

29 January 2024

## EXPLORATION INITIATED FOR HIGH-GRADE NIOBIUM, CLAY-HOSTED AND HARD ROCK REE & PEGMATITE LITHIUM IN MINAS GERAIS BRAZIL

- 41,409 Ha of vacant ground across 25 applications has been applied for in the highly prospective region of Minas Gerais and Goiás
- The Company has identified a 15km trend hosting S-type G4 and G5 supersuite, that consists of two-mica leucogranites that are a potential source of clay-hosted and carbonatite REE deposits
- A Hyperspectral survey is planned immediately after the acquisition of magnetic and gravity surveys to identify prospective areas containing Niobium, clay-hosted and hard rock rare earths and lithium pegmatites, to be followed by ground survey and air-core drilling
- Patagonia's technical team in Brazil has been engaged and work has already commenced using Al and other data systems to identify potential economic sources.

**Patagonia Lithium Ltd (ASX:PL3, Patagonia** or **Company)** is pleased to advise that it has incorporated a new 100%-owned subsidiary, PL3 Brazil Mineracao Ltda and has already commenced work on these properties. A total of 41,409 Hectares, across 25 applications have applied for.

The strategy adopted by the board is to explore for **high-grade Niobium** and **clay-hosted rare-earths** and at Niobium prices of US\$40-50,000 per tonne is an attractive element to explore. Niobium is present in the Araxa area in carbonatite complexes in Goiás state where the application is.

In these carbonatite and monazite complexes, **clay-hosted rare-earths** including **hard-rock lithium pegmatites** are also found, making it a highly prospective area and a key area of focus for PL3.

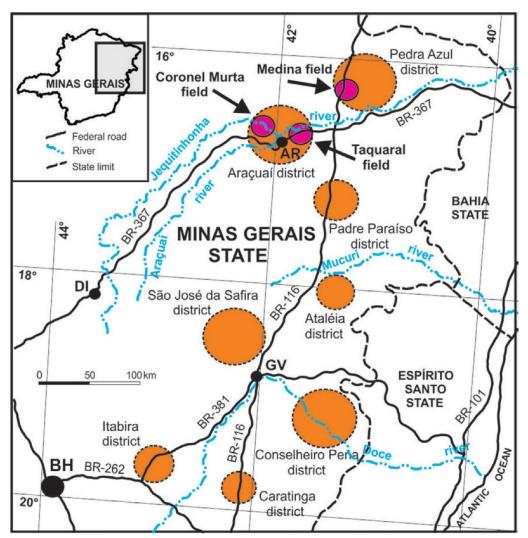


Figure 1: Schematic geographic map showing the eight main pegmatite districts in the Eastern Brazilian Pegmatite Province, emphasizing the focused ones in Northeastern Minas Gerais, the Coronel Murta, Taquaral and Medina fields. Towns: BH, Belo Horizonte (capital of the State); GV, Governador Valadares; DI, Diamantina; AR, Araçuaí.

In the southeast, the Company will be **concentrating on the S-type G4 and G-5 supersuite** that consists largely of garnet-bearing two-mica leucogranites that are the source of many pegmatites mined for tourmalines and many other gems, lithium (spodumene) ore and industrial feldspar. Once the Company's applications have been granted (expected over coming weeks), the Company will provide a market update on the potential of the areas in more detail upon completion of our initial geological and technical reviews. We anticipate the applications to be processed over a period of 60-90 days before being approved.

In the north of Brazil, the Borborema Pegmatite Province that contains lithium bearing spodumene extends NNE between  $5^{\circ}$  300' and  $7^{\circ}150$ ' and  $35^{\circ}$  450' and  $37^{\circ}$  150' W, over an area of approximately 75 x 150km, along the eastern part of the Serido Belt (SB) in the central part of the Northern Tectonic Sub-Province of the Borborema Tectonic Province.

Brazil has the third largest reserves of rare earths in the world according to the US Geological Survey (USGS), with **21 million tonnes**. Brazil produced only 80 tonnes of REEs in 2022, a significant decline from the previous year's output of 500 tonnes. This low production level is largely due to the lack of investment in REE projects in the country. The rare earths most common in Brazil are the light rare earths neodymium and praseodymium and the heavy rare earths dysprosium and terbium, which are all needed for high-performance neodymium iron boron (NdFeB) magnets for the engines of electric vehicles (EVs).

Phillip Thomas, Executive Chairman commented "We are excited with the potential of the areas we have applied for. The extensive research we have conducted over the past few months will give us a good footing to start satellite based exploration followed by extensive airborne and ground-based exploration. Niobium has become in great demand, as have clay-hosted rare earths, and Brazil is significantly under explored for these elements partly due to the terrain and expertise available to complete integrated exploration campaigns."

Authorised for release by the Board of the Company.

For further information please contact: Phillip Thomas Executive Chairman

Patagonia Lithium Ltd M: +61 433 747 380

E: phil@patagonialithium.com.au

Our socials – twitter@pataLithium, Instagram, facebook, pinterest and youtube

## **About Patagonia Lithium Limited**

Patagonia Lithium has two major lithium brine projects – Formentera/Cilon in Salar de Jama, Jujuy province and Tomas III at Incahuasi Salar in Salta Province of northern Argentina in the declared lithium triangle. Since listing on 31 March 2023, recharge water analysis, surface sampling and MT geophysics have been completed in preparation of an upcoming drill program at Formentera, and MT Geophysics at Tomas III that was very prospective. In July 2023 a 13 hole drill program was submitted for approval which was granted in January 2024. Samples as high as 1,100ppm lithium (2 June 2023 announcement) were recorded at Formentera and resistivity values as low as  $0.3\Omega$ .m were recorded during the MT Geophysics survey at Formentera making the project highly prospective. The Company confirms it is not aware of any new information or data that materially affects the information in this announcement.