14 August 2026

Ten new locations identified in Brazil for TREO REE

- We have **successfully** deployed an adjunct geophysics system that has been trialled against our soil samples and previous hyperspectral work using AI/modelling to **better identify ionic clay deposit locations** with drill targets to reduce our exploration expenditure risk.
- The analysis discovered **10 new targets** less than a few kilometres away from our samples.
- We can now progress to augur sampling to identify REE ionic clays.
- Two unrelated systems, built on entirely different principles, independently confirmed these targets to within single-digit kilometres.
- We will also complete a ground magnetics survey after sampling to validate structure and geology.

Patagonia Lithium Ltd (**ASX:PL3, Patagonia** or **Company**) is pleased to announce it has used a new deterministic system called **Logos** to better target the Company's proposed augur/drilling program on 860164 and 860165 concessions in Goiás State Brazil. Previously we had used SW-IR/hyperspectral mapping. We have now included radiometric surveys (Th/K/U) and fenitization filters as the key Rare Earth Element (REE) vectors, and an **AI** screening layer on top.

Phillip Thomas, Executive Chairman commented "We were able to utilise the latest AI and other technology to sure up our augur/drill targets in Goiás state to drastically improve our chances of REE discovery in ionic clays. While using AI is useful, this process has been very rewarding so far and we are impressed with the Logos System and its results."

