

16 July 2024

## **REE clay system Identified in Metasediments in Goias state, Brazil**

- Goias concessions sampled for ionic clays predisposed to REE concentrations
- 11 targets identified for augur and drilling
- The rare earth element percentages for the above survey are shown in Figure 5 with 20% Lutetium and 24% Yttrium oxides
- Further target work to be done using short wave and infra-red analysis, followed by rock chips and air-core drilling

**Patagonia Lithium Ltd (ASX:PL3, Patagonia or Company)** is pleased to advise that it has completed initial ground truth mapping, channel and road cutting sampling in the Minas Gerais and Goias state from the extensive 3,700km field trip undertaken referencing geophysics completed on the company's granted concessions. Additional work has been completed using short wave and infrared analysis.

Phillip Thomas, Executive Chairman commented "We are delighted with the progress made and the discovery of large tracts of clays and saprolites with granites and altered metasediments on the surface in the Goias state area. The total light and heavy rare earth totals are very encouraging on the basis it was mostly sampled from road cuttings and outcrops.

The higher concentrations of REE are found at depth where there is alteration of sericite from the granites and gneiss from hydrothermal fluids which is what we are seeing evidence of. As a generalisation, REE concentrations are associated with ion adsorption clays in weathering mantle on differentiated granites (concentration in the 'B' horizon where augur is required to sample) and enrichment of LREE in fenites by metasomatism (which is evident at the Company's Goias concessions). These new geophysics techniques will assist us better target niobium and rare earths."

### **Capital structure**

58.6m - PL3 shares

5.5m - unquoted options

14.6m - PL3O quoted options

### **Patagonia Lithium Ltd**

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### **Board**

Phil Thomas - Exec Chair

Rick Anthon - NED

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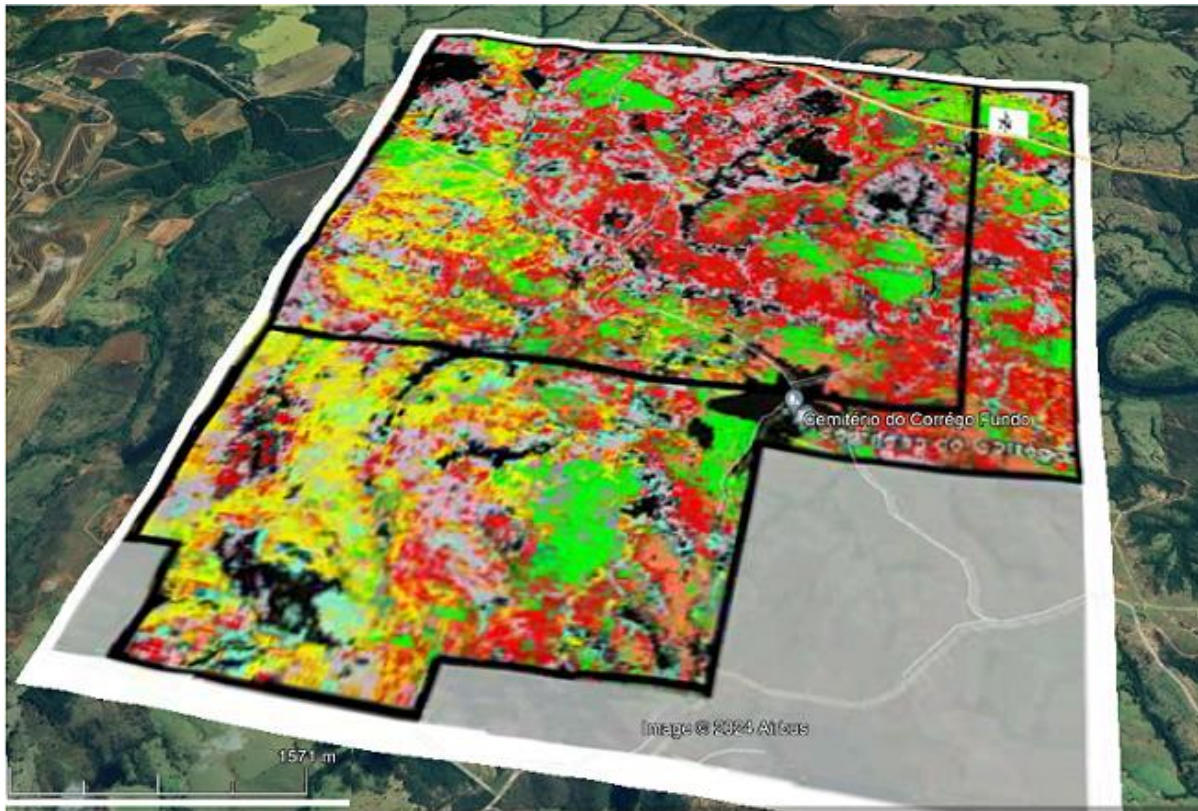


