

5 March 2025

## **NIOBIUM AND REE DOWNSTREAM PROCESSING STUDY PROGRESSING AT ARAXÁ PROJECT IN MINAS GERAIS, BRAZIL**

### ***St George accelerates development studies following completion of Project acquisition***

- **Niobium and REE testwork launched:** Metallurgical testwork is now underway at the Araxá Project, with the initial scope focused on optimising niobium and rare earth recoveries via flotation processing. The study is conducted under the technical co-venture between St George and two of Brazil's leading scientific agencies – EMBRAPPII and SENAI.
- **Comprehensive metallurgical program:** Three large representative samples of mineralisation (each >60 kg) – with a range of mineralisation from different lithological units across the project area – were selected for bench-scale testing, ensuring a reliable basis for process optimisation across the Project.
- **Delivering a pathway to sustainable commercial production:** The downstream processing study will make recommendations for the potential commercial production of niobium and REE products, a critical step in finalising the plant design and project construction for a potential mining operation at Araxá.

St George Mining Limited (ASX: SGQ) (“St George” or “Company”) is pleased to provide an update on the downstream processing study for its 100%-owned Araxá Project in Minas Gerais, Brazil.

The Company completed the acquisition of the Araxá Project on 27 February 2025 and has initiated a comprehensive program of works to advance development studies. The first scope of works to commence is metallurgical testwork on the niobium-REE mineralisation at Araxá with a substantial drilling campaign also scheduled to begin this month.

**John Prineas, St George Mining’s Executive Chairman, commented:**

“We are excited to now have boots on the ground at Araxá following completion of the Project acquisition last week. We have a number of important work programmes scheduled to commence in the coming weeks including our maiden drill campaign, geophysical surveys, geotechnical studies and downstream processing studies – as well as the release of our maiden JORC mineral resource estimate.

“We are pleased to confirm the commencement of the first phase of metallurgical testwork in collaboration with two leading scientific agencies in Brazil – EMBRAPPII and SENAI – to develop a flowsheet for the processing and production of commercial niobium and rare earths products from the Araxá Project. In the first phase of the testwork, we will assess the potential use of new technologies in traditional flotation circuits to maximise recoveries, reduce waste and lower costs.

“Our highly credentialled in-country mining team – with many years of niobium mining and production at Araxá – allows us to fast track these development studies. Working together with the leading scientists at SENAI and the well-equipped lab at CIT-SENAI in Belo Horizonte, Minas Gerais State will also assist to expedite these studies and deliver outcomes that will guide the Project’s path to potential commercial production.”

### **Metallurgical Testwork**

Bench-scale metallurgical testwork has commenced utilising samples selected from historical drilling at the Araxá Project. The objective of this program is to assess the amenability of the Project mineralisation to traditional flotation processing and the potential to enhance that process using new technologies.

These studies aim to define flotation parameters and recovery rates, which will guide future strategies for potential mine development and the commercial production of niobium and rare earths products as well as by-products such as magnetite, phosphate and barite.

The testwork is being conducted in collaboration with SENAI and EMBRAPPII, two pre-eminent scientific agencies in Brazil under the framework of the Technical Collaboration Agreement with St George. For details of this arrangement, see our ASX Release dated 9 January 2025 ‘Niobium and REE Processing Co-venture for Araxá’.

St George’s in-country team includes leading experts in niobium processing and production:

- **Mr Ricardo Nardi** – former Head of Mineral Processing at CBMM **with** more than 30 years’ experience in niobium mineral processing, including all mineral by-products (barite, magnetite, phosphate and rare earths), as well as high purity niobium oxide production.
- **Mr Carlos Araujo** – industrial project specialist who managed the design, construction and commissioning of CBMM’s technologically advanced niobium processing plant.
- **Mr Adriano Rios** – former Production Manager at CBMM, where he was responsible for planning, managing and monitoring mineral processing and metallurgy units; and former Director of Operations for COMIPA (the joint venture operating company between CBMM and the State of Minas Gerais).
- **Mr Thiago Amaral** – former CBMM Product Regulation Coordinator responsible for quality system controls in processing and production, and ex-Head of Sustainability at CBMM responsible for licensing, environmental management and ESG programs.

