

MULTISPECTRAL ANALYSIS IDENTIFIES NIOBIUM TARGETS AT EQUADOR

HIGHLIGHTS

- **Multispectral analysis targeting niobium mineralisation at Equador completed with 30 targets identified.**
- **Fieldwork has established that the Sentinel 2 and ultraviolet spectral data sets broadly correlate to areas of identified tourmaline pegmatite.**
- **Summit has scheduled a drone magnetic survey to commence this month to complement these findings.**
- **Previous surface sampling results at Equador included¹ :**

EQUADOR ASSAYS (Niobium + REE)

- **303,400ppm or 30.34% (Nb₂O₅) + 15,130ppm PREO or 1.513% PREO. (SID 100/24)**

Summit Minerals Limited (ASX: SUM) (“**Summit**” or the “**Company**”) is pleased to provide an update on exploration activities related to its recently acquired Equador Nb-REE Project in northeast Brazil's Borborema Pegmatitic Province (BPP), Paraiba State. The province is one of the world's most important sources of tantalum, rare earth elements (REEs), beryllium and produces significant quantities of gemstones.

Summit engaged image processing specialist Dr Neil Pendock of Dirt Exploration to evaluate the prospectivity of the Equador Project for Niobium mineralisation via Sentinel-2 visible/near-infrared [VNIR], shortwave infrared [SWIR] and ALOS AVNIR-2 satellite imagery. REE metals have many diagnostic spectral features in the VNIR, while some important minerals (such as lepidolite, diamonds, fluorite, niobium, erbium, ytterbium, and neodymium) fluoresce, allowing for their detection¹.

¹Refer to Summit Minerals (SUM.ASX) ASX Announcement 23 April 2024

² The addition of Nb as a dopant in the detector can induce luminescence and scintillation, leading to detectable fluorescence effects in the observed materials. Thus, rocks rich in Nb will be bright blue within the UV spectrum. The more Nb, the greater the fluorescence.

Neil has identified many possible niobium targets that require priority field confirmation and follow-up (Figure 1).

Summit’s Managing Director, Gower He, commented,

“The Equador Project is already showing its potential, with the identification of several pegmatite bodies and many historical workings where tantalite and niobium have been found. Dr Neil Pendock of Dirt Exploration’s multispectral review has quickly identified further potential areas of pegmatite and niobium mineralisation and will be invaluable in guiding our early exploration work.”