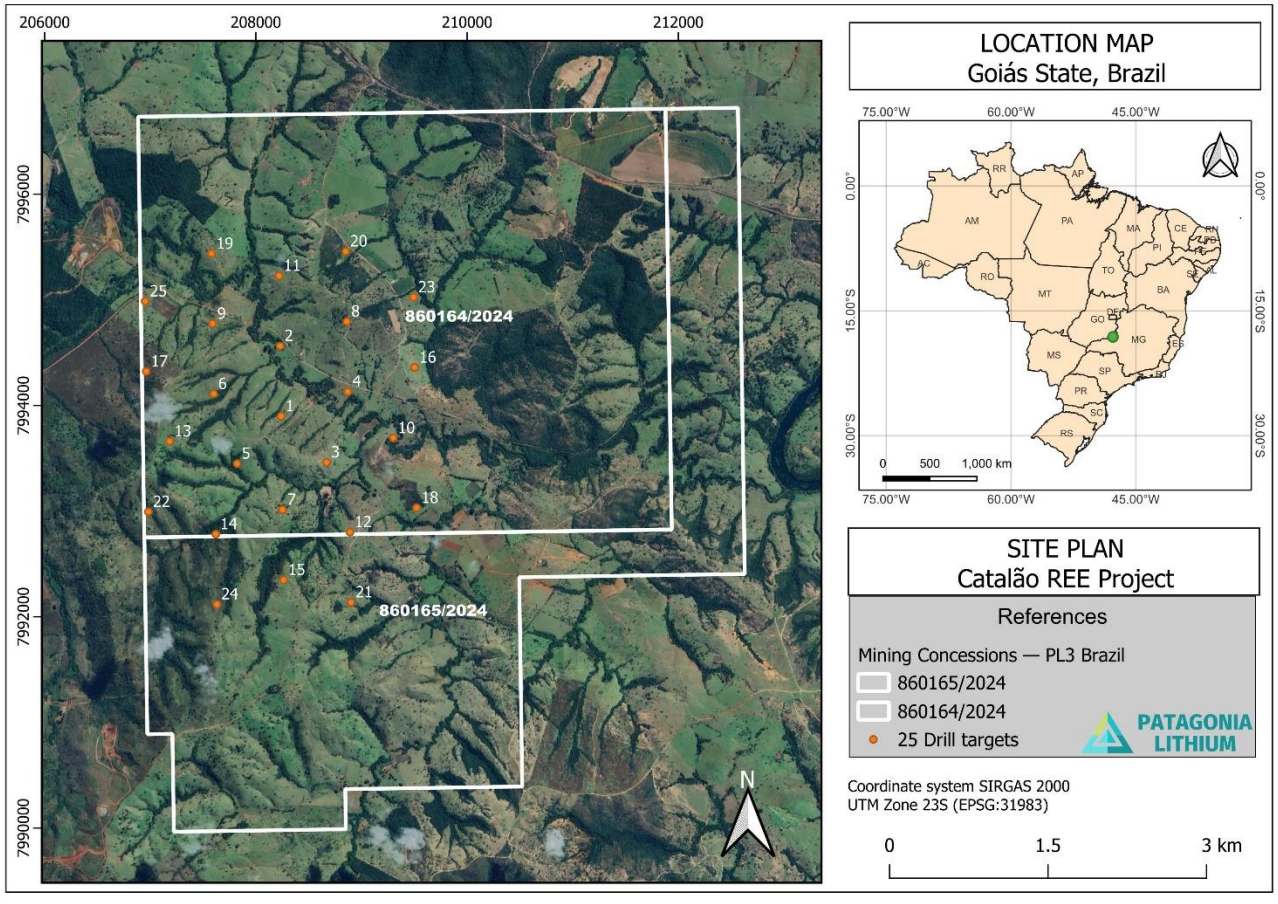

Figure 1. Concessions 860164 and 860165 adjacent to the CMOC Niobium mine and the 25 new drill targets.

Capital structure
241.1 - PL3 shares
29.4m - unquoted options
25.0m - unquoted performance rights

Patagonia Lithium Ltd
Suite 66, 1st Floor, 2-4 Cochranes Road, Moorabbin, VIC 3189
https://patagonialithium.com.au/

The LOGOS system works on a deterministic (process system) model that does not require training datasets, does not need our proprietary data and runs on open geophysical fields (gravity, magnetics, bathymetry / topography, fault geometry, depth, satellite-derived indices). It produces a **ranked prospectivity map** for any region worldwide.

Initial results from our Goias concessions:

- **5 out of 5 known carbonatite complexes with REE captured within 30 km** in leave-one-out blind testing
- Best individual result: **1.3 km** to Araxá Carbonatite, **2.6 km** to Catalão I
- As a follow up we intend to run the system again with the new sampling data. At 0.25% TREO (Total Rare Earth Oxide) REE becomes exciting as potentially economically viable as an ionic clay deposit.

Accuracy:

- Mean error across all 5 anchors: 18–21 km
- Statistical significance: $p < 0.001$, lift 1.99× vs random
- **Average localisation error: 0.45km (450m) Median error: 0.28km (280m)**
- Best prediction: less than 100m
- 100% hits within a 2 km radius in blind tests (40 predictions, 10 random splits)

Figure 2. Local map of drill targets.

We ran a rigorous series of blind tests, eliminating points one at a time and forcing the system to predict their position blindly. In 100% of cases, the system fell within a **radius of 2km** from the **actual PL3 sample point**, at an average distance of 450 m. Also, for the first time, a new feature appeared - the system began to predict not only the position, but **also the approximate content** of rare earth elements (TREO) at a point. This is a weak correlation (r=0.31), but it is the first sign which we can refine using AI and sample correlations. With more samples from our auger program, we can amplify this into a complete discovery tool.

Six of our Geochem-anchored field samples (MC-PL-047, 049, 056, 058, 061, 066 — with TREO and Nb grades) were used as calibration anchors. The system predicts **15 new mineralization targets** and independently confirms 10 of our sample locations, validating the method.

New drilling targets (25 points, with a top 10):
In a new development, each target now contains predicted TREO content (in ppm). The targets are deduced from the 3066 airborne gamma survey - 872 stations inside the licence outlines - and on the thorium-TREO relationship, which reproduces at +0.90 correlation across two independent surveys flown 31 years apart.

