

7 February 2024

25 EXPLORATION APPLICATIONS COMPLETED FOR HIGH-GRADE NIOBIUM, CLAY-HOSTED AND HARD ROCK REE & PEGMATITE LITHIUM IN MINAS GERAIS AND GOIÁS STATES IN BRAZIL

- 41,746 Ha of vacant ground across 25 applications has been entered into the ANM Brazilian mines database in the highly prospective region of Minas Gerais and Goiás
- Patagonia's technical team to commence geological evaluation and reconnaissance to build a geophysics/geological exploration database ahead of planned hyperspectral surveys
- The Monte Formoso group of exploration concessions well located in Brazil's Aracuaí lithium valley

Patagonia Lithium Ltd (ASX:PL3, Patagonia or Company) is pleased to advise that it has completed and registered exploration licence applications for a total of 41,746 Hectares. This is a result of executing the board strategy to explore for **high-grade Niobium** and **clay-hosted rare-earths and lithium in pegmatites**, whilst also expanding its footprint into other mining friendly jurisdictions complementing our exploration strategy in Argentina.

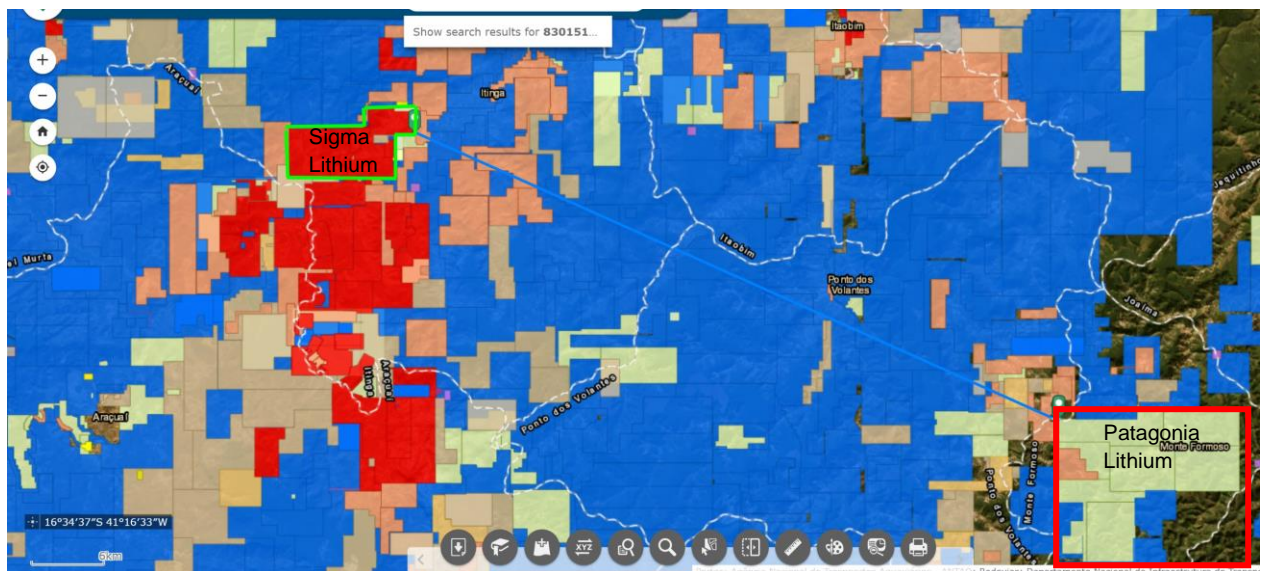


Figure 1: The Monte Formoso group of PL3 concessions 830151-157/2024 (outlined in red but only green areas not beige or blue areas) are approximately 63km south west of Sigma Lithium (ASX:SGML) (shown in green outline) in the Aracuaí Lithium valley. Blue squares are granted exploration concessions, red are granted mines and beige are mine requests.

The Company has staked four groups of concessions – the Monte Formoso group (830151-167/2024), the Teofilo Otoni group 830167-179/2024, the Agua Boa (830178-196

Capital structure

58.6m - PL3 shares
5.5m - unquoted options
14.6m - PL3O quoted options

Patagonia Lithium Ltd
Level 6, 505 Little Collins Street
Melbourne VIC 3000
<https://patagonialithium.com.au/>

Board

Phil Thomas - Exec Chair
Gino D'Anna - NED
Sam Qi - NED
Jarek Kopias - Co Sec

and the Catalao group 860164-5/2024. We continue to evaluate other concessions that are available to either acquire or joint venture with our geological team.