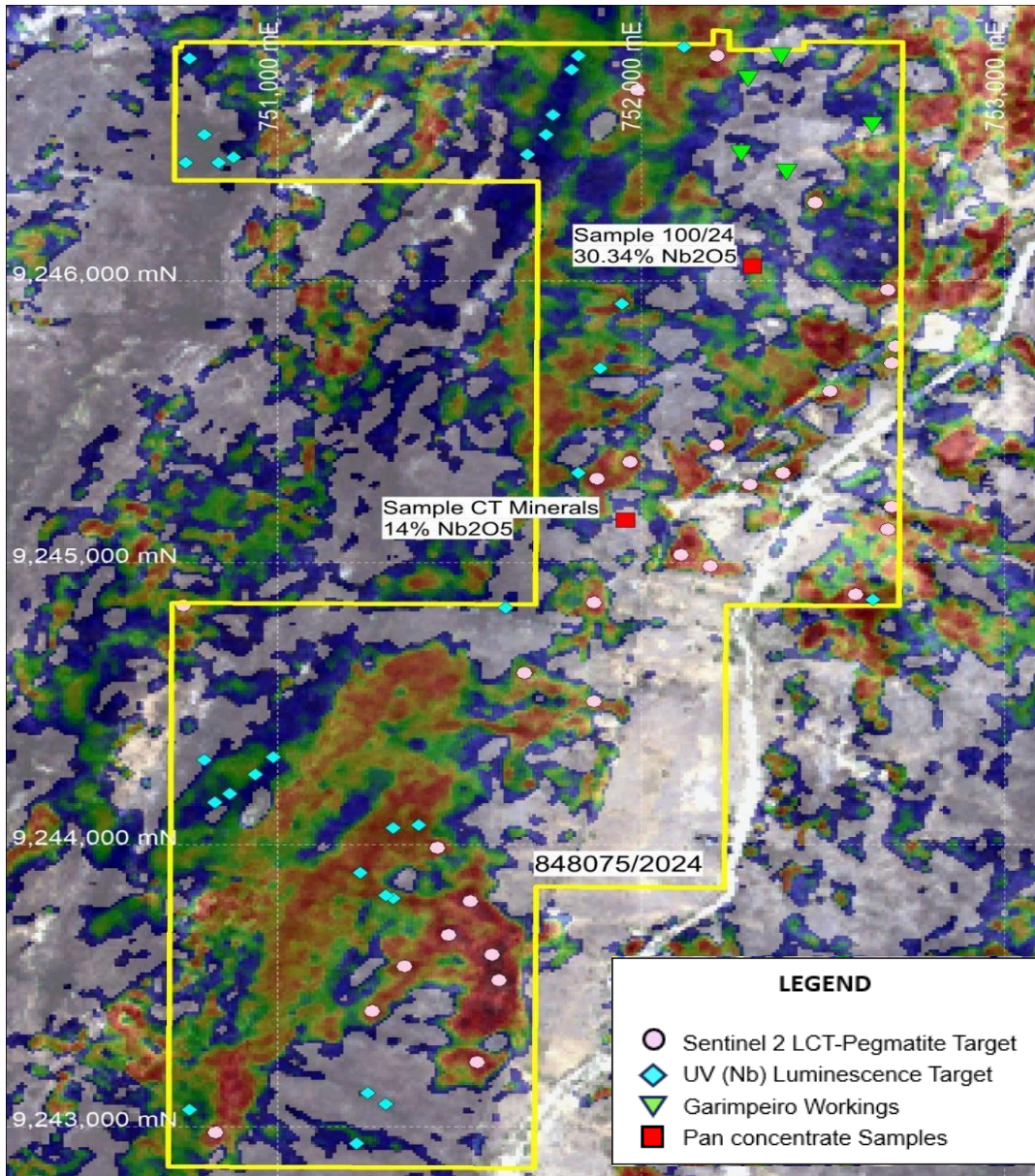


Figure 1:-Interpreted Niobium Targets, Equador, Paraíba State, Brazil.

Background information

Consultant Dr Neil Pendock was engaged to complete a multispectral analysis across the Company’s recently acquired Brazilian assets (Figure 2). Processing for the Equador asset is complete, with Dr Pendock interpreting 30 florescent targets prospective for niobium mineralisation. Field investigations of the multispectral target layers has commenced.