Summary of the Drill Targets

Target	Latitude	Longitude	Score	Type	PL3 Sample	Dist. Km
1	-18.1421	-47.7411	**0.920**	confirm	064	0.7
2	-18.0881	-47.7271	**0.917**	**NEW**	070	2.4
3	-18.0861	-47.7291	**0.907**	**NEW**	070	2.6
4	-18.1261	-47.7471	**0.895**	confirm	054	0.2
5	-18.1821	-47.7871	**0.889**	**NEW**	056	4.7
6	-18.0901	-47.7251	**0.887**	**NEW**	070	2.2
7	-18.0961	-47.7791	**0.886**	**NEW**	066	2.2
8	-18.1801	-47.7891	**0.884**	**NEW**	056	4.7
9	-18.1141	-47.7891	**0.884**	**NEW**	052	2.6
10	-18.1561	-47.7331	**0.883**	confirm	064	1.1
11	-18.0941	-47.7151	**0.882**	**NEW**	070	2.5
12	-18.1861	-47.7811	**0.881**	**NEW**	058	4.7
13	-18.1781	-47.7911	**0.880**	**NEW**	056	4.7
14	-18.1381	-47.7451	**0.877**	confirm	061	1.1
15	-18.0821	-47.7771	**0.875**	**NEW**	066	2.9
16	-18.1641	-47.7251	**0.875**	**NEW**	064	2.2
17	-18.1841	-47.7831	**0.874**	**NEW**	056	4.7
18	-18.1161	-47.7291	**0.873**	confirm	070	0.8
19	-18.1141	-47.7331	**0.870**	confirm	070	0.5
20	-18.1281	-47.7531	**0.868**	confirm	054	0.5
21	-18.1001	-47.7491	**0.865**	confirm	066	1.1
22	-18.1321	-47.7591	**0.865**	confirm	051	1.2
23	-18.1421	-47.7511	**0.865**	confirm	058	1.1
24	-18.1501	-47.7871	**0.864**	**NEW**	056	2.9
25	-18.1261	-47.7031	**0.859**	**NEW**	070	3.6

Table 1. Drill targets showing new and those confirmed with soil sampling.

For rare earths the blocks are substantive — TREO up to 2,295.7 ppm, niobium up to 245.8 ppm.

Considering the model of mineralisation in REE by fenitisation, the samples with the greatest potential are MC-PL-47, MC-PL-48, MC-PL-49, MC-PL-50, MC-PL-53, MC-PL-55, MC-PL-56, MCPL-57, MC-PL-58, MC-PL-59, MC-PL-60 and MC-PL-61. These points are within the context of the estimated metasomatism zone. Point MC-PL-66 also stands out for its **thorium anomaly**.

Please reference ASX Releases:

Significant Geophysics REE Anomaly in Brazilian Application	10 Apr-24
Initial Exploration Completed in Brazil	13 May-24
Significant Pegmatite Swarms Sampled in Brazil	24 May-24
REE Clay System Identified in Metasediments in Brazil	16 Jul-24
High Priority REE and Lithium Concession Granted in Brazil	9 Oct-24
Two Concessions Prospective for REE granted in Goias Brazil	4 Dec-24
Argentina Lithium Drilling and Brazil REE Update	14 Oct-25

Sample MC-PL-049 was collected on the bank of the main drainage in the area, downstream from the Mosaic mining company's tailings dam. It has a total REE content of 994.76 ppm, of which 947.38 ppm is light and 47.38 ppm is heavy.

Sample	Cerium ppm	TREO	Niobium	Type
MC-PL-000	1217 (0.12%)	0.23%	235 (0,024%)	Carbonatite
MC-PL-049	477 (0.047%)	246ppm	-	Carbonatite
MC-PL-056	92 (0.045%)	20ppm	-	Carbonatite

So this is a carbonatite-type geochemical anomaly (the indicators hold up — Ce/La, Nb/Ta>20. The best predictions land on the highest-grade anchors (MC-PL-049 at 210 m, MC-PL-056 at 230 m) - strong independent validation, since the model was not shown those points when predicting them.

Samples	Type	Σ REE	Σ REO	Σ heavy REE	Σ light REE
MC-PL-047	Regolith	242,64	291,89	56,12	186,52
MC-PL-048	Regolith	183,98	221,72	23,69	160,29
MC-PL-049	Channel sediment	994,76	1196,46	47,38	947,38
MC-PL-050	Regolith	247,68	295,99	53,74	193,94
MC-PL-053	Regolith	139,83	168,41	26,86	112,97
MC-PL-055	Rock	213,03	254,26	19,17	193,86
MC-PL-056	Rock	373,75	447,04	60,28	313,47
MC-PL-057	Regolith	305,72	367,27	79,65	226,07
MC-PL-058	Regolith	230,33	275,92	34,76	195,57
MC-PL-059	Regolith	171,98	206,59	29,90	142,08
MC-PL-060	Regolith	190,41	231,83	33,81	156,60
MC-PL-061	Regolith	149,49	179,79	30,78	118,71
MC-PL-066	Regolith	250,90	300,81	48,71	202,19

Table 2. 2024 Assay table of samples taken rare earth elements, oxides heavy and light rare earth elements.

