

ASX Announcement

5<sup>th</sup> July 2023

## **Titan Battery Minerals Technology Pty Ltd Incorporated to Demerge the Los Pumas Battery Metals Manganese Project**

### **Highlights:**

- **Southern Hemisphere plans to spin-out its 100% owned Los Pumas Battery Metals Manganese Project into a new stock exchange listing “Titan Battery Minerals Technology” (Titan BMT)**
- **The Los Pumas Battery Metals Manganese Project, ideally located in Northern Chile, recently increased the JORC Mineral Ore Resource by 27.5% to 30.26 million tonnes of ore**
- **Recent test work has confirmed a suitability for HPMSM downstream production, with the ability to produce at site a substantial lower carbon footprint end-product**

Southern Hemisphere Mining Limited (“Southern Hemisphere” or “the Company”) (ASX: SUH, FWB: NK4) reports that Titan Battery Minerals Technology Pty Ltd (“Titan BMT”) (100% owned by Southern Hemisphere) has been incorporated with the intention of acquiring 100% of the shares in Minera Panamericana SCM, a wholly owned subsidiary of Southern Hemisphere, which holds 100% of the Los Pumas Battery Metals Manganese Project (“Los Pumas Project”).

Titan BMT is starting with a significant manganese mineral resource and is also exploring purifying technologies specific to the battery metals industry with a key focus on becoming embedded in the value chain, especially as battery minerals and technologies continue to evolve. The importance of manganese is continuing to increase in the global drive for competitive battery energy storage to aid in the decarbonisation of the world’s energy supply.

The demerger will create a dedicated, globally focused battery minerals and technology company. The Los Pumas Project is the flagship project to convert high-quality manganese mineral resources into High-Purity Manganese Sulphate Monohydrate (“HPMSM”) to supply the Electric Vehicle (“EV”) and battery energy storage markets. Other advancing projects and technologies in lithium, manganese and cobalt are key areas for business growth as the Los Pumas Project moves through the feasibility stage.

### **Lead Director of The Los Pumas Battery Metals Manganese Project, Natalie Dawson, said:**

*“This is a significant opportunity for Southern Hemisphere. The Los Pumas manganese deposit is substantial, high quality and geopolitically well suited to serve emerging technologies for energy storage, particularly in the US. Manganese has historically been used in lithium battery technologies principally as a stabiliser to decrease battery combustibility and increase density which assists with increasing EV driving range.*”

*Going forward, we expect low-cost manganese cathode technology to significantly contribute to lowering the unit cost per kWh of energy storage both for existing lithium-ion batteries but also for newer battery technologies such as sodium manganese batteries. The expected increase in demand should have a positive impact on the price of high purity manganese as we progress development.”*

Pricing for manganese is currently ~US\$150 per tonne at 38% concentrate, and HPMSM is ~US\$1,000 per tonne. Shipping an end product from Los Pumas amplifies the business case for Titan BMT as well as the substantial carbon footprint reduction by downstream manufacture at the mine.

Whilst the amount to be raised or the issue price per share under the prospectus, the consideration, structure or timeframe of the spin-out are yet to be determined and has not yet met any suitability requirements for a listing, Titan BMT plans in due course to apply for listing. It is likely that Southern Hemisphere will seek shareholder approval under Listing Rule 11.4 and all other regulatory approvals.

Southern Hemisphere will remain a major shareholder, supporting Titan BMT's progress and growth with its in country administrative and geological expertise. This demerger allows Southern Hemisphere to focus on expanding the flagship Llahuin Copper Project to take advantage of the looming copper supply gap estimated in 2025/26.

We are excited by the possibilities of what Titan BMT could achieve and look forward to providing further details on the demerger in due course.

Approved by the Board for release.

**Natalie Dawson**

Lead Director - Los Pumas Battery Metal Manganese Project

**CONTACTS:**

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**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.

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

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

**FORWARD LOOKING STATEMENTS**

This announcement may include forward-looking and aspirational statements. Such statements are based on Southern Hemisphere management's expectations and beliefs concerning future events as at the time of the release of this announcement. Forward looking and aspirational statements are necessarily subject to risks, uncertainties and assumptions which may change over time and are outside the control of the Company.

Any forward-looking and aspirational statements in this communication are made only at the date of release of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company makes no undertaking and is under no obligation to subsequently update or revise any information or any of the forward-looking and aspirational statements made in this document to reflect any changes in events, conditions, or circumstances on which any such statements are based.