Figure 1. Potential mineralisation of 16 REE oxides VNIR (visible and near infrared + SWIR Short wave infrared).

The rare earth element percentages for the above survey are shown in Figure 5. REE Proportions estimated from hyperspectral and short wave analysis, with 20% lutetium and 24% Yttrium oxides.

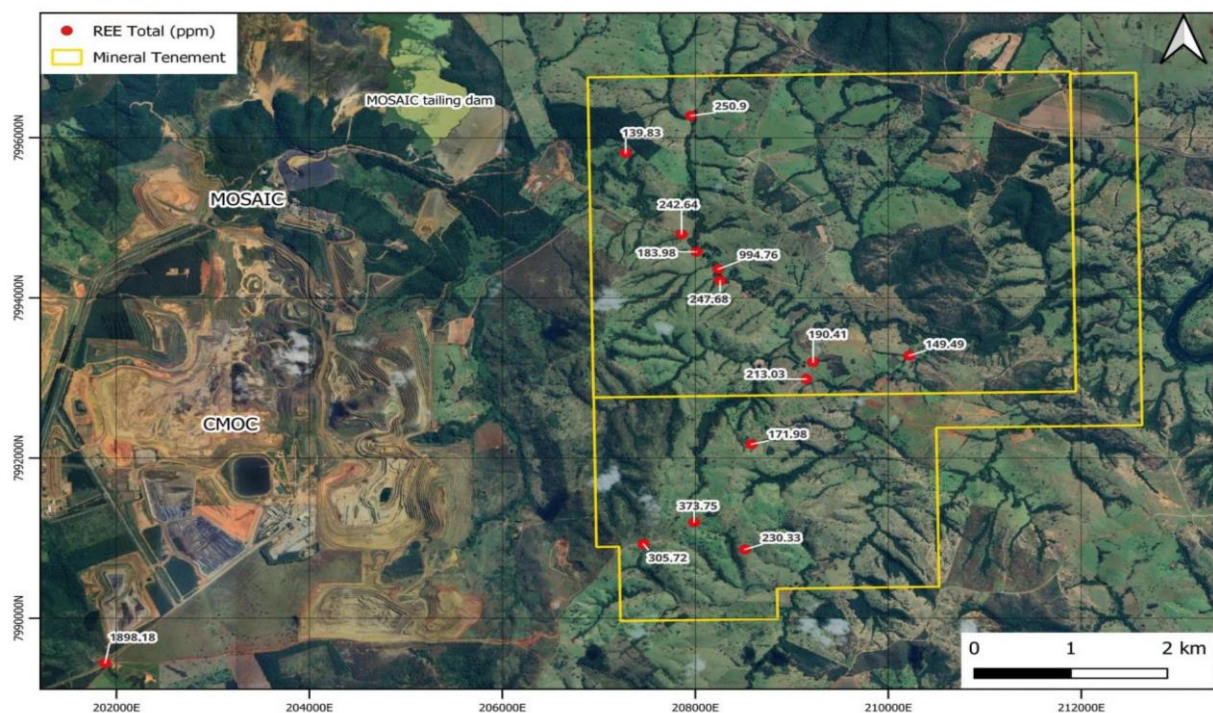


Figure2. Total REE results for the samples analysed.





Figure 3. Targets identified using infrared and hyperspectral mapping by Giselle Kempter – Minera Santa Maria.

Considering the model of mineralisation in REE by fenitisation, the areas 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, MC-PL-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.

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.

