

ASX Announcement

13<sup>th</sup> July 2023

## Work Commences on the New Lago Lithium Brine Concessions

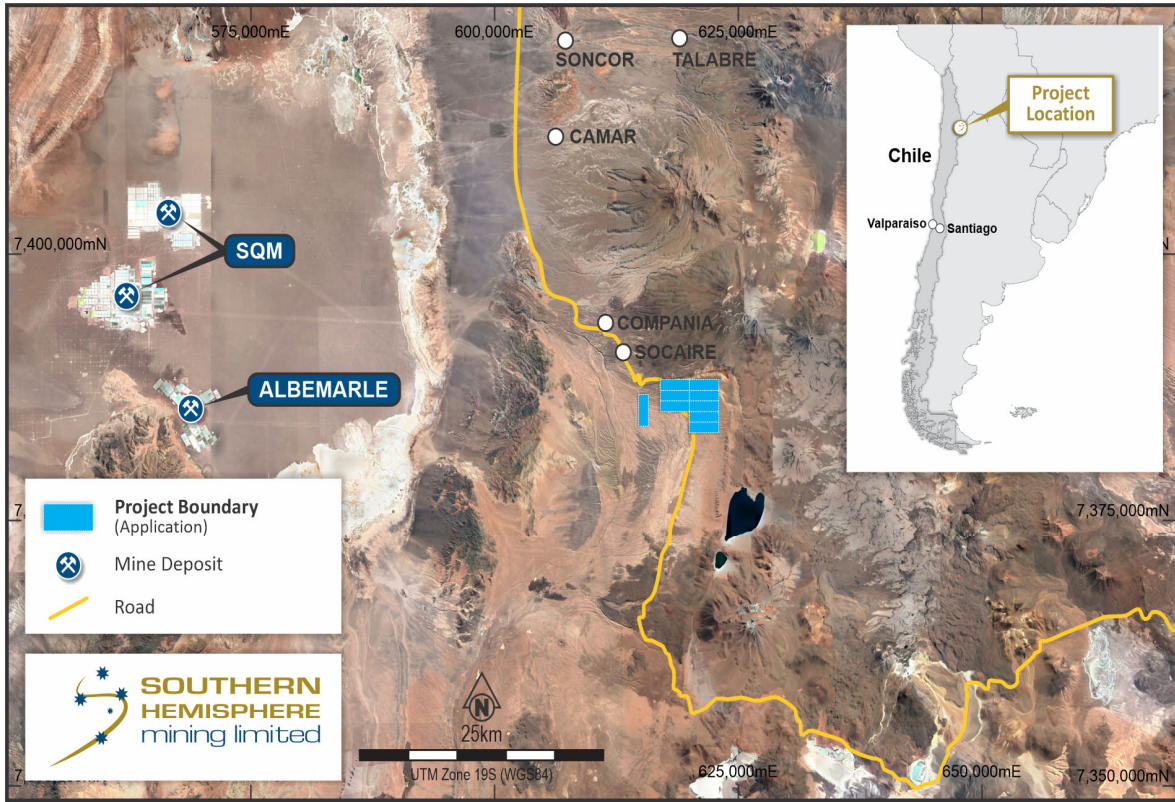
### Highlights:

- **The Lago Lithium Project includes nine concessions covering an area of approximately 27km<sup>2</sup>, located near two of the largest lithium operators, SQM and Albemarle, in the renowned lithium-rich Atacama region of Chile**
- **An Expert Chilean geological consultant has been engaged and work has already commenced**

