9 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.

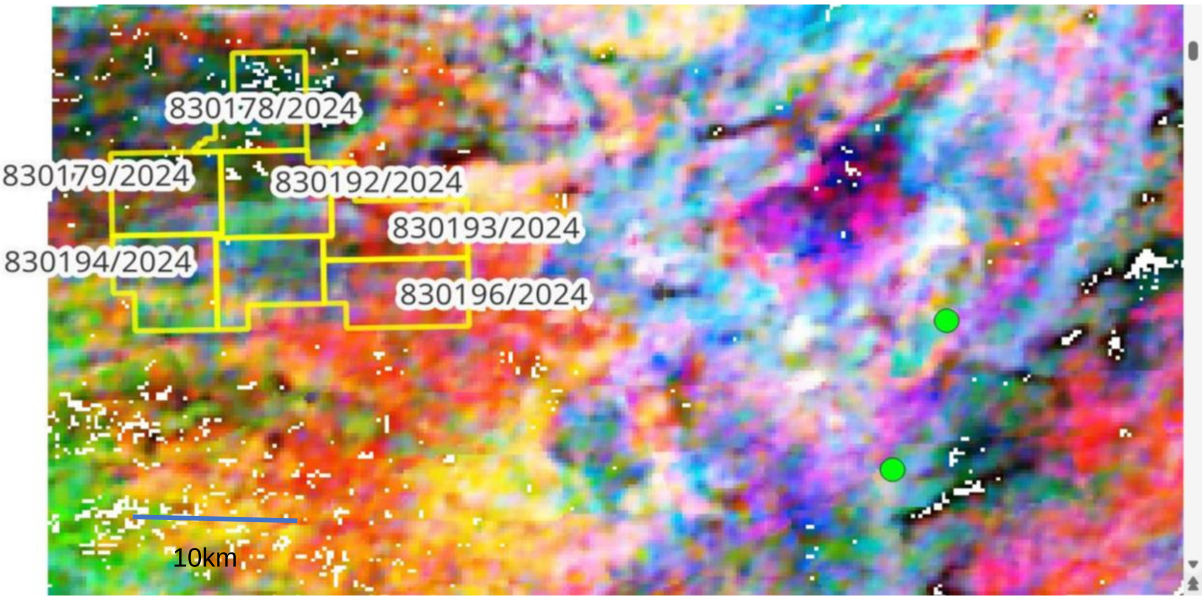

Figure 1. 830178 and other concession applications are shown. Green dots are where REE have been found. The radiographic map shows uranium in green, thorium in blue, fenitization in white. We will target the green and blue areas for REE ionic clays.

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.

Competent Person Statement

The information in this announcement is based on, and fairly represents information compiled by Phillip Thomas, MAIG FAusIMM, Technical Adviser of Patagonia Lithium Limited, 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.