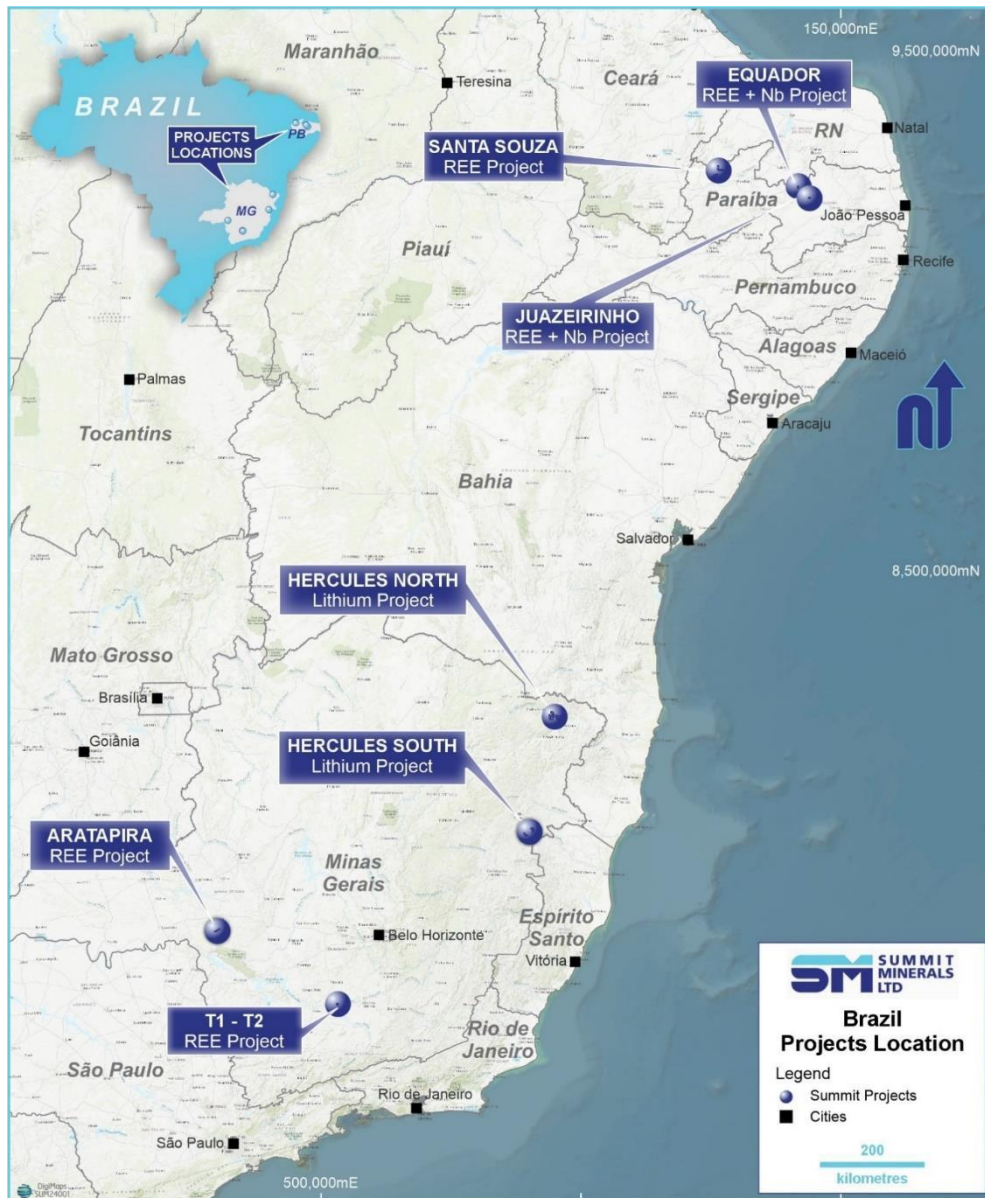


Figure 2 – Summit Project locations, Minas Gerais and Paraiba States, Brazil

The fieldwork has established that the Sentinel 2 and ultraviolet spectral data sets broadly correlate to areas of identified tourmaline pegmatite (for example, Figures 3 and 4). The identified pegmatite has been sampled for lithium, REE, niobium, and tantalum mineralisation. The mineralogy of the

pegmatites are similar to the columbite-tantalite-lithium pegmatite historically exploited by garimpeiros in the project's north (Figure 5).