Niobium, measured in the identical 509 stream sediment samples, places our block in the survey's highest class, above 2.39 ppm against a basin median of 0.67 ppm. The map shows a **continuous top-class anomaly** covering the whole Catalão-Ouvidor district, with our licences included.

Fenite / carbonatite systems carry a strong open-data signature (magnetics and radiometrics in particular, alongside the SW-IR we have used). We already hold ground truth: the ~1,800 ppm TREO fenites found off-concession less than 500m away.

Ground Truthing – Next Actions
The top 5 NEW targets (scores 0.92–0.89) have been chosen for **priority ground-truthing and soil/rock-chip sampling.** They sit within the predicted fenite/metasomatic halo of the Catalão carbonatite complex. The 10 confirming targets (within ~1.5 km of our samples) serve as method validation — independent confirmation that the process engine locates known mineralization correctly.

THE DATASET
We utilised Atlas geoquímico da bacia do Rio Paranaíba, Serviço Geológico do Brasil (CPRM), published 2020. A regional geochemical survey of the Paranaíba basin, which contains the Catalão district; the alkaline complex is named in the report.
Analysis: 53 elements by ICP-OAS and ICP-MS, aqua regia digestion
Laboratory SGS-GEOSOL, Vespasiano, Minas Gerais in report.
Sampling stream sediments, one station per 150-200 km² catchment, soils, one station per 1:50,000 sheet, roughly a 25 x 25 km grid.
Airborne geophysical survey over the licence area — magnetometry and gamma-ray spectrometry (thorium, uranium and potassium channels). 93,000 readings with full coverage of the block.
Digital elevation model, 30 m resolution.
Multispectral satellite imagery, six bands, cloud-free scene.
Published weathering profiles for the Catalão I complex and for the operating Serra Verde mine — used to calibrate expectations on depth and grade.
Processed the full regional geophysical stack (aero-mag, gamma spectrometry eTh/K/Th-K, gravity, heat-flow — over a million data points, including pulling and parsing the 954 MB SGB survey 3082 for the block.

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 – www.patagonialithium.com.au: x.com @pataLithium, Instagram, facebook, LinkedIn and Youtube.

Visit Executive chairman blog on our website, In the news for more frequent updates, videos and information
https://www.patagonialithium.com.au/ceo-blog-1

https://www.youtube.com/watch?v=_INhV7WTyws&pp=ygURcGF0YWdvbmlhIGxpdGhpdW0%3D

INVESTOR BRIEFING

Shareholders should note that Executive Chairman, Phillip Thomas will be giving a **briefing update** on 19 August 2026 and login details are set out below:

Attendee registration details via Zoom:

https://us02web.zoom.us/webinar/register/WN_3i36OnsuRP-7_rRUxiBGfA

When: **Wednesday, 19 August 2026**

Time: **12:30pm AEST**

ABOUT PATAGONIA LITHIUM LTD

Patagonia Lithium has **two major lithium brine projects** – Formentera/Cilon in Salar de Jama, Jujuy province covering 19,500 has and Tomas III at Incahuasi Salar covering 580 Has in Salta Province of northern Argentina in the declared lithium triangle. In Brazil the Company has been granted five exploration concession packages **41,746 ha** of concessions where the company is exploring for **ionic REE clays, Niobium, Antimony and Lithium in pegmatites**. The Company has staked next door to the largest Niobium producer (CMOC) in Brazil in Goiás state with 10,024 tonnes per annum of Niobium production.