Understanding the distribution of REEs in carbonatites and associated fenitisation zones is essential for the exploration and development of REE resources. Detailed geological, mineralogical, and geochemical studies are required to characterise these distributions accurately and to assess the potential for economic REE extraction. The studies for the Goiás areas were based on the ratio between the Araxá carbonatite, silicate rocks and fenitisation. Catalão I carbonatite is correlated to the same geological event as the Araxá carbonatite.

Ion-adsorption deposits form when igneous rocks, usually granites, containing rare earth element (REE)-bearing minerals undergo weathering processes. The weathering breaks down REE minerals, releasing ionized REEs that are, then, absorbed by clay minerals, like halloysite and kaolinite.

### Follow up work includes:

- a field campaign to acquire samples at depth to provide a better understanding of the local geology, as well as the constraints on the formation of the relief.
- detailed geophysics will better define and constrain the target areas.
- a thorium anomaly that is not associated with the CMOC niobium tailings dam, the schist will be sampled at depth (e.g. trench, RC drilling) for the possibility of identifying the fenite.
- a region of anomalous concentrations of uranium, thorium and potassium which is close to the metasomatic zone, higher REE contents.
- permission from some of the cattle ranch owners will be required to do some of these works.

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

Figure 4. Assay table of samples taken rare earth elements, oxides heavy and light rare earth elements

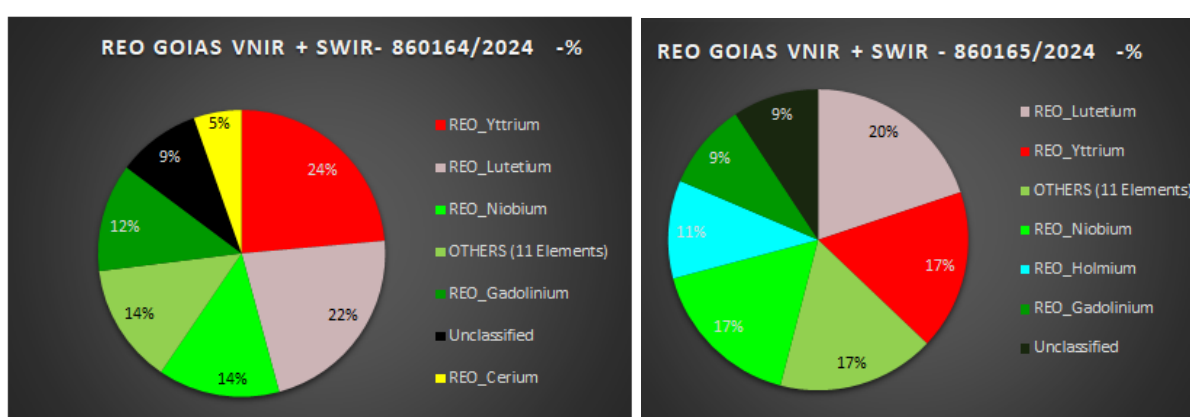


Figure 5. REE Proportions estimated from hyperspectral and short wave analysis.