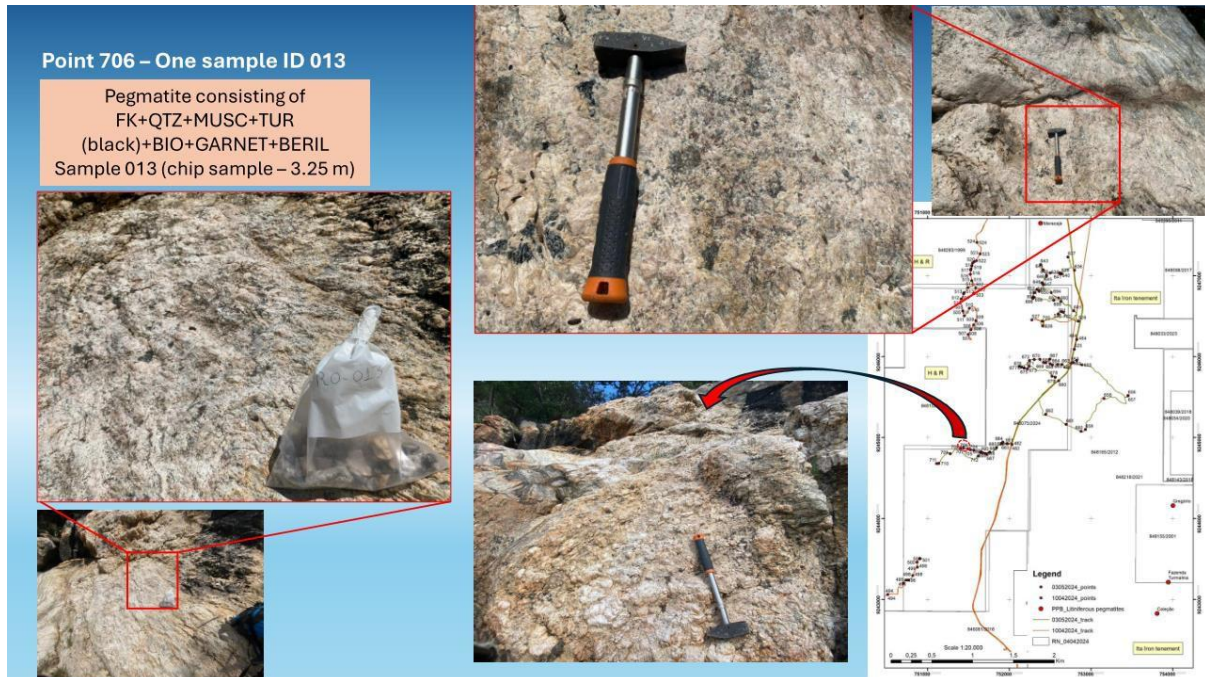


Figure 3:- Tourmaline ± beryl-bearing pegmatite occurrence with sample and location, reconnaissance field work, Equador Project

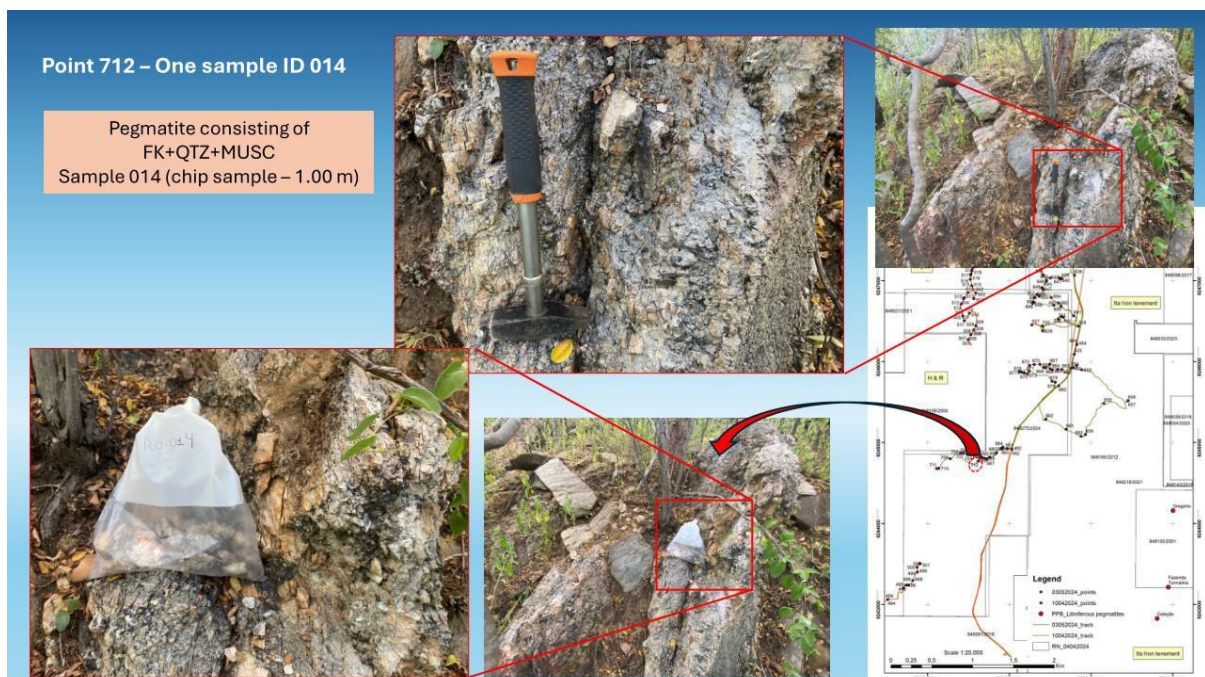


Figure 4:- Pegmatite occurrence with sample and location, reconnaissance field work, Equador Project

Dr Pendock continues to examine similar multispectral data for the Company’s Minas Gerais portfolio. Meanwhile, Summit’s early exploration plans for Equador include a comprehensive project review and drone aeromagnetic survey in the lead-up to selecting exploration contractors for a drilling campaign planned to commence later in the year.

