



ASX: SUH
TSX-V: SH

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SOUTHERN HEMISPHERE ANNOUNCES POSITIVE PRE-FEASIBILITY STUDY RESULTS FOR ITS LOS PUMAS MANGANESE PROJECT

(All dollars in US currency except where noted)

October 15th, 2010, -- Southern Hemisphere Mining Limited (ASX: SUH, TSX-V: SH) is pleased to announce the positive Pre-Feasibility Study ("PFS") results of its 100% owned Los Pumas Manganese Project in Chile ("Project"). The PFS was managed by SNC-Lavalin Group Inc. ("SNC-Lavalin"), with participation and contribution from industry consultants.

The PFS has evaluated the development of an open pit mine at Los Pumas and on-site processing facilities. The mine is expected to produce an average of 300,000 tonnes of manganese product per annum over a 7 year mine life, at an average cash cost (life of mine) of approximately US\$3.50 per dry metric tonne unit ("dmtu"). The project economics are extremely robust with an after tax internal rate of return ("IRR") of over 40% on an initial capital investment of US\$74.3 million.

Final Project approvals and the results of a Feasibility Enhancement Study ("FES") are expected in the first quarter of 2011.

Highlights of the PFS include:

- **Long life mine:** Increased JORC resource of 18.3Mt @7.6% Mn will support average annual production of 300,000 tonnes over an initial 7 year mine life. Coffey Mining, who are the independent resource estimators, are reviewing the model and a reinterpreted resource estimate that includes further sample data will be completed within a month. This reinterpreted data will be incorporated by the Company into the FES.
- **Excellent logistics and near mine infrastructure:** The Project is located 170km from Arica Port which has undercover stockpile facilities and bulk loading capabilities for Handymax ships. Manganese product will be trucked from Los Pumas to a stockpile 10km from Arica Port, with 140km on a sealed highway and the remainder a provincial gravel road.
- **High quality 38% Mn product:** Metallurgical test work supports the production of a high quality manganese product with a high manganese to iron ratio. The metal recovery yield of 60% used in the PFS is expected to be improved following further testwork and incorporated into the FES by the Company.
- **Low operating costs:** Average cash cost (life of mine) of approximately US\$3.50/dmtu forecast to generate strong operating margins.
- **Capital costs:** Pre-production capital costs of US\$74.3 million are expected to be paid back within two years of commencing production.
- **Robust Project economics:** Estimated Project net present value ("NPV") of US\$90 million and an IRR of 43% using a long term manganese price of US\$7.40/dmtu (FOB Port of Arica).
- **Permitting:** Final environmental approval is expected by January 2011.

- **Significant potential upside remains:**

The Company is conducting a supplementary study to the PFS focusing on the identified enhancements available to the economics and mine life of the Project. The FES will incorporate the reinterpretation of the resource by Coffey Mining, and further metallurgical testwork being undertaken to confirm the Project's metal recovery assumptions.

The FES is expected to deliver:

- Further metallurgical testwork to enhance product yield assumptions that have the potential for increasing production and lowering operating costs.
- A review of the ore resource statement being conducted by Coffey Mining that includes further analysis data to increase the ore resource inventory.
- Reduction in product lost to waste through flowsheet optimisation.
- Identification of optimal product mix for the Los Pumas ore.
- Regional exploration potential.

The Company expects to deliver the FES by first quarter 2011.

Trevor Tennant, Managing Director and CEO of Southern Hemisphere stated: "The first drill hole into the Los Pumas Project was sunk on the 16 December 2008 and work has progressed on the Project to the current state where a pre-feasibility has been completed that supports findings that the Project is viable and will be a producer of a quality of product that will be well accepted in the Chinese market. The Project site is in the north of Chile that is relatively undeveloped and the opportunity for employment and provision of services will be appreciated. The mine will have a Company work force of 66 and contractors will directly employ 150 persons."

LOS PUMAS PRE-FEASIBILITY STUDY

Contributors

The PFS is based on technical information generated by a number of independent consulting firms, with specific technical expertise and Southern Hemisphere personnel. Table 1 lists the responsible contributors to the various parts of the PFS:

Table 1 PFS Contributors

<i>Component</i>	<i>Responsibility</i>
Resource definition	Coffey Mining
Initial metallurgical testwork	Mintek (Peer review by Mineral Processors)
Process engineering	Mineral Processors
Preliminary civil, structural, mechanical and electrical engineering	SNC-Lavalin
Mine design and scheduling	Southern Hemisphere
Estimation of capital and operating costs	SNC-Lavalin
Determination of Project execution plan	Southern Hemisphere
Project execution scheduling	SNC-Lavalin/Southern Hemisphere
Financial analysis	Southern Hemisphere

Mineral Resource

This PFS is based on a mineral resource estimate developed by Coffey Mining as summarised in Table 2 below:

Table 2 Resource Estimate Summary

<i>Resources</i>	<i>Tonnes (Mt)</i>	<i>Mn (%)</i>	<i>SiO₂ (%)</i>	<i>Fe₂O₃ (%)</i>	<i>Al (%)</i>	<i>P (%)</i>
Measured & Indicated	14.3	7.9	57	3	6	0.05
Inferred	4.0	6.8	58	3	6	0.06
TOTAL	18.3	7.6	57	3	6	0.05

Note: Mineral resources reported at a cut-off grade of 4% Mn

Mining

Mining at Los Pumas will be carried out through conventional open pit mining to be performed by a local contract miner. The mine plan for Los Pumas contemplates a mine life of 7 years, averaging 7,100 tonnes per day with a strip ratio of 1.5:1. Mining costs (life of mine) are expected to average approximately US\$1.20/dmtu of product.