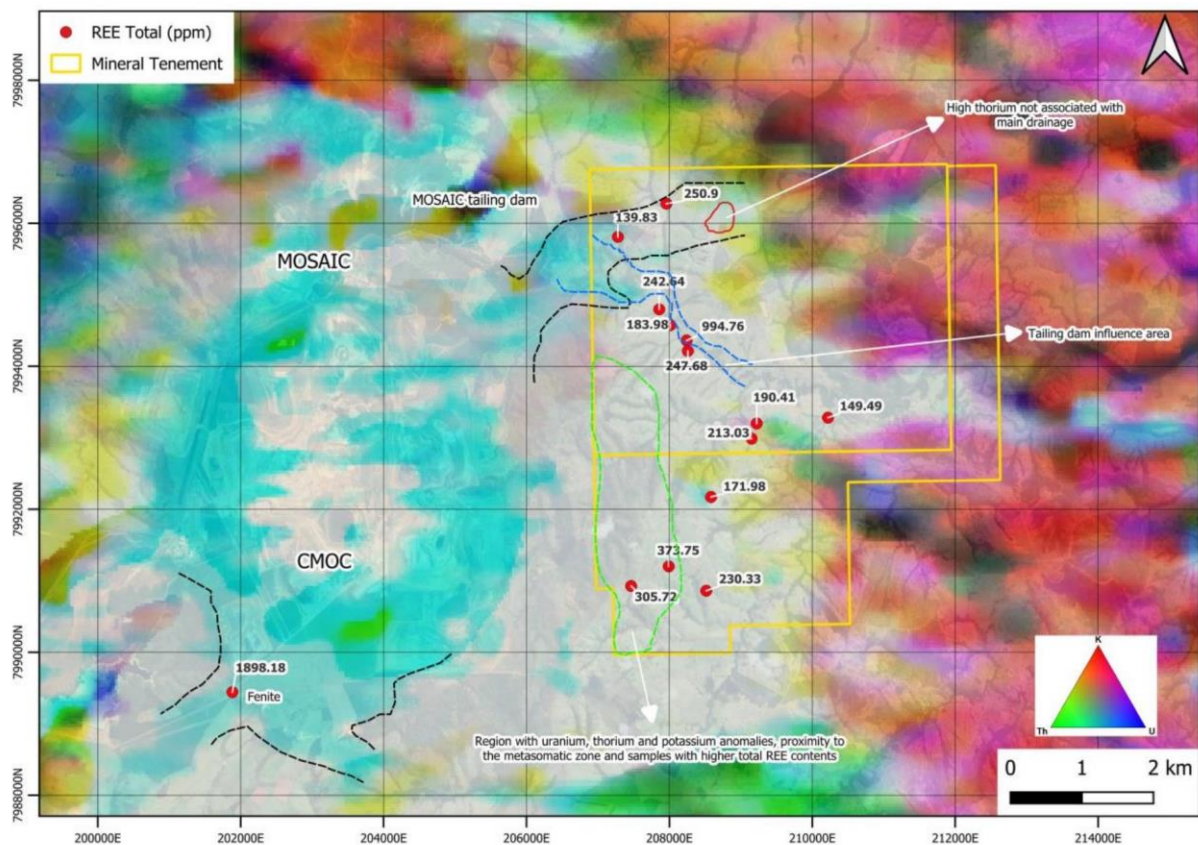


Figure 6. Geological interpretation of the geochemical results of the samples analysed and potential for fenite occurrence.

### Short Wave and Infra-red Rare Earth Analysis

We have commenced analysing preliminary survey data using clays, silicates and have been able to identify a range of rare earth oxides in these rock types.

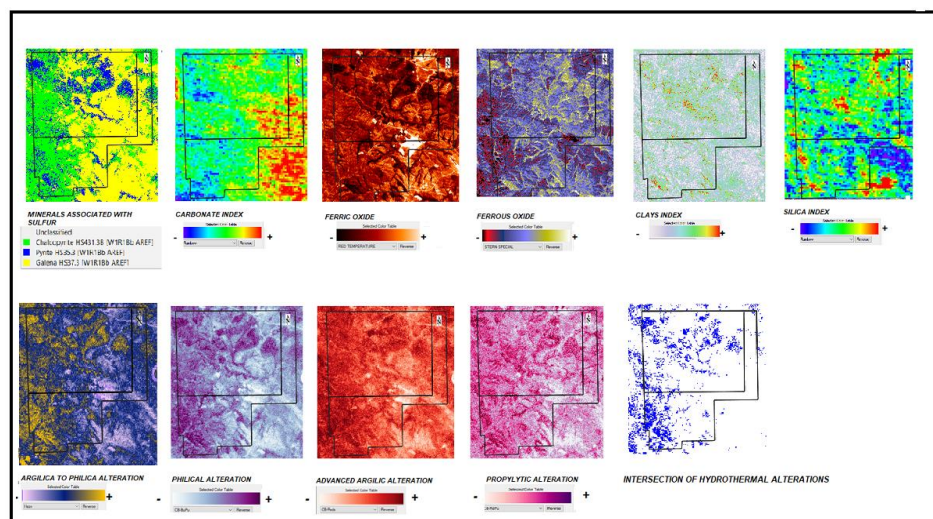


Figure 7. Spectral surveys show copper sulphide minerals in top left corner, then clays, iron, silicates, and then altered minerals on the bottom row showing potential location of ion adsorption clays.