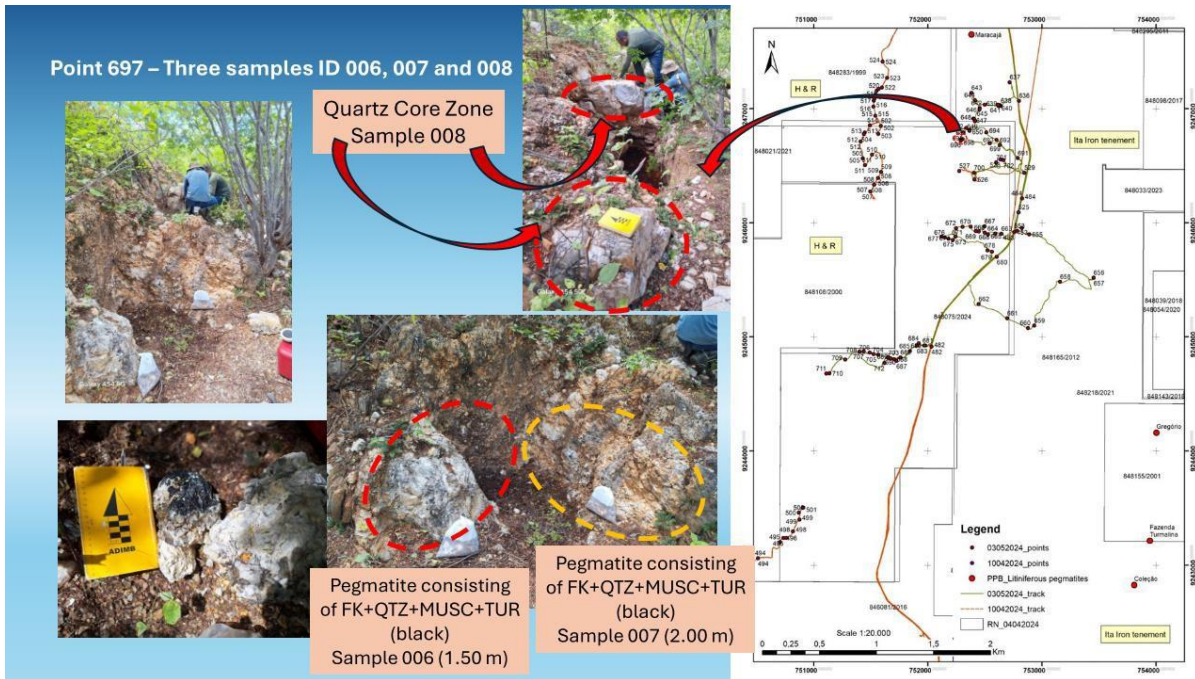


Figure 5:- Garimpeiros workings developed on tourmaline-bearing LCT-pegmatite and reportedly exploited for tantalite and columbite, north Equador.

Cautionary Statement

Mineral exploration using the concentration of heavy minerals from stream sediments is one of the oldest methods of prospecting for ore. Many ore minerals are dispersed in the surficial environment as chemically and mechanically resistant detrital grains with greater densities than most common rock-forming minerals. Inspection and analysis of these grains in heavy-mineral concentrates provide valuable information on mineralisation and bedrock geology, complementary to that derived from fine-fraction stream-sediment samples. Traditionally, this technique has been applied to precious metals, gems, and tin and tungsten minerals, which can be identified visually in the field. More recently, multi-element chemical analysis of heavy-mineral concentrates has become widely used. The technique is widely used in first pass (area selection) exploration where heavy ore minerals are anticipated. Such is the case at Equador, as shown in the results presented in Figure 1. The reader is referred to the JORC table accompanying the acquisition statement released on 23 April 2024 for details on sampling. This is available at <https://summitminerals.com.au/investor-centre/>

The vendor has used this approach, panning a heavy mineral concentrate from an active stream bed. The concentration is threefold via stream action (saltation and concentration), pan concentration, and low-intensity mag separation, providing an optimised sample for analysis. A substantial enrichment in

the reporting values can be expected in the appropriate geological environment, such as downstream of (topographically below) historical workings or a yet-to-be-identified mineralisation.