Since listing on 31 March 2023, surface sampling and MT geophysics have been completed, drill holes JAM-24-01, JAM-24-02, JAM-24-03, JAM-24-04, JAM 25-05, JAM 26-06, JAM 26-07 and currently JAM 26-08 is being drilled on Cilon. Progress to date has been exceptional as measured by lithium assays and pump tests. The MT Geophysics at Tomas III on Incahuasi salar is very prospective. In July 2023, a 10 drill hole drill program was approved for Formentera and a three drill hole program for Cilon. Samples as **high as 1,122 ppm Li** (2 June 2023 announcement) were recorded at Formentera and a Lithium value of **591 ppm in drill hole JAM-24-01** (Outstanding Assay Results from First Drilling in Argentina released on 3 May 2024). Very low resistivities were recorded to more than 1 km depth during the MT Geophysics survey at Formentera. On 14 July 2025 an upgraded Mineral Resource Estimate was released with **551,000 tonnes LCE.** A passive seismic survey was completed to determine basement and an upgraded MRE is being estimated.

Competent Person Statement

The information in this announcement that relates to exploration results is based on, and fairly represents information compiled by Phillip Thomas, BSc Geol, MBM, MAIG FAusIMM, Technical Adviser to Patagonia Lithium Ltd and is Executive Chairman, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Thomas has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thomas consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

The Company confirms it is not aware of any new information or data that materially affects the information cross referenced in this announcement and all material assumptions and technical parameters underpinning the MRE (lodged on 14 July 2025 as "Lithium Carbonate Mineral Resource increased by 319%") continue to apply and have not materially changed. The LCE MRE of 551,400t LCE @ 294mg/L is comprised of 14,800t LCE @ 393mg/L Indicated MRE and 536,600t LCE @ 292mg/L Inferred MRE. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcements.

JORC Code, 2012 Edition – Table 1 report Patagonia Lithium Ltd ASX:PL3Goais State exploration
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Random chips and samples taken from road cutting and extensive exposures of weathered faces were taken. Of the estimated 40 samples 13 were sent for assay using ICP-OES analysis with lithium borate. • The soil samples were taken with a shovel, then rifled into 1/8th of the total soil in the area and then a 500gm sample was bagged and labelled for analysis. • The samples were assayed using three different types of analysis to determine the presence of Rare Earth elements, lithium and with two quartz rock chip samples gold.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core*	• No drilling was undertaken.

Criteria	JORC Code explanation	Commentary
	diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No drilling was undertaken. • Minerals such as garnet were identified which are pathfinders for rare earth mineralisation. • In the pegmatite rocks some phenocrysts were possible spodumene but assay will be used to positively identify their mineralogy.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• GPS references were taken for the location of the samples and a description of each samples mineralogy. Clays were identified as either saprolites, kaolin, or other. • A large tabular kaolin outcrop was identified but not sampled. • No strike or length of mineralisation was recorded as the exploration was focussed on determining sample composition and concentration of elements.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and*	• Not applicable as no drilling or augur sampling was undertaken. • Samples of 5 kg were taken in soils and approximately 1kg rock chip samples and these were reduced to 500gm samples through rifling to 1/8th -1/10th of the sample size for soils and rock chips were broken into 500gm lots. • ICP-OES used 10gm of each sample.

Criteria	JORC Code explanation	Commentary
	whether sampled wet or dry. • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and*	• 13 samples have been sent for assay from this lot of samples collected. • No field analysis was undertaken. • MC-PL-011-01 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-011-02 (halo of change - contact) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-011-03 (hosted) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-013 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-014-01 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-014-02 (pegmatite gravel pit) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS • MC-PL-036 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS MC-PL-039 (gold in quartz veins) FAA505 - Determination of Gold by Fire Assay - AAS - 50 g Fusion MC-PL-046 (gold in quartz veins) FAA505 - Determination of Gold by Fire Assay - AAS - 50 g Fusion • MC-PL-047 (Fe-rich mica schist) ICP95A/IMS95A - Determination of 48

Criteria	JORC Code explanation	Commentary
	precision have been established.	elements by fusion with lithium metaborate - ICP OES/MS MC-PL-048 (Fe-rich mica schist) ICP95A/IMS95A - Determination of 48 elements by fusion with lithium metaborate - ICP OES/MS • OREAS standards were used with ICP-OES • Single analysis was done on each sample with no duplicates
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• GE21 staff are independent of Patagonia Lithium staff and they have been contracted to obtain samples and interpret the extensive geophysics. • Giselle Kempter provided the short wave and infra red analysis used as a comparator. • Sergey Svobod provided the Logos system processing using the dataset.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Accuracy of the data locations are between 2-4m. • The grid system used was WGS84 and ESPG 4326. • Topographic control was within 1m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Aggregate exploration results have been reported, with only locations and numbering of samples taken. • Sampling was carried out to define presence of elements rather than concentrations due to access constraints. • Sampling is NOT sufficient to carry out grade continuity estimates.
Orientation of data in relation to	• *Whether the orientation of sampling achieves*	• No auger or drill samples were taken.