Niobium and REE Exploration

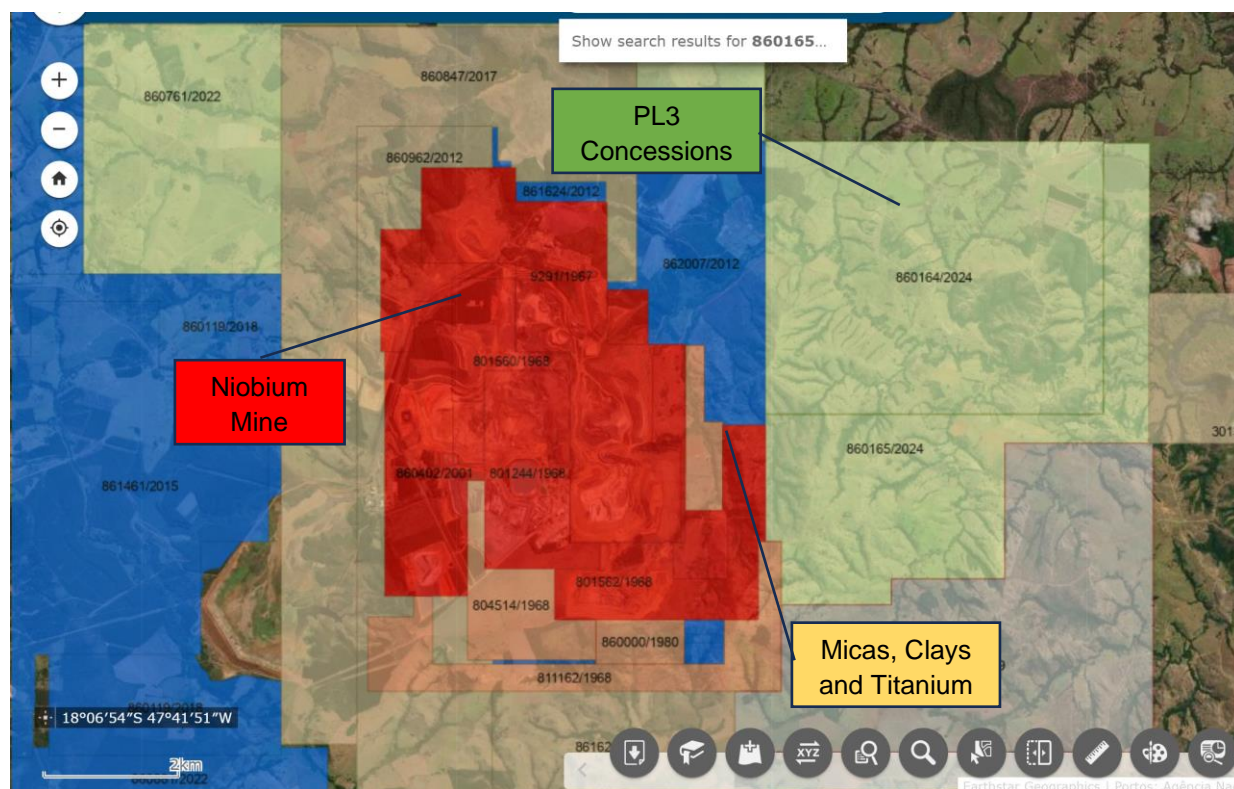


Figure 2: Shows two concessions in Goias state 860164/2024 and 860165/2024 approximately 5.6km x 6.8km that are close to the existing CMOC Brazil Mineracao Industries Niobium mine (red), and vermiculite clays that were generated from mica in granites.

The Company's initial focus is to explore for niobium in an area well known for niobium mineralisation found in Catalão area. The Catalão I alkaline–carbonatite–phoscorite complex contains both fresh rock and residual (weathering related) niobium mineralization. The CMOC mine fresh rock niobium deposit consists of two plug-shaped orebodies named Mine II and East Area, respectively emplaced in carbonatite and phlogopite (mica). Together, these orebodies contain 29Mt at 1.22wt.% Nb₂O₅ (measured and indicated)¹. **REE extraction can be obtained from byproducts of niobium and/or phosphate tailings in ionic clays.** Carbonatite is an igneous rock consisting chiefly of carbonate minerals crystallized from a carbonate magma.