The Company will undertake fieldwork to test and confirm the results and the projects for potential niobium, tantalum, rare earth, and lithium mineralisation. Laboratory analysis of routine exploration samples, including pan-concentrates, is required to determine whether the projects have the potential to host mineralisation.

Nothing observed causes Summit and the Competent Person to question the accuracy or reliability of the provided pan-concentrate results. Summit has not independently validated the former owner's results and is not to be regarded as reporting, adopting, or endorsing those estimates. The Company is encouraged by the geology and the results, but no quantitative or qualitative mineralisation assessment has been completed. It is possible that following further evaluation and/or exploration work the confidence in the prior reported Exploration Results may be reduced.

- ENDS -

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About Summit Minerals Limited

Summit Minerals Limited is an Australian-focused ASX-listed battery mineral exploration Company with a portfolio of projects in demand-driven commodities. It is focused on systematically exploring and developing its projects to delineate multiple JORC-compliant resources.

Summit's projects include the niobium, REE and lithium projects in Brazil, Castor Lithium Project in the prolific James Bay District, Quebec, Canada; the Phillips River Lithium Project in Ravensthorpe WA. Through focus, diligence and execution, the board of Summit Minerals is determined to unlock previously unrealised value in our projects.

Competent Person Statement

The information related to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on data compiled by Jonathan King, a Competent Person and Member of The Australian Institute of Geoscientists. Jonathan King is a director of Geoimpact Pty Ltd. Jonathan King has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Jonathan King consents to the inclusion in presenting the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This announcement contains 'forward-looking information based on the Company's expectations, estimates and projections as of the date the statements were made. This forward-looking information includes, among other things, statements concerning the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by using forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions and that the Company's results or performance may differ materially. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to materially differ from those expressed or implied by such forward-looking information.

Appendix 1: JORC Code, 2012 Edition- Section 1 – Equador Niobium and REE Project
Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Comment
Sampling techniques	<p>☐ 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.</p>	<p>Summit Minerals has just commenced reconnaissance-level sampling of the identified spectral targets. The work includes field mapping around and extending the distribution of the known LCT-Pegmatites, previously exploited by artisanal miners (Garimperios) for columbite and tantalite mineralisation.</p> <p>Dirt Exploration (Dr Neil Pendock) interpreted pegmatitic rocks from Sentinel 2 imagery and mineral fluorescence (interpreted as being related to niobium-bearing minerals) from the ALOS AVNIR-2 data products.</p> <p>Eight spectral bands of Sentinel-2 VNIR imagery have 10 m spatial resolution, and two bands of SWIR have 20 m resolution. Three scenes of Sentinel-2 data were collected on 26 November 2023. The AVNIR scene was from April 7, 2011.</p> <p>The release refers to current rock assay sampling that conforms to standard industry practice. These samples will be submitted to an accredited laboratory utilising an analytical method suitable for the target commodities (lithium, niobium, tantalum and REE)</p> <p>Summit will complete the reconnaissance work to verify the interpretation presented in this release.</p>
	<p>☐ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p>	<p>The chip sampling strategy will be detailed in later announcements. It suffices to say that it complies with standard industry practice.</p>
	<p>☐ 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 (e.g., '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.</p>	<p>The field crews move to the point of interest (spectral target or extension to known pegmatite body), explore for suitable outcrops, and identify and rock the rock type and mineralogy. They chip multiple locations around a midpoint, ensuring sample representativity, and bag the sample, collecting approximately 3 kilograms of material for assay The sample is then photographed with the outcrop. The outcrop location and sample number are recorded.</p>
Drilling techniques	<p>☐ Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).</p>	<p>No drilling performed</p>
Drill sample recovery	<p>☐ Method of recording and assessing core and chip sample recoveries and results assessed.</p>	<p>No drilling performed</p>