Criteria	JORC Code explanation	Commentary
geological structure	*unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	
Sample security	• *The measures taken to ensure sample security.*	• Samples were secured after riffling, in calico bags tied with wire and tagged. The lab is recording the chain of custody to ensure the wire is still twisted into the tag and not been removed.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable as no audits have been undertaken.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Mining concessions granted include 830.151/2024 to 830.153/2024, 830.155/2024 to 830.157/2024, 830.167/2024, 830.169/2024, 830.171/2024, 830.172/2024, 830.176/2024, 830.192/2024, 830.193/2024, 830.195/2024, 830.196/2024 • 860.164/2024 and 860165/2024 in the state of Goais, Brazil – the concessions granted are 100% owned by Patagonia Lithium subsidiary PL3 Mineracao Brazil Ltda. The licence is for a 3 year period unless it is renewed for a further period. It has been referenced for lithium exploration
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• From the government ANM database it is not apparent that these concessions have been explored previously.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The REE first target zone, of greatest importance, is the metasomatic zone. The second, an anomaly of Thorium and Uranium located within a structure aligned to the 125-degree Azimuth, is characterised by a topographic low that may be associated with the accumulation of radioactive minerals (possibly Monazites?) and potentially, Rare Earth Elements. The third zone, the second anomaly situated northwest of the area, also enriched in Uranium and Thorium, is located at the summit of a topographic elevation. This anomaly may represent an igneous body with chemical characteristics similar to carbonatite, albeit smaller, not identified in the MVI magnetic geophysics data. • The Catalão I alkaline–carbonatite–phoscorite complex (ferro niobium mine adjacent) contains both fresh rock and residual (weathering-related) niobium mineralization. The fresh rock niobium deposit consists of two plug-shaped orebodies

Criteria	JORC Code explanation	Commentary
		named Mine II and East Area, respectively emplaced in carbonatite and phlogopitite. Together, these orebodies contain 29 Mt at 1.22 wt.% Nb2O5 (measured and indicated). 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). Dolomite carbonatite (DC) is intimately related with nelsonite. Natropyrochlore and calciopyrochlore are the most abundant niobium phases in the fresh rock deposit. Pyrochlore supergroup chemistry shows a compositional trend from Ca–Na dominant pyrochlores toward Ba-enriched kenopyrochlore in fresh rock and the dominance of Ba-rich kenopyrochlore in the residual deposit. Carbonates associated with Ba-, Sr-enriched pyrochlore show higher δ18OSMOW than expected for carbonates crystallizing from mantle-derived magmas. We interpret both the δ18OSMOW and pyrochlore chemistry variations from the original composition as evidence of interaction with low-temperature fluids which, albeit not responsible for the mineralization, 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 being determined and might be related to crystal accumulation and/or emplacement of a phosphate–iron-oxide magma.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of*	• The main geophysical data coming from georeferenced PDFs, highlighted by the correlation between samples is the F parameter, followed by the

Criteria	JORC Code explanation	Commentary
	the following information for all Material drill holes: ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	thorium-uranium ratio. There is a high correlation between Kd potassium factor and Thorium. • Numerous outcrops of saprolitic ionic clays and pegmatite phenocrysts were identified by the two geologists who undertook the sampling.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable – 1D inversion was used to better define the fenitization in the radiometric and magnetic surveys in the tonalites. • No assay data has been received to date of this report.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not Applicable as no drilling was undertaken.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Not Applicable as no drilling was undertaken.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not Applicable as no drilling was undertaken.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or*	• Apart from the geophysics reported previously there has been no drilling, or sampling work done on the projects. • The mining done on adjacent concessions has been to extract granite as industrial works.

Criteria	JORC Code explanation	Commentary
	contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• We intend to commence auger sampling and further rock chip sampling as per targets in figure 1. • Refer to figure 1.