### **Sample Selection Criteria**

Three discrete 1 metre intervals, each exceeding 60 kg in weight, were selected from drill holes AAX-TR-0041, AAX-TR-0042, and AAX-TR-0045 to undergo comprehensive metallurgical testwork. These representative samples were obtained through a program of large diameter helical auger drilling that was executed by previous Project owners in 2012.

The auger drilling was undertaken at the collars of pre-existing diamond drill holes that had mineralisation confirmed by laboratory assay (“the Parent Hole”). This methodology was adopted to ensure the acquisition of a sufficient sample mass for the planned metallurgical program while simultaneously leveraging the valuable geological and grade intersections data previously delineated through diamond drilling and half-core sampling.

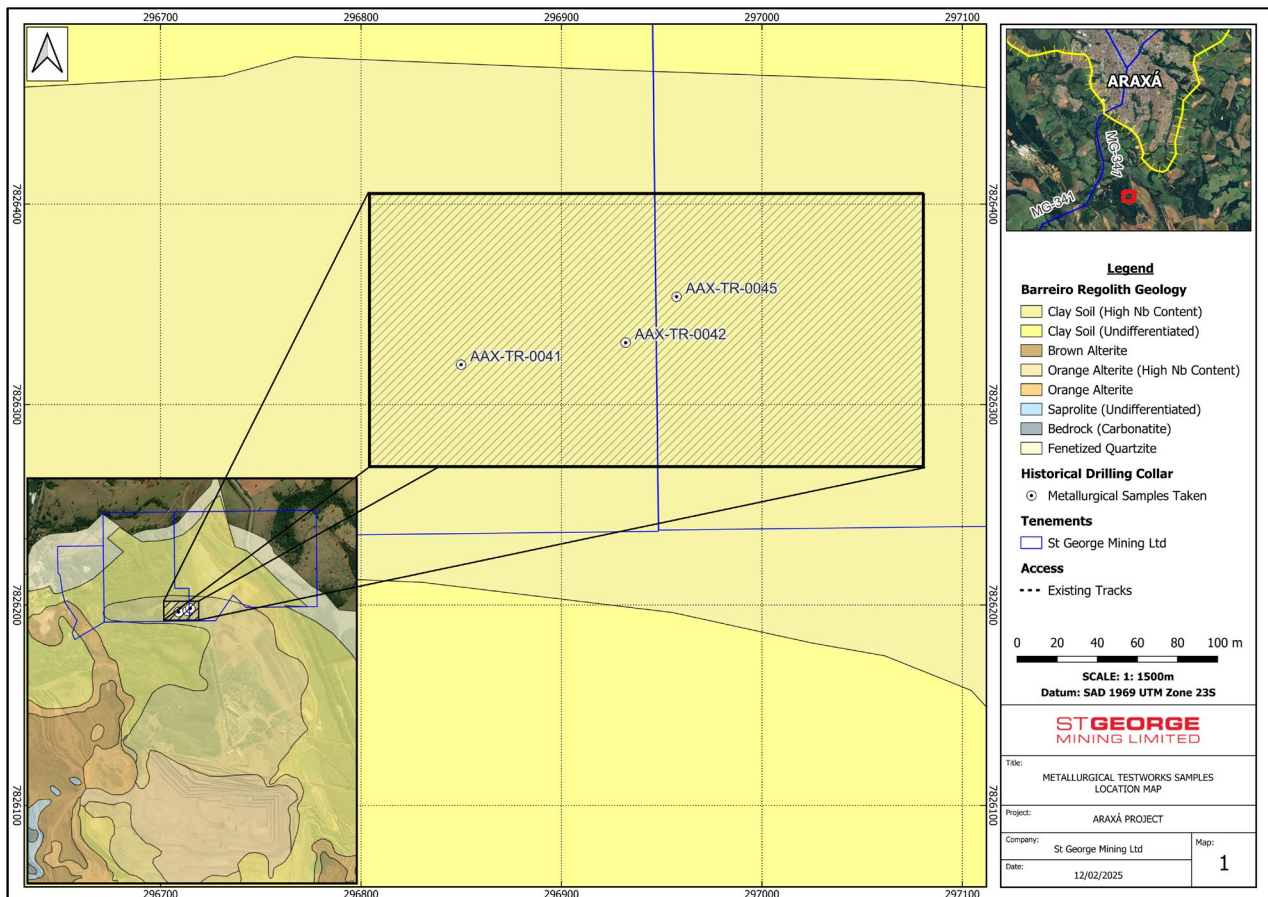
The sample drill holes will be assayed as part of the testwork program. Laboratory assays are required to determine the presence and grade of any contained mineralisation in these drill holes. The Parent Hole is a guide as to the potential mineralisation in the samples but is not to be considered a proxy or substitute for laboratory analysis.