Criteria	JORC Code explanation	Comment
	<input type="checkbox"/> Measures taken to maximise sample recovery and ensure representative nature of the samples.	No drilling performed
	<input type="checkbox"/> 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 performed
Logging	<input type="checkbox"/> 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.	No drilling performed
	<input type="checkbox"/> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The sample is described and photographed with the outcrop from which it was taken (see examples within the report. The outcrop's location and sample number are recorded.
	<input type="checkbox"/> The total length and percentage of the relevant intersections logged.	No drilling performed
Sub-sampling techniques and sample preparation	<input type="checkbox"/> If core, whether cut or sawn and whether quarter, half or all cores taken.	No drilling performed
	<input type="checkbox"/> If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling performed
	<input type="checkbox"/> For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Figure 1 assay data is for previously reported pan concentrate samples (see 23 April 2024 release and accompanying JORC table)
	<input type="checkbox"/> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No assay data is being reported
	<input type="checkbox"/> 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.	The field crew, including a geologist, chip multiple locations around a midpoint, ensuring sample representativity, and bag the sample, collecting approximately 3 kilograms of material for assay
	<input type="checkbox"/> Whether sample sizes are appropriate to the grain size of the material being sampled.	Approximately 3 kilograms of material is collected from each sampling location.
Quality of assay data and laboratory tests	<input type="checkbox"/> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The assay data included in Figure 1 was detailed in the acquisition statement and JORC table released on 23 April 2024.
	<input type="checkbox"/> 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.	Summit is collecting geological data supporting the spectral work and a future drone-based aeromagnetic survey.

Criteria	JORC Code explanation	Comment
	<input type="checkbox"/> Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	<p>The assay data included in Figure 1 was detailed in the acquisition statement and JORC table released on 23 April 2024.</p> <p>No drilling performed</p>
Verification of sampling and assaying	<input type="checkbox"/> The verification of significant intersections by either independent or alternative company personnel.	No verification was undertaken, as no drilling was performed
	<input type="checkbox"/> The use of twinned holes.	No drilling undertaken
	<input type="checkbox"/> Discuss any adjustment to assay data.	No adjustments were made to the assay data being reported
Location of data points	<input type="checkbox"/> 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.	GPS recordings per sample location and point of interest (Garimperios workings, road transits, etc.)
	<input type="checkbox"/> Specification of the grid system used.	The grid system used at Equador Niobium and REE Project is UTM WGS 84 (Zone 24S).
	<input type="checkbox"/> Quality and adequacy of topographic control.	GPS topographic control used \pm 5 m
Data spacing and distribution	<input type="checkbox"/> Data spacing for reporting of Exploration Results.	Reconnaissance spaced sampling
	<input type="checkbox"/> 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.	Discovery, not resource stage work.
	<input type="checkbox"/> Whether sample compositing has been applied.	No sample compositing has been applied.
Orientation of data in relation to geological structure	<input type="checkbox"/> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Area selection and discovery stage work. Geometries are not critical at this point. Sampling is, however, generally across the strike/trend of the target pegmatite.
	<input type="checkbox"/> 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.	No drilling performed
Sample security	<input type="checkbox"/> The measures taken to ensure sample security.	A geologist collects samples, packages them together, and transports them to the sample dispatch or laboratory once they are chosen.
Audits or reviews	<input type="checkbox"/> The results of any audits or reviews of sampling techniques and data.	No audits were conducted