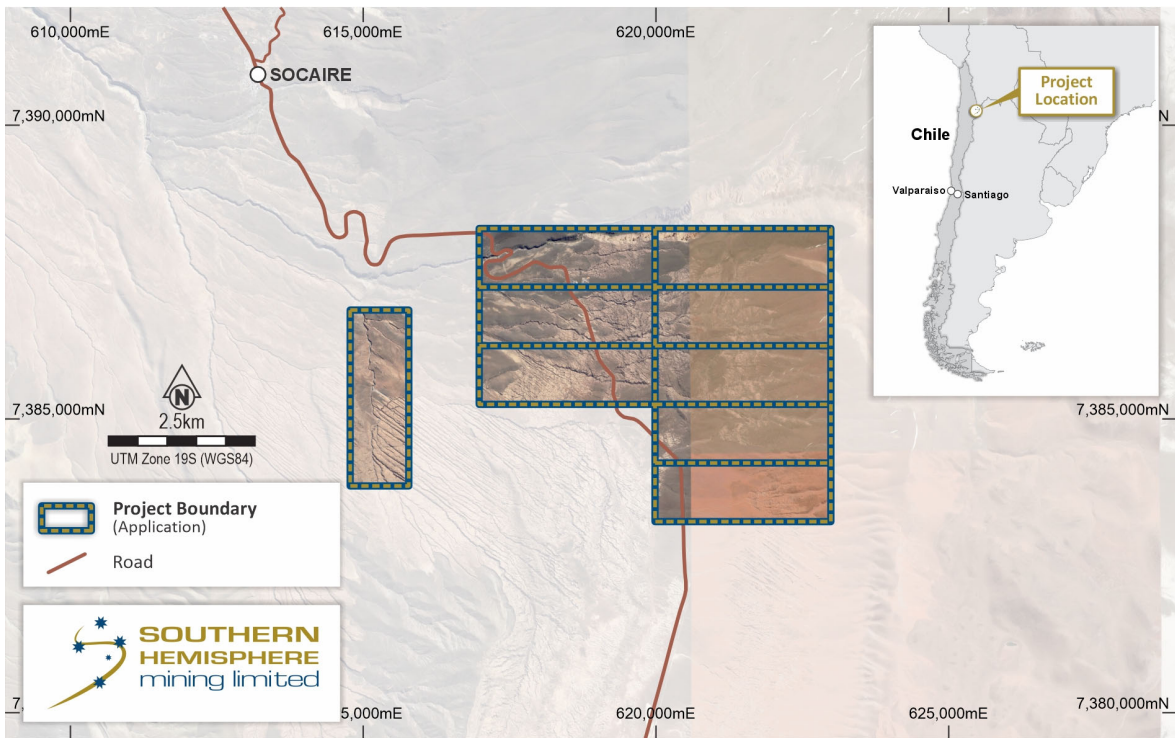
Southern Hemisphere Mining Limited (“Southern Hemisphere” or “the Company”) (ASX: SUH, FWB: NK4), reports that an expert Chilean geological consultant has been engaged to manage the Lago Lithium Brine Exploration Project.

Early stages in brine exploration are low cost and quick to advance. Work has already commenced on this interesting project to ascertain the scale of this new addition to the Company’s Chilean mineral asset portfolio.

The work will target brines from these nine new concessions that are potentially amenable to both Direct Lithium Extraction (DLE) and/or conventional solar evaporation. DLE has the advantage of reducing the requirement for large solar evaporation ponds used in the concentration of lithium brines as well as reducing the use of fresh water, a potentially faster lithium extraction time, reduced environmental impact, scalability and high purity lithium production output.



**Figure 1:** Location of the nine new lithium brine concessions



**Figure 2:** Close up of the nine new lithium brine concessions. Highway 23 provides excellent access to the project area

Exploration results will be reported in due course.

Approved by the Chairman for release.

**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:

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ASX Release References:

[ASX Announcement dated 11 July 2023, "Application for New Lithium Brine Concessions in Chile"](#).

**BACKGROUND INFORMATION ON SOUTHERN HEMISPHERE MINING LIMITED:**

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 Battery Metals Manganese Project, both of which were discovered by the Company, and the recently applied for Lago Lithium Brine Project.

**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*
<i>Measured</i>	112	0.31	0.12	0.008	0.42
<i>Indicated</i>	37	0.23	0.14	0.007	0.37
<b><i>Measured plus Indicated</i></b>	<b>149</b>	<b>0.29</b>	<b>0.12</b>	<b>0.008</b>	<b>0.41</b>
<i>Inferred</i>	20	0.20	0.19	0.005	0.36
<b><i>Total M+I+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 testwork**

- *"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 optimized, the results indicated good flotation process characteristics".*

Copper Equivalent Formula= Cu % + Au (g/t) x 0.72662 + Mo % x 4.412 Price Assumptions- Cu (\$3.40/lb), Au (\$1,700/oz), Mo (\$15/lb)

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

<b>Resource (at 2.5% Mn cut-off)</b>	<b>Tonnes</b>	<b>Mn %</b>	<b>Al%</b>	<b>Fe2O3%</b>	<b>K%</b>	<b>P%</b>	<b>SiO2%</b>	<b>SG%</b>
<b>Indicated</b>	23,324,038	6.21	5.71	2.78	2.98	0.05	57.07	2.15
<b>Inferred</b>	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.*

Metallurgical studies have demonstrated greater than 38% Mn concentrates are achievable by DMS with low impurities and high silica product.

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).