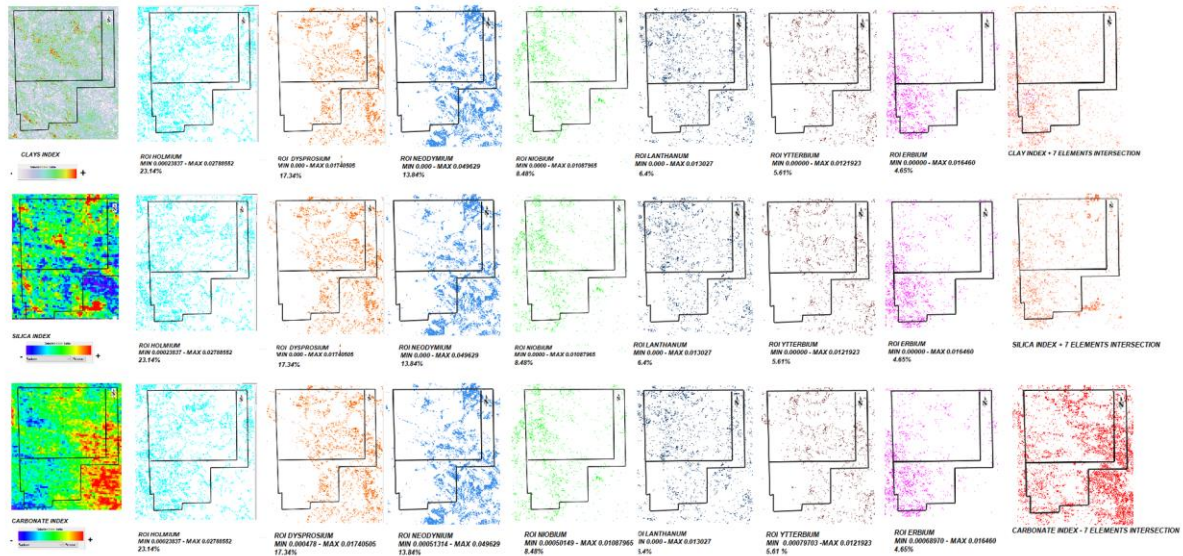


Figure 8. Coloured sections show intersection of indices clay, silica and carbonate with 7 rare earth oxide elements – with neodymium in blue showing a strong presence.

Assay results reflect the reconnaissance field stage, and therefore reflect the chemical analysis of hand samples.

### Niobium and Columbite Analysis

The concessions are located beside CMOC Niobium mine. The analysis below shows that the main presence of the coarse grains is in the south eastern corner of the concession. The green areas on the left hand side figure shows niobium with Rare earth occurrences.