In closer detail, the orebodies consist of dyke swarms of pyrochlore-bearing, olivine-free phoscorite-series rocks (nelsonite) that can be either apatite-rich (P2 unit) or magnetite-rich (P3 unit). We are exploring for this major feature. The Company interprets the pyrochlore chemistry variations from the original composition as evidence of interaction

¹ Cordeiro, Pedro & Brod, Jose & Palmieri, Matheus & Oliveira, Claudinei & Barbosa, Elisa & Santos, Roberto & Gaspar, José & Assis, Luis. (2011). The Catalão I niobium deposit, central Brazil: Resources, geology and pyrochlore chemistry. Ore Geology Reviews. 41. 112-121. 10.1016/j.oregeorev.2011.06.013.

with low temperature fluids which, albeit not responsible for the mineralisation, modified its magmatic isotopic features. The origin of the Catalão I niobium deposit is related to carbonatite magmatism, but the process that generated such niobium-rich rocks is still largely undetermined and might be related to crystal accumulation and/or emplacement of a phosphate-iron-oxide magma.



Figure 3: Niobium mine and PL3 Concessions showing faulting and structural features. Our initial exploration will focus on dyke outcrops.

CMOC produced 7,489 tonnes of niobium in 2023. The niobium operations focus on mining and processing of niobium with ferroniobium as its major product.



Figure 4: Location Map of three parcels of exploration concessions applied for in Minas Gerais state.

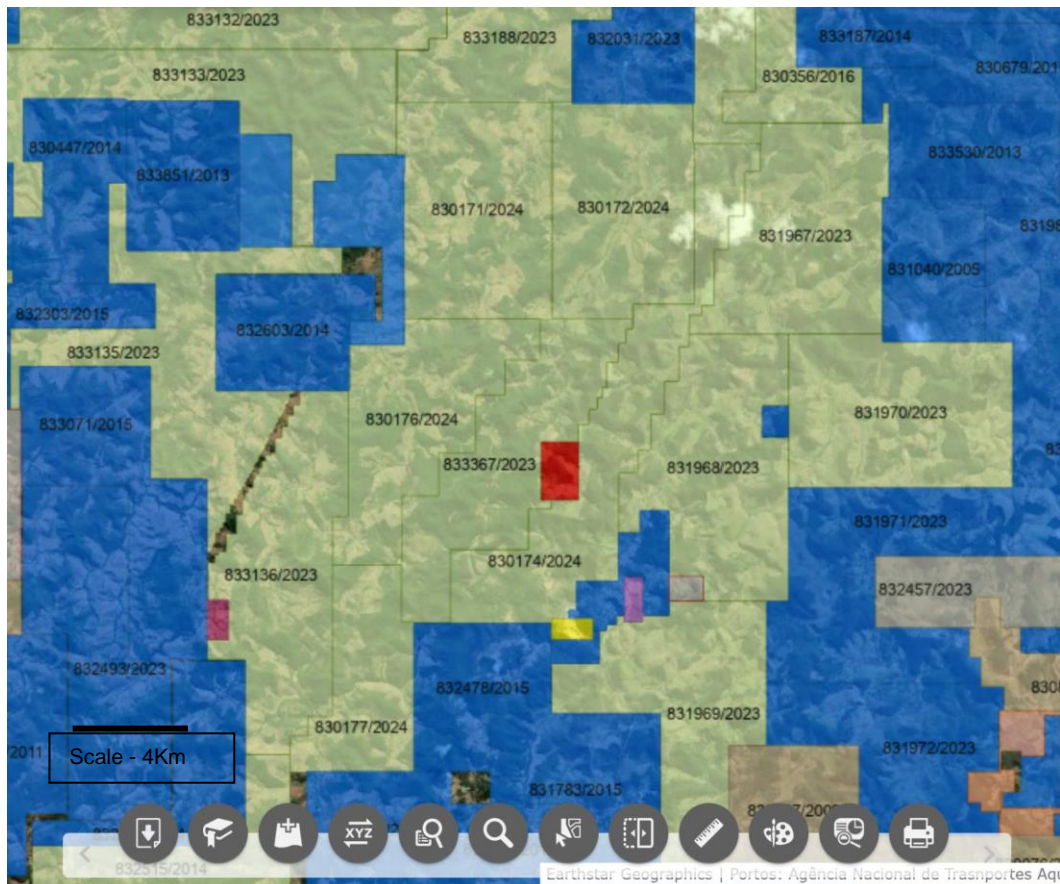


Figure 5: Shows a package of five concessions (light green) (830171-830177/2024) near the town of Teófilo Otoni with Spark Resources (TSXv:EMIN) on one side and Luna Lithium on the other searching for REE, ionic clays and pegmatites containing lithium.

