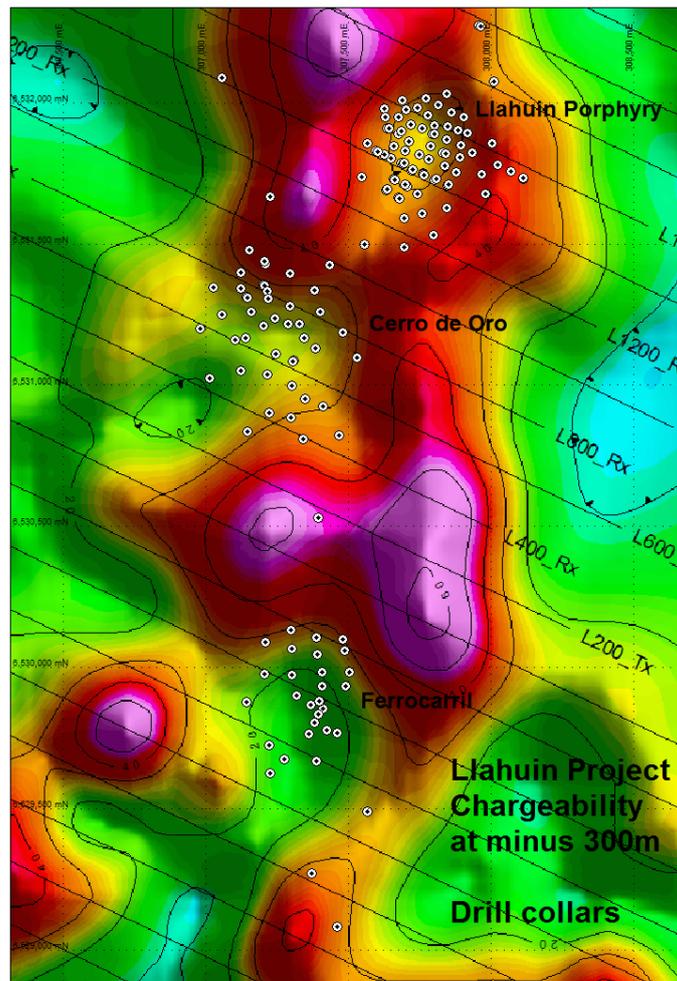
At Ferrocarril, the RC rig was used as a first pass probe to better understand grade distribution within the mineralised porphyry, returning the following significant results:

Hole ID	Intersect m	From	% Cu	g/t Au	% Cu Eq*
RC-LLF-117	16	74	0.41	0.13	0.50
RC-LLF-120	10	38	0.39	0.09	0.45
RC-LLF-134	22	182	0.45	0.27	0.63
RC-LLF-133	46	14	0.28	0.08	0.34
	40	144	0.31	0.15	0.42
RC-LLF-136	16	100	0.76	0.17	0.87

Geophysics

Results from the IP and ground magnetic surveys have been received, analysed and a series of drill holes planned to test the anomalous zones. The results are show below:

Figure 3 – Chargeability in three Target Zones



Drill Hole Locations

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

Geology

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

***Copper 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 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= $Cu \% + Au (g/t) \times 0.72662$
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.

Metallurgical Testwork

The metallurgical test work was completed by ASMIN INDUSTRIAL LTDA, a metallurgical process laboratory based in Santiago Chile, which is accredited under ISO 9001:2008

-ENDS-

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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 **100% owned 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**, a 172 km² property located on the prestigious Western Fault which hosts Chile's largest copper porphyry deposits. Further details on Southern Hemisphere can be found at www.shmining.com.au