JORC Code, 2012 Edition – Table 1 report Patagonia Lithium Ltd ASX:PL3

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.*	• There was no sampling as the concession 830.178/2024 was granted on 3 April 2024. Publicly available radiometric data was acquired from the bureau of mineral resources in the state of Mato Grosso Brazil. • The geophysics that measure Uranium, Thorium and Potassium were derived from satellite data accessing the Data from CPPLL, Codemge/Codemig, Metago, and other projects publicly available. • Acquisition and processing of LANDSAT, Sentinel 1, ASTER scenes, pre-processing, spectral analysis and evaluation/prioritization of results and the evaluation and processing of geophysical data was undertaken. • Artificial Intelligence data referencing was used to scrape more than 3,700 technical papers and references on field sampling and drilling, and geological lithologies and distances from source.
Drilling techniques	• *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).*	• No drilling was undertaken.
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*	• No sampling was undertaken. The geophysics data analysed that included radiometric, magnetic and gravity data is publicly available.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>loss/gain of fine/coarse material.</td><td></td></tr>
<tr><td>Logging</td><td>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.</td><td>No logging was undertaken but the Artificial Intelligence model did reference sampling ratios of elements and distances from deposits of occurrences of rare earths. See sample of table below for REE.
<table>
<tr><th></th><th></th><th></th><th colspan="2">Carbonatite</th><th colspan="2">Silicate rocks</th><th colspan="2">Fenitisation</th><th colspan="2">Other</th><th></th></tr>
<tr><th></th><th>Carbonatite complex</th><th>Total (km²)</th><th>km²</th><th>%</th><th>km²</th><th>%</th><th>km²</th><th>%</th><th>km²</th><th>%</th><th>Reference</th></tr>
<tr><td>1</td><td>Amba Dongar</td><td>6.7</td><td>3.2</td><td>47.7</td><td>2.6</td><td>39.4</td><td>0.7</td><td>10.3</td><td>0.2</td><td>2.5</td><td>William-Jones and Palmer (20</td></tr>
<tr><td>2</td><td>Otjisazu</td><td>11.9</td><td>0.9</td><td>7.9</td><td>10.7</td><td>90.0</td><td>0.3</td><td>2.1</td><td></td><td></td><td>Gunthorpe and Buerger (198</td></tr>
<tr><td>3</td><td>Araxá</td><td>21.2</td><td>7.0</td><td>33.0</td><td>5.4</td><td>25.4</td><td>8.8</td><td>42.6</td><td></td><td></td><td>Traversa et al. (2001); Issa Filho et al. (1984)</td></tr>
<tr><td>4</td><td>Panda Hill</td><td>9.8</td><td>1.9</td><td>19.3</td><td></td><td></td><td>7.9</td><td>80.4</td><td>0.03</td><td>0.3</td><td>Basu and Mayila (1986)</td></tr>
<tr><td>5</td><td>Naantali</td><td>3.5</td><td>0.2</td><td>4.3</td><td></td><td></td><td>3.4</td><td>95.6</td><td></td><td></td><td>Woodard and Hölttä (2005)</td></tr>
<tr><td>6</td><td>Fen</td><td>6.5</td><td>3.3</td><td>50.7</td><td>0.6</td><td>9.7</td><td>2.6</td><td>39.6</td><td></td><td></td><td>Kresten and Morogan (1986)</td></tr>
<tr><td>7</td><td>Callander Bay</td><td>7.8</td><td>0.002</td><td>0.03</td><td>0.3</td><td>4.0</td><td>7.5</td><td>96.0</td><td></td><td></td><td>Currie and Ferguson (1971)</td></tr>
<tr><td>8</td><td>Kangankkunde</td><td>2.9</td><td>0.2</td><td>6.2</td><td></td><td></td><td>2.7</td><td>93.8</td><td></td><td></td><td>Bowden (1985)</td></tr>
<tr><td>9</td><td>Sokli</td><td>62.9</td><td>21.6</td><td>34.4</td><td>13.5</td><td>21.5</td><td>27.8</td><td>44.2</td><td></td><td></td><td>Sarapää et al. (2013)</td></tr>
<tr><td>10</td><td>Okorusu</td><td>8.2</td><td>0.2</td><td>2.7</td><td>2.7</td><td>32.7</td><td>4.9</td><td>59.5</td><td>0.4</td><td>5.1</td><td>Pirajno (1994)</td></tr>
<tr><td>11</td><td>Lueshe</td><td>4.4</td><td>2.8</td><td>64.6</td><td>0.8</td><td>17.9</td><td>0.8</td><td>17.5</td><td></td><td></td><td>Maravic and Morteani (1980)</td></tr>
<tr><td>12</td><td>Sarfartôq</td><td>78.5</td><td>1.0</td><td>1.3</td><td></td><td></td><td>13.2</td><td>16.8</td><td>64.3</td><td>81.9</td><td>Secher and Larsen (1980)</td></tr>
<tr><td>13</td><td>Pollen</td><td>1.3</td><td>0.2</td><td>17.4</td><td>0.8</td><td>56.0</td><td>0.4</td><td>26.6</td><td></td><td></td><td>Robins and Tysseland (1983)</td></tr>
<tr><td>14</td><td>Virulundo Mountain</td><td>9.2</td><td>5.2</td><td>56.4</td><td></td><td></td><td>4.0</td><td>43.6</td><td></td><td></td><td>Torró et al. (2012)</td></tr>
<tr><td>15</td><td>Alnö</td><td>6.1</td><td>0.4</td><td>6.3</td><td>3.7</td><td>61.5</td><td>2.0</td><td>32.2</td><td></td><td></td><td>Morogan and Lindblom (199</td></tr>
<tr><td>16</td><td>Copperhead</td><td>0.01</td><td>0.00003</td><td>0.5</td><td>0.01</td><td>97.9</td><td></td><td></td><td>0.0001</td><td>1.7</td><td>Rugless and Pirajno (1996)</td></tr>
<tr><td>17</td><td>Ipanema</td><td>9.3</td><td>0.0002</td><td>0.002</td><td>0.6</td><td>6.0</td><td>8.8</td><td>94.0</td><td></td><td></td><td>Guarino et al. (2012)</td></tr>
<tr><td>18</td><td>Salitre I</td><td>43.3</td><td>2.4</td><td>5.5</td><td>31.1</td><td>71.7</td><td>8.3</td><td>19.1</td><td>1.6</td><td>3.7</td><td>Barbosa et al. (2012)</td></tr>
<tr><td>19</td><td>Loe Shilman (Western)</td><td>0.2</td><td>0.08</td><td>56.1</td><td></td><td></td><td>0.1</td><td>43.9</td><td></td><td></td><td>Mian and Le Bas (1986)</td></tr>
<tr><td>20</td><td>Oka</td><td>8.4</td><td>5.0</td><td>59.4</td><td>2.4</td><td>28.8</td><td>1.0</td><td>11.8</td><td></td><td></td><td>Lentz et al. (2006)</td></tr>
<tr><td>21</td><td>Afrikanda</td><td>5.6</td><td>0.3</td><td>4.9</td><td>3.7</td><td>66.1</td><td>1.6</td><td>29.0</td><td></td><td></td><td>Wu et al. (2013)</td></tr>
<tr><td>22</td><td>Newania</td><td>3.2</td><td>2.3</td><td>71.3</td><td></td><td></td><td>0.8</td><td>25.4</td><td>0.1</td><td>3.3</td><td>Schleicher et al. (1997)</td></tr>
<tr><td>23</td><td>Barra do Itapirapuã</td><td>4.4</td><td>3.1</td><td>69.1</td><td></td><td></td><td>1.4</td><td>30.9</td><td></td><td></td><td>Andrade et al. (1999)</td></tr>
<tr><td>24</td><td>Aley</td><td>7.0</td><td>4.8</td><td>68.3</td><td>0.006</td><td>0.08</td><td>2.2</td><td>31.6</td><td></td><td></td><td>McLeish et al. (2010)</td></tr>
<tr><td>25</td><td>Siilinjärvi</td><td>14.8</td><td>1.2</td><td>8.11</td><td>13.59</td><td>91.9</td><td></td><td></td><td></td><td></td><td>Puustinen (1970)</td></tr>
<tr><td>26</td><td>Qaqarssuk</td><td>11.8</td><td>3.5</td><td>29.8</td><td></td><td></td><td>8.3</td><td>70.2</td><td></td><td></td><td>Kunzendorf and Secher (198</td></tr>
<tr><td></td><td>Average</td><td>13.4</td><td>2.7</td><td>27.9</td><td>3.6</td><td>27.7</td><td>4.6</td><td>40.6</td><td>2.6</td><td>3.8</td><td></td></tr>
</table>
Note: Surface areas calculated from available geological maps in referenced documents.</td></tr>
<tr><td>Sub-sampling techniques and sample preparation</td><td>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 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.</td><td>Not applicable as no sampling was undertaken.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	• *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 precision have been established.*	• Raw data from the magnetic surveys was reprocessed into 1D inversions.
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.*	• Not applicable as no sampling was undertaken.
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 is between 50-150m with data obtained at 400-600m intervals. Gravity data is more unreliable and thus was given a lower ranking.
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.*	• 400-600m spacing depending on the satellite data used.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Orientation was perpendicular to earth surface.