Phillip Thomas, Executive Chairman commented "We are delighted that the areas we have initially selected have been accepted for registration. The extensive research we have conducted over the past few months will give us a good footing to complete integrated exploration campaigns. We expect the concessions to be granted in the next few months."

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](https://twitter.com/pataLithium), Instagram, facebook, pinterest and youtube

About Patagonia Lithium Ltd

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. It has also applied for **41,746 Hs** of concessions exploring for **ionic REE clays, Niobium, and lithium in pegmatites**. The Company has applied for four exploration concession packages.

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 0.3Ω.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.

Appendix

Summary of the Concessions applied for

ID	PROCESS	TITLEHOLED	AREA (ha)	PHASE	SUBSTANCE	DISTRICT	STATE
1	830151/2024	PI3 Brazil Mineracao Ltda	1.949,67	Application for Exploration	lithium	Ponto Dos Volantes, Monte Formoso	MG
2	830152/2024	PI3 Brazil Mineracao Ltda	1.955,16	Application for Exploration	lithium	Monte Formoso	MG
3	830153/2024	PI3 Brazil Mineracao Ltda	729,53	Application for Exploration	lithium	Monte Formoso	MG
4	830154/2024	PI3 Brazil Mineracao Ltda	1.981,26	Application for Exploration	lithium	Monte Formoso	MG
5	830155/2024	PI3 Brazil Mineracao Ltda	1.986,53	Application for Exploration	lithium	Joaíma, Monte Formoso	MG
6	830156/2024	PI3 Brazil Mineracao Ltda	1.602,09	Application for Exploration	lithium	Monte Formoso	MG
7	830157/2024	PI3 Brazil Mineracao Ltda	1.957,42	Application for Exploration	lithium	Monte Formoso	MG
8	830167/2024	PI3 Brazil Mineracao Ltda	606,89	Application for Exploration	lithium	Simonésia	MG
9	830169/2024	PI3 Brazil Mineracao Ltda	1.455,07	Application for Exploration	lithium	Santana Do Manhuaçu	MG
10	830170/2024	PI3 Brazil Mineracao Ltda	933,64	Application for Exploration	lithium	Santana Do Manhuaçu	MG
11	830171/2024	PI3 Brazil Mineracao Ltda	1.934,15	Application for Exploration	lithium	Teófilo Otoni	MG
12	830172/2024	PI3 Brazil Mineracao Ltda	1.780,24	Application for Exploration	lithium	Teófilo Otoni	MG
13	830173/2024	PI3 Brazil Mineracao Ltda	1.878,62	Application for Exploration	lithium	Teófilo Otoni	MG
14	830174/2024	PI3 Brazil Mineracao Ltda	1.971,27	Application for Exploration	lithium	Teófilo Otoni	MG
15	830176/2024	PI3 Brazil Mineracao Ltda	1.636,94	Application for Exploration	lithium	Teófilo Otoni	MG
16	830177/2024	PI3 Brazil Mineracao Ltda	1.087,78	Application for Exploration	lithium	Teófilo Otoni	MG
17	830178/2024	PI3 Brazil Mineracao Ltda	1.739,15	Application for Exploration	lithium	Água Boa	MG
18	830179/2024	PI3 Brazil Mineracao Ltda	1.913,61	Application for Exploration	lithium	Água Boa	MG
19	830.192/2024	PI3 Brazil Mineracao Ltda	1.910,28	Application for Exploration	lithium	Água Boa	MG
20	830.193/2024	PI3 Brazil Mineracao Ltda	1.910,28	Application for Exploration	lithium	Água Boa	MG
21	830.194/2024	PI3 Brazil Mineracao Ltda	1.916,94	Application for Exploration	lithium	Água Boa	MG
22	830.195/2024	PI3 Brazil Mineracao Ltda	1.684,16	Application for Exploration	lithium	Água Boa	MG
23	830.196/2024	PI3 Brazil Mineracao Ltda	1.963,49	Application for Exploration	lithium	Água Boa	MG
24	860.164/2024	PI3 Brazil Mineracao Ltda	1.997,03	Application for Exploration	lithium	Catalão e Ouvidor	GO
25	860.165/2024	PI3 Brazil Mineracao Ltda	1.265,20	Application for Exploration	lithium	Catalão e Ouvidor	GO