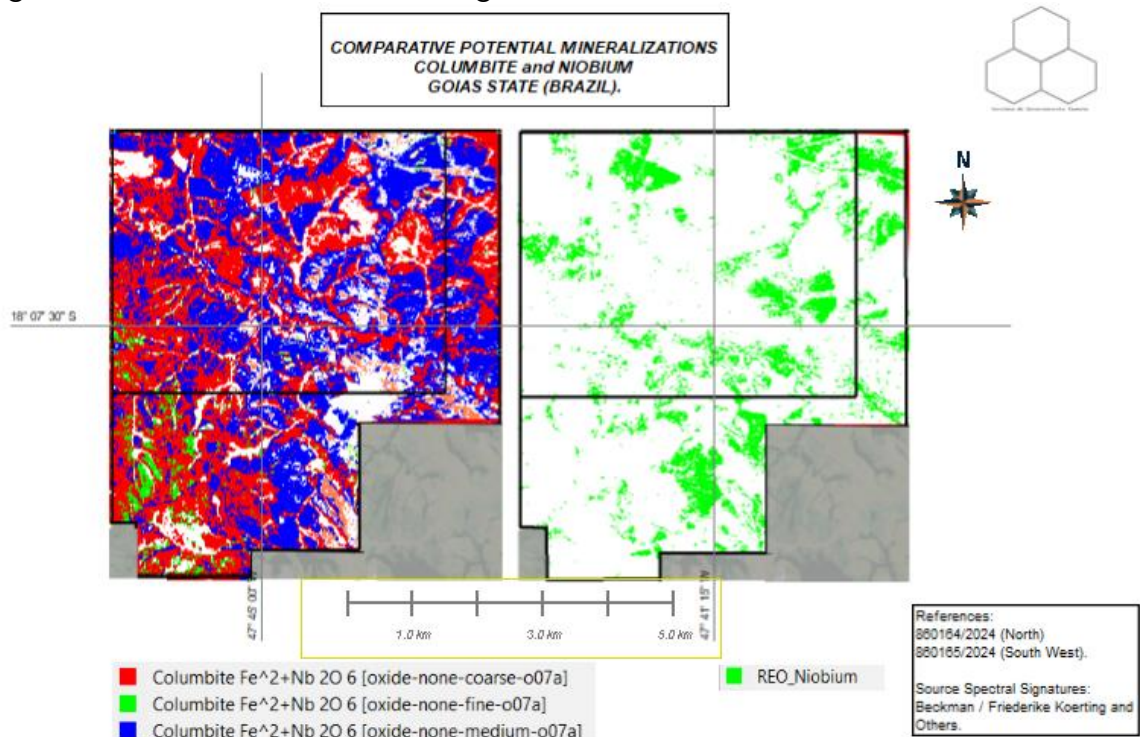


Figure 9. Imaging showing columbite ( $\text{Fe}^{2+}\text{Nb}_2\text{O}_6$ ) (Nb= Niobium) oxides – survey processing by Giselle Kempter's Team.

The representation of the isovalues in depth allows to associate which areas were most affected by contact metamorphism. Areas close to the carbonatite are coloured red, while more distant areas are coloured in a greenish colour.

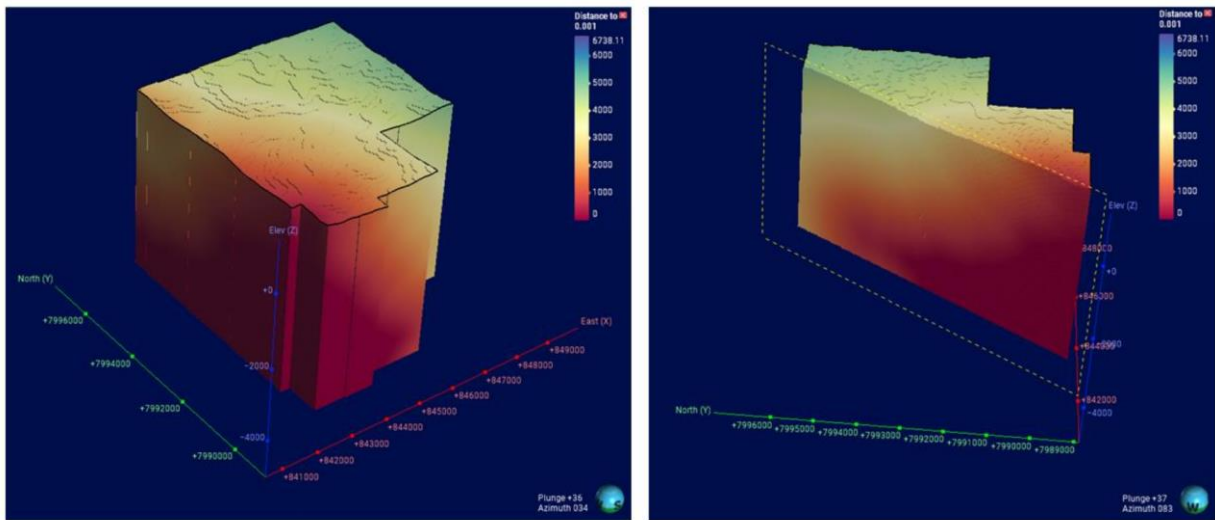


Figure 10. Isovalues at depth of carbonate intrusion with heat originating in south east corner at depth. This would have contributed to alteration of rocks on surface.



Figure 11. The fenitised Araxa shale in sample PL-066.



Authorised for release by the Board of the Company.

