8 April 2024

Exploration application granted in Lithium Valley Project Brazil for REE

Concession covers 1734.22 ha 6km from the town of Agua Boa and covers the Serra Negra Group granites targeting Ionic clay rare earths in the state of Mato Grosso, Brazil.

Patagonia Lithium Ltd (ASX:PL3, "Patagonia" or **"Company")** advises that its Brazilian subsidiary, PL3 Brazil Mineracao Ltda, has been granted the concession 830.178/2024 for a three year period - 24 applications are still pending.

The concession is located within a volcano-sedimentary association overlaying the TTG (Tonalite-Trondhjemite-Granodiorite ("TTG")) basement, known as the Serra Negra Group. The geophysical pattern is characterised by diffuse granularity. On site chemical soil data will be collected in the field for an assessment based on medium radiographic intensity in geophysics of Uranium, Thorium, and Potassium. Potassium is evidenced in the river systems, but is highly ubiquitous. The concession to the east of 830.178/2024 has been staked for lithium and also shows promising high anomalies.

The main geophysical data coming from georeferenced PDFs, highlighted by the correlation between samples is the F parameter, followed by the thorium-uranium ratio. There is a high correlation between Kd potassium factor and Thorium and rare earths.

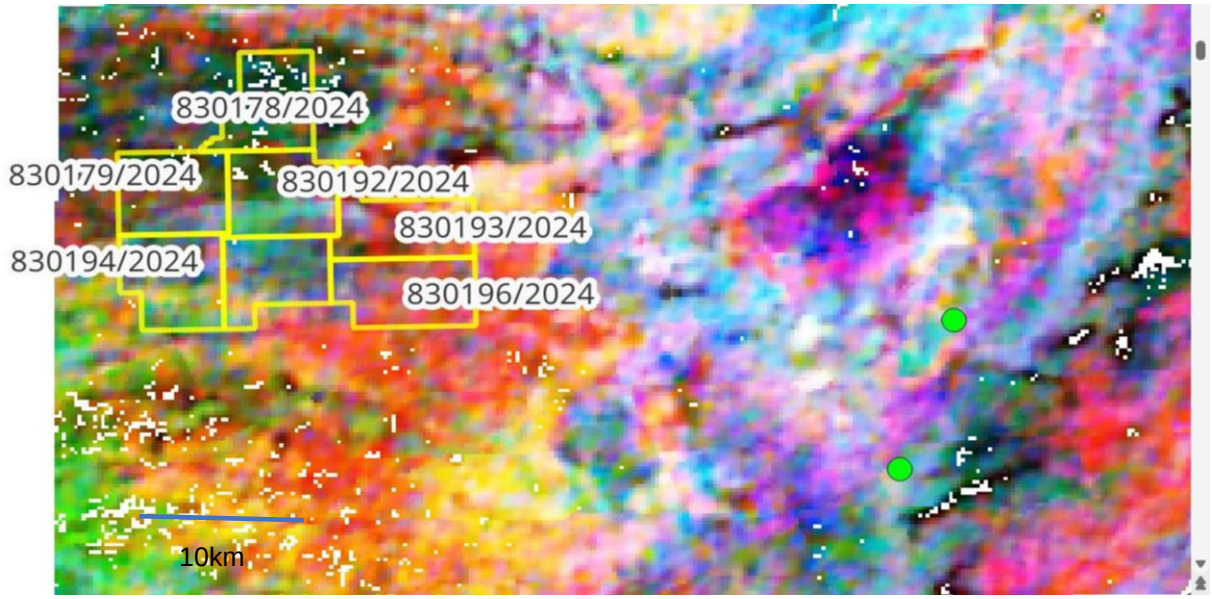

Figure 1. 830178 and other concession applications are shown. Green dots are where REE have been found. The radiographic map shows uranium in green, thorium in blue, fenitization in white. We will target the green and blue areas for REE ionic clays.

The deposit 830178 has upside for pegmatites near granite intrusions breaking through meta sediments. Patagonia proposes to explore 830177 and 830178 with augur for soil samples. REE are at the bottom of the soil horizon. We intend to evaluate the acquisition of spectral data with a drone to get higher resolution from a spectral camera.