Criteria	JORC Code explanation	Commentary
geological structure	• *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.*	• Not applicable as no sampling was undertaken.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable as no sampling was 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 concession 830.178/2024 granted in the state of Mato Grosso, Brazil – 100% owned by Patagonia Lithium subsidiary PL3 Mineracao Brazil Ltda. The licence is for a 3 year period expiring on 3 April 2027 unless it is renewed for a further period. It has been referenced for lithium exploration. It covers 1734.22 Has.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No exploration has been undertaken in this area. Both exploration licences adjacent were acquired in 2023 exploring for lithium and no work has been reported.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Carbonatites - 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.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar*	• 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.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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.
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	• *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*	• See above for detailed geophysical results - Carbonatites and alkaline-silicate rocks are the most important sources of rare earth elements (REE) and niobium (Nb). Cooling and crystallizing

Criteria	JORC Code explanation	Commentary
exploration data	*method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	carbonatitic and alkaline melts expel multiple pulses of alkali-rich aqueous fluids which metasomatize the surrounding country rocks, forming fenites during a process called fenitization. We are 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. • RGB 3,2,10 – ratio 4,12 – PCA band 8,3 were used to identify lithium minerals. **Sentinel-2** imagery (low resolution – pixel 32m) yielded poor results so we will use Hi Res spectral.
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 soil sampling and rock chip sampling as soon other the other exploration concessions are granted that are adjacent to 830178/2024.