**Table 1: Location of drill holes selected for metallurgical testwork (Datum: SAD69 UTM Zone 23S).**

Hole ID (Auger)	Parent Hole ID (DD)	Easting	Northing	Elevation	Azimuth	Dip	Depth
AAXT0041	AAX-DD-008	296849.89	7826319.91	1069.27	0	-90	5
AAXT0042	AAX-DD-009	296931.96	7826330.9	1074.7	0	-90	3
AAXT0045	AAX-DD-012	296957.38	7826353.8	1075.56	0	-90	8.6

The selection of the metallurgical samples was strategically designed to evaluate a range of conditions, considering both the geological characteristics of the material and variations in grade and spatial distribution. This approach ensures that the samples are, to a certain extent, representative of the mineralisation across the Project and capture its key features and distribution patterns.

By including different lithological units, mineralisation style and grade variations, the program provides a comprehensive understanding of the mineralisation’s characteristics. Additionally, this methodology enables a thorough assessment of how different materials behave during the beneficiation process, supporting efforts to optimise recovery and processing efficiency.



**Figure 1: Location Map – spatial distribution of drill holes selected for metallurgical testwork.**

The sample intervals selected represent distinct weathering profiles including saprolite, clay-like units, and lateritic units. These intervals highlight variations in texture and alteration intensity, providing valuable insights for metallurgical assessment and processing strategies. The key characteristics of each sample are summarised below:

- **SGAXMET001 (AAXTR0042, Parent Hole AAXDD009, Interval 2–3m):** Saprolite varying from moderate yellowish-brown to moderate brown with manganiferous intervals. Highly weathered to clay near the top, transitioning to a grittier texture with sparse minor residual fragments of highly weathered saprock/bedrock, interpreted as carbonatite.
- **SGAXMET002 (AAXTR0041, Parent Hole AAXDD008, Interval 4–5m):** Clay-like unit transitions from moderate reddish-brown at the surface to dark yellowish-orange at the base. It comprises sand aggregates within a clay matrix, with minor magnetic material and traces of manganese.
- **SGAXMET003 (AAXTR0045, Parent Hole AAXDD012, Interval 7–8m):** Laterite unit varying from moderate reddish-brown to dusky red. Contains fragments of highly ferruginous saprock, interspersed with short intervals of saprolite residuum. The saprolite is fully weathered to clay, with no remaining traces of the original rock's textures or structures.

The Parent Holes returned assays with grades in the range of 1.6% to 2.9% niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ) and 8.4% to 14.2% Total Rare Earth Oxides (TREO) – see Table 2. For details of the historical drilling and assays, see our ASX Release dated 6 August 2024 'Acquisition of High-Grade Araxá Niobium Project'.



**Figure 2: Selected samples for metallurgical bench-scale testwork being prepared for dispatch.**