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### **Competent Person Statement**

*The information in this announcement that relates to exploration results is based on, and fairly represents information compiled by Phillip Thomas, MAIG FAusIMM, Technical Adviser of 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.*

### **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 Ha**s of concessions exploring for **ionic REE clays, Niobium, Gallium and lithium in pegmatites**. Four exploration concession packages covering 25 concessions have been applied for and 19 have been granted. The first phase of exploration was completed in June 2024.

Since listing on 31 March 2023, surface sampling and MT geophysics have been completed, drill hole JAM24-01 and Jam 24-02 completed. Progress to date has been exceptional as measured by lithium assays. The MT Geophysics at Tomas III on Incahuasi salar is very prospective. In July 2023, a 10 hole drill program was approved for Formentera and a three well program for Cilon is pending. Samples as **high as 1,100ppm lithium** (2 June 2023 announcement) were recorded at Formentera and a Lithium value of **591ppm in well JAM 24-01** (3 May 2024 and 15 May 2024 announcements) and **582ppm in well JAM 24-02** (18 June 2024 announcement). Very low resistivities were recorded to more than a kilometre depth during the MT Geophysics survey at Formentera. The Company confirms it is not aware of any new information or data that materially affects the information in this announcement.



# JORC Code, 2012 Edition – Table 1 report Patagonia Lithium Ltd ASX:PL3 Goais State exploration

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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)</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• The soil samples were taken with a shovel, then rifled into 1/8<sup>th</sup> of the total soil in the area and then a 500gm sample was bagged and labelled for analysis.</li> <li>• 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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>may warrant disclosure of detailed information.</i>	
Drilling techniques	<ul style="list-style-type: none"> <li>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core 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).</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was undertaken.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was undertaken.</li> <li>• Minerals such as garnet were identified which are pathfinders for rare earth mineralisation.</li> <li>• In the pegmatite rocks some phenocrysts were possible spodumene but assay will be used to positively identify their mineralogy.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• A large tabular kaolin outcrop was identified but not sampled.</li> <li>• No strike or length of mineralisation was recorded as the exploration was focussed on determining sample composition and concentration of elements.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as no drilling or augur sampling was undertaken.</li> <li>• Samples of 5 kg were taken in soils and approximately 1kg rock chip samples and these were reduced to 500gm samples through riffing to 1/8<sup>th</sup> - 1/10<sup>th</sup> of the sample size for soils and rock chips were broken into 500gm lots.</li> <li>• ICP-OES used 10gm of each sample.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>13 samples have been sent for assay from this lot of samples collected.</li> <li>No field analysis was undertaken.</li> <li>MC-PL-011-01 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-011-02 (halo of change - contact) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-011-03 (hosted) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-013 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-014-01 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-014-02 (pegmatite gravel pit) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-036 (pegmatite) Determination by Fusion with Sodium Peroxide - ICP OES / ICP MS</li> <li>MC-PL-039 (gold in quartz veins) FAA505 - Determination of Gold by Fire Assay - AAS - 50 g Fusion</li> <li>MC-PL-046 (gold in quartz veins) FAA505 - Determination of Gold by Fire Assay - AAS - 50 g Fusion</li> <li>MC-PL-047 (Fe-rich mica schist) ICP95A/IMS95A - Determination of 48 elements by fusion with lithium metaborate - ICP OES/MS</li> <li>MC-PL-048 (Fe-rich mica schist) ICP95A/IMS95A - Determination of 48 elements by fusion with lithium metaborate - ICP OES/MS</li> <li>OREAS standards were used with ICP-OES</li> <li>Single analysis was done on each sample with no duplicates</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>GE21 staff are independent of Patagonia Lithium staff and they have been contracted to obtain samples and interpret the extensive geophysics.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Giselle Kempter provided the short wave and infra red analysis.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Accuracy of the data locations are between 2-4m.</li> <li>The grid system used was WGS84 and ESPG 4326.</li> <li>Topographic control was within 1m.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Aggregate exploration results have been reported, with only locations and numbering of samples taken.</li> <li>Sampling was carried out to define presence of elements rather than concentrations due to access constraints.</li> <li>Sampling is NOT sufficient to carry out grade continuity estimates.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No auger or drill samples were taken.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were secured after riffing, 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.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no audits have been undertaken.</li> </ul>



## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>830.164/2024 and 830.165/2024 in the state of Goias, 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</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>No exploration has been undertaken on these concessions. From the ANm database it is not apparent that these concessions have been explored previously.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The <b>REE first target zone</b>, 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.</li> <li>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 named Mine II and East Area, respectively emplaced</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>in carbonatite and phlogopitite. Together, these orebodies contain 29 Mt at 1.22 wt.% Nb<sub>2</sub>O<sub>5</sub> (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 <math>\delta^{18}\text{OSMOW}</math> than expected for carbonates crystallizing from mantle-derived magmas. We interpret both the <math>\delta^{18}\text{OSMOW}</math> 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.</p> <ul style="list-style-type: none"> <li> <b>Lithium</b>  The Araçuaí Orogen, as one of the Neoproterozoic orogenic systems of Brazil (Pedrosa Soares et al., 2001), occupies the area between the São Francisco Craton and the Brazilian eastern continental margin. Among the lithostratigraphic units that take part in it are the Salinas, São Domingos, Chapada Acauã, and Capelinha formations. The Brazilian pegmatitic provinces were defined by Paiva (1946), based on the </li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>geographic distribution of these rock bodies across the national territory. The Eastern Pegmatitic Province encompasses the states of Bahia, Minas Gerais, Espírito Santo, and Rio de Janeiro, over an area of approximately 150,000 km<sup>2</sup>. However, more than 90% of this area is in the eastern part of Minas Gerais state, specifically within the geotectonic unit called the Araçuaí Orogen (Figure 3-1). Granitic rocks, ranging in age from the late Neoproterozoic to the Cambrian-Ordovician, including pegmatites, cover around 1/3 of this region (Pedrosa-Soares et al., 2009). The pegmatitic bodies in this large region are mainly related to the granitic magmatism that developed during the Brasiliano Event, between 630 Ma and 490 Ma, along the Araçuaí Orogen (Dardenne &amp; Schobbenhaus, 2003; Pedrosa-Soares et al., 2009). They can be of two types: anatectic (directly formed from the partial melting of regional rocks) or residual (silicate melts resulting from the fractional crystallization of the parent granites) (Correia Neves et al., 1984; Pedrosa-Soares et al., 2009). Considering field relationships, geochemical and petrological attributes, as well as U-Pb geochronological data on zircons, the granitic rocks of the Araçuaí orogen were grouped into five different supersuites, designated as G1, G2, G3, G4, and G5 (Pedrosa Soares et al., 2001, 2008; in Pedrosa-Soares et al., 2009). Regarding the stages of development of the Araçuaí Orogen, supersuite G1 is pre-collisional (630-585Ma), G2 is syn-collisional (585-560Ma), G3 is late to post collisional (545-520Ma), and G4 and G5 are post-collisional (535-490Ma) (Pedrosa-Soares et al., 2009, 2011). Among these five characteristic granitic suites, the main mineralized pegmatites of the Eastern Province are mostly derived from the syn-collisional granites of suite G2 and post-collisional granites of suites G4 and G5 (Heilbron et</p>

Criteria	JORC Code explanation	Commentary
		al., 2004). The pegmatites of suite G2 are rich in gemstones and industrial minerals in the Conselheiro Pena region; those of suite G4 exhibit abundance in gemstones, mainly tourmaline and morganite, lithium minerals, rare metal minerals, and minerals destined for ceramic and glass industries; and those of suite G5 are rich in aquamarine and topaz (Heilbron et al., 2004).
Drill hole Information	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Numerous outcrops of saprolitic ionic clays and pegmatite phenocrysts were identified by the two geologists who undertook the sampling.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable – 1D inversion was used to better define the fenitization in the radiometric and magnetic surveys in the tonalites.</li> <li>• No assay data has been received to date of this report.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported,</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable as no drilling was undertaken.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable as no drilling was undertaken.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable as no drilling was undertaken.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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 contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Apart from the geophysics reported previously there has been no drilling, or sampling work done on the projects.</li> <li>• The mining done on adjacent concessions has been to extract granite as industrial works.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• We intend to commence auger sampling and further rock chip sampling at the targets set out in figure 1.</li> </ul>