To achieve the planned mine life it is expected that there will be a 93% conversion of resources to reserves and that additional tonnages will be identified during the re-interpretation of the resources and by further local exploration activities.

Processing and Metallurgy

A 410tph three stage crushing plant, 1,750t crushed ore silo and 353tph coarse and fine media separation plants will be located at the Project.

Metallurgical testwork indicates that recovery of metal to concentrate for the bulk of the deposit will be better than 60%. The recovery assigned to the volcanic sediments, the base lithological unit, is lower at 55%. To enhance possible recoveries from this material, further metallurgical testing is planned. The expected recovery used in the PFS is 60%.

Infrastructure

The Project is located approximately 170km from Arica Port. Manganese product will be trucked from Los Pumas to a stockpile 10km from Arica Port, with 140km on a sealed highway and the remainder a provincial gravel road. The Arica Port has bulk loading capabilities for Handymax ships and undercover pre-loading facilities. Southern Hemisphere is acquiring an additional offsite lay down area.

The work force at Los Pumas will be accommodated at a 150 man mine camp which is under option to Southern Hemisphere. The price will be US\$1.3 million.

Capital Costs

Initial capital costs for the PFS are estimated to be US\$74.3 million that includes US\$8 million in contingency:

Table 3 Capital Costs

	<i>US\$ million</i>
Mine establishment	1.2
Mine facilities	0.6
Process Plant	31.6
Infrastructure	18.7
General	0.4
Total direct cost	52.4
Indirect costs	8.4
Owners costs	5.3
Subtotal	66.1
Contingency	8.2
Total	74.3

Approvals

A Declaration of Environmental Impact (“DIA”) was submitted by Southern Hemisphere under the System of Environmental Impact Assessment (“SEIA”) on 27 July 2010. Southern Hemisphere is required to respond to clarification requests by 3 November 2010.

The Company anticipates final environmental approval to be granted by January 2011.

Project Economics

The Project has been evaluated using a discounted cash flow analysis on a 100% equity basis and constant US dollar basis. Cash inflows consist of annual revenue projections for the remaining mine life. Cash outflows such as capital, operating costs and taxes are subtracted from the inflows to arrive at the annual cash flow projections. Annual net cash flow (“NCF”) projections are then discounted for time and risk and then summed to arrive at a NPV.

After tax NPV results for various discount rates and the Project IRR are presented in Table 4 below:

Table 4 Project Economics (after tax basis)

	<i>Base Case – Manganese price (FOB Arica) US\$7.40/dmtu</i>
NPV (0% discount rate)	207 million
NPV (5% discount rate)	136 million
NPV (10% discount rate)	90 million
IRR	43 %

Feasibility Study and Financing

Southern Hemisphere expects to release its FES by first quarter 2011, following the anticipated receipt of final environmental approvals, resource reinterpretation by Coffey Mining and further metallurgical test work.

Southern Hemisphere is currently assessing a range of financing alternatives to fund the further development of the Project.

The full NI 43-101 Technical Report for the PFS will be filed on SEDAR within 45 days and posted to Southern Hemisphere's website at www.shmining.com.au.

Contact Details

For further information please contact Trevor Tennant on +56 (9) 7766 4688.

Competent Persons Statement

Information of a scientific or technical nature in this report was prepared under the supervision of Trevor Tennant, Managing Director of Southern Hemisphere, a "qualified person" under National Instrument 43-101 – "Standards of Disclosure for Mineral Projects", and is a member 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 2004 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 report. For further information regarding the Project, including a description of Southern Hemisphere's quality assurance program, quality control measures, the geology, samples collected and testing procedures in respect of the Project please refer to the technical report which are available under the Company's profile at sedar.com.

Forward Looking Statement

This press release contains certain "forward-looking statements". All statements, other than statements of historical fact, that address activities, events or developments that Southern Hemisphere Limited, including its subsidiaries and affiliated entities (collectively, "Southern Hemisphere" or the "Company"), believes, expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect", and "intend" and statements that an event or result "may", "will", "can", "should", "could", or "might" occur or be achieved and other similar expressions. These forward-looking statements reflect the current internal projections, expectations or beliefs of Southern Hemisphere based on information currently available to Southern Hemisphere. Forward-looking statements are subject to a number of risks and uncertainties, including those detailed from time to time in filings made by Southern Hemisphere with securities regulatory authorities, that may cause the actual results of Southern Hemisphere to differ materially from those discussed in the forward-looking statements, and even if such actual results are realised or substantially realised, there can be no assurance that they will have the expected consequences to, or effects on Southern Hemisphere. Southern Hemisphere expressly disclaims any obligation to update or revise any such forward-looking statements.

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