Section 2 Reporting of Exploration Results – Equador Niobium and REE Project

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

Criteria	JORC Code explanation	Comment
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.	<p>The Exploration tenement, 848075/2024, was recently acquired by Summit as a parcel of tenements focused in Paraiba and Minas Gerais States, Brazil (see the acquisition announcement).</p> <p>The tenements are granted and in good standing with the relevant government authorities, and there are no known impediments to operating in the project area.</p> <p>Title for the Equador tenement is being transferred to Summit, as outlined in the acquisition announcement.</p>
	-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.	The tenements are being transferred from Sandro Arruda Silva Ltda to Summit Minerals (or a wholly owned local subsidiary). No impediments are known or expected by the Company to prevent the transfer occurring.
Exploration done by other parties	-Acknowledgment and appraisal of exploration by other parties.	<p>Limited historical mining has been completed within the tenement, with no exploration targeting lithium mineralisation. The focus has always been on recovering columbite, tantalite, tourmaline, and beryl from the outcropping pegmatites.</p> <p>No systematic modern exploration has been attempted across the area.</p>
Geology	-Deposit type, geological setting, and style of mineralisation.	<p>The Equador niobium – REE Project lies in the Borborema Pegmatitic Province (BPP) of Northeast Brazil. This pegmatitic province represents one of the world's most important sources of tantalum, REE and beryllium, as well as producing significant quantities of gemstones, including aquamarine, morganite, and the high-quality turquoise blue "Paraiba Elbaite".</p> <p>The Boqueirao granitic pegmatite is broadly widespread over the BPP and is classified as belonging to the lithium-cesium-tantalum (LCT) family. It is enriched in Li, Rb, Cs, Be, Sn, Ta, Nb, B, P, and F. Like the pegmatites of the Lithium Vally, the Boqueirão granitic pegmatite is related to granites of the late- to post-orogenic phase, labelled as G4 granites. It has intruded into meta-conglomerates of the Equador Formation and older granite and gneissic rocks near the Equador Project. The unit was identified within the project area during due diligence.</p> <p>The Project has the potential for lithium-bearing pegmatite, orogenic gold, and PGEs.</p>
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:	No drilling performed

Criteria	JORC Code explanation	Comment
	<ul style="list-style-type: none"> easting and northing of the drill hole collar 	No drilling performed
	<ul style="list-style-type: none"> elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	No drilling performed
	<ul style="list-style-type: none"> dip and azimuth of the hole 	No drilling performed
	<ul style="list-style-type: none"> down hole length and interception depth 	No drilling performed
	<ul style="list-style-type: none"> hole length. 	No drilling performed
	<p>-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.</p>	Not applicable as no drilling performed
Data aggregation methods	<p>-In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	The assay data included in Figure 1 was detailed in the acquisition statement and JORC table released on 23 April 2024.
	<p>-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.</p>	The assay data included in Figure 1 was detailed in the acquisition statement and JORC table released on 23 April 2024.
	<p>-The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	The assay data included in Figure 1 was detailed in the acquisition statement and JORC table released on 23 April 2024.
Relationship between mineralisation widths and intercept lengths	<p>- These relationships are particularly important in the reporting of Exploration Results.</p>	No drilling is being reported. This is area selection and reconnaissance level exploration.
	<p>- If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	No drilling performed
	<p>-If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</p>	No drilling performed
Diagrams	<p>-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.</p>	Appropriate plans are included within this release.

Criteria	JORC Code explanation	Comment
Balanced reporting	<p>·Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</p>	<p>The reporting level is balanced and appropriate for early-stage exploration. The results obtained justify further work on the project.</p> <p>The Garimperios responsible for the historical workings acted as guides or formed part of the company's field crews and assisted with the exploration of the tenement. Several commented directly on the target metals (columbite and tantalite), and their successes.</p>
Other substantive exploration data	<p>·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.</p>	<p>To the Company's knowledge, no material exploration data or information has been omitted from this Release</p> <p>The Company continues to complete a thorough geological review of all available data as part of the Company's due diligence</p>
Further work	<p>·The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</p>	<p>Summit re-affirms its commitment to exploration across its project portfolio in Australia and Canada.</p> <p>Summit geologists are presently testing and reviewing the points of interest (interpreted targets, mapping extensions to the identified LCT-pegmatites and preparing for a drone-based aeromagnetic survey later in the month.</p> <p>Drilling will subsequently be completed on any key targets identified from the magnetics, mapping and sampling.</p>
	<p>·Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<p>Suitable diagrams are provided. All information in the announcement will be updated as it is finalised by Summit before being released to the market.</p>

The logo for Summit Minerals Ltd features a stylized 'SM' monogram on the left, where the 'S' and 'M' are interconnected in a bold, blue font. To the right of the monogram, the words 'SUMMIT MINERALS LTD' are stacked vertically in a clean, sans-serif, blue font.

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