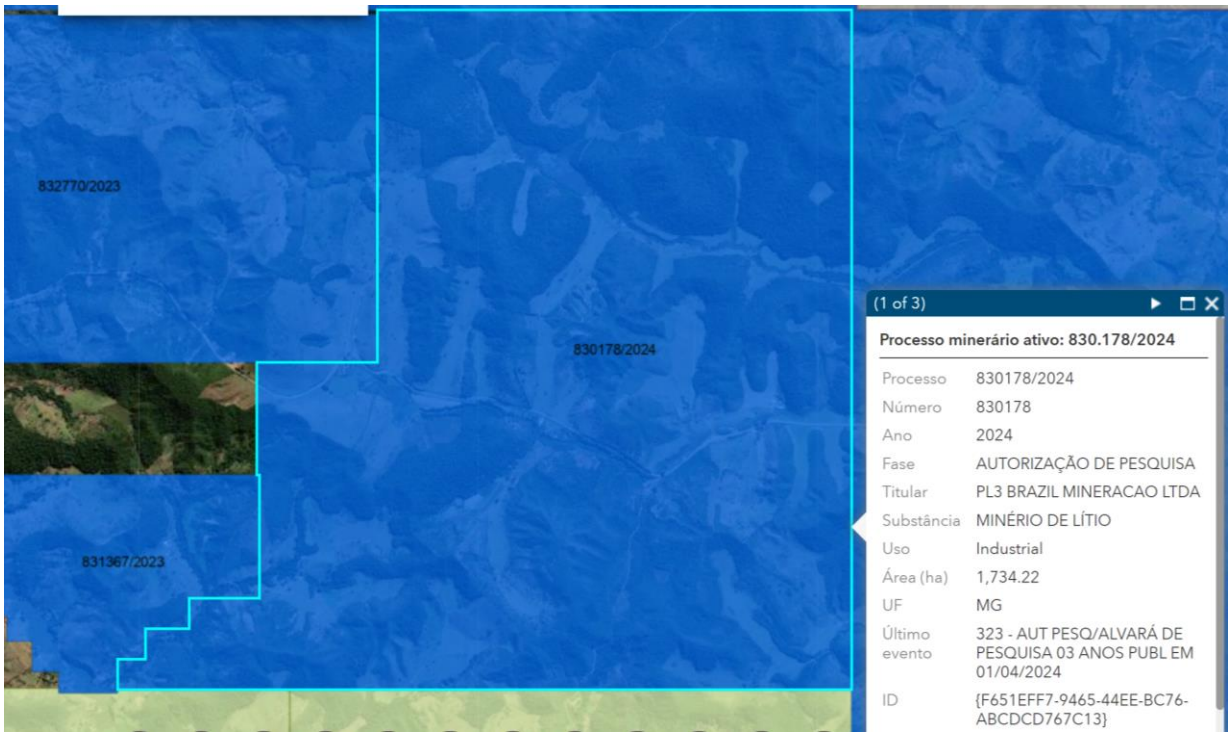

Figure 2. Extract of the concession details from the Brazil government ANM database.

Geology and Petrology

The Serra Negra group is well known for rare earths emanating from carbonatites. All the complexes of this group belong to the Late Cretaceous (81–86 Ma) episode of alkaline carbonatite magmatism. The Serra Negra Group do not have glimmerites. Glimmerite is an igneous rock consisting almost entirely of dark mica (biotite and phlogopite). Conversely, the complexes of Araxá, and Catalão I, that have well known rare earth deposits in the geological vicinity contain glimmerites. Serra Negra and Catalão II have calciocarbonatites and magnesiocarbonatites that are found in Salitre, whereas only magnesiocarbonatites are found in Araxá and Catalão I. This information is critical in our exploration efforts for large commercial clay based ionic deposits.

Exploration Rationale

Carbonatites and alkaline-silicate rocks are the most important sources of rare earth elements (REE) and niobium (Nb). Cooling and crystallising carbonatitic and alkaline melts expel multiple pulses of alkali-rich aqueous fluids which metasomatise the surrounding country rocks, forming fenites during a process called fenitisation. The Company is exploring for these rocks. These alkalis and volatiles are original constituents of the magma that are not recorded in the carbonatite rock, and therefore fenites are a key focus of a carbonatite system and our exploration efforts.

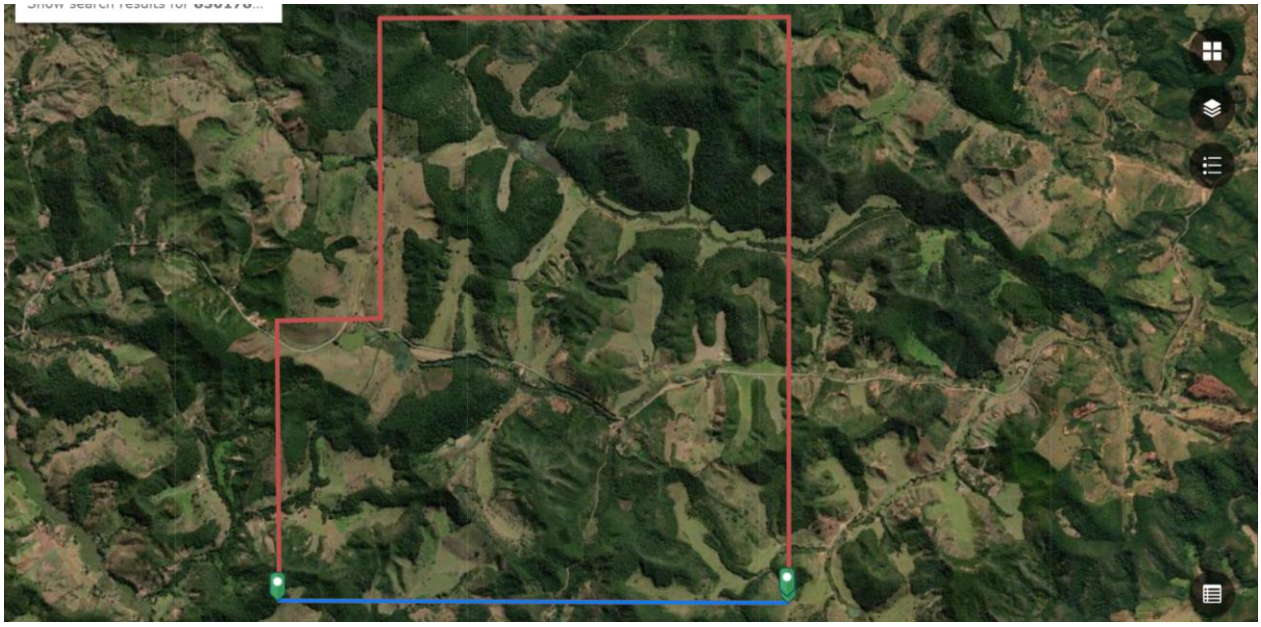

Figure 3. Google map of the concession. The blue line is 4.17km in length.

Patagonia is continuing to review the radiographic, magnetic and gravity data we have acquired to identify site visit, sampling and potential drill hole locations in our lithium valley pegmatite and niobium REE projects.

Authorised for release by the Board of the Company.

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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. Samples as high as 1,100ppm lithium (2 June 2023 announcement) were recorded at Formentera and resistivity values as low as 0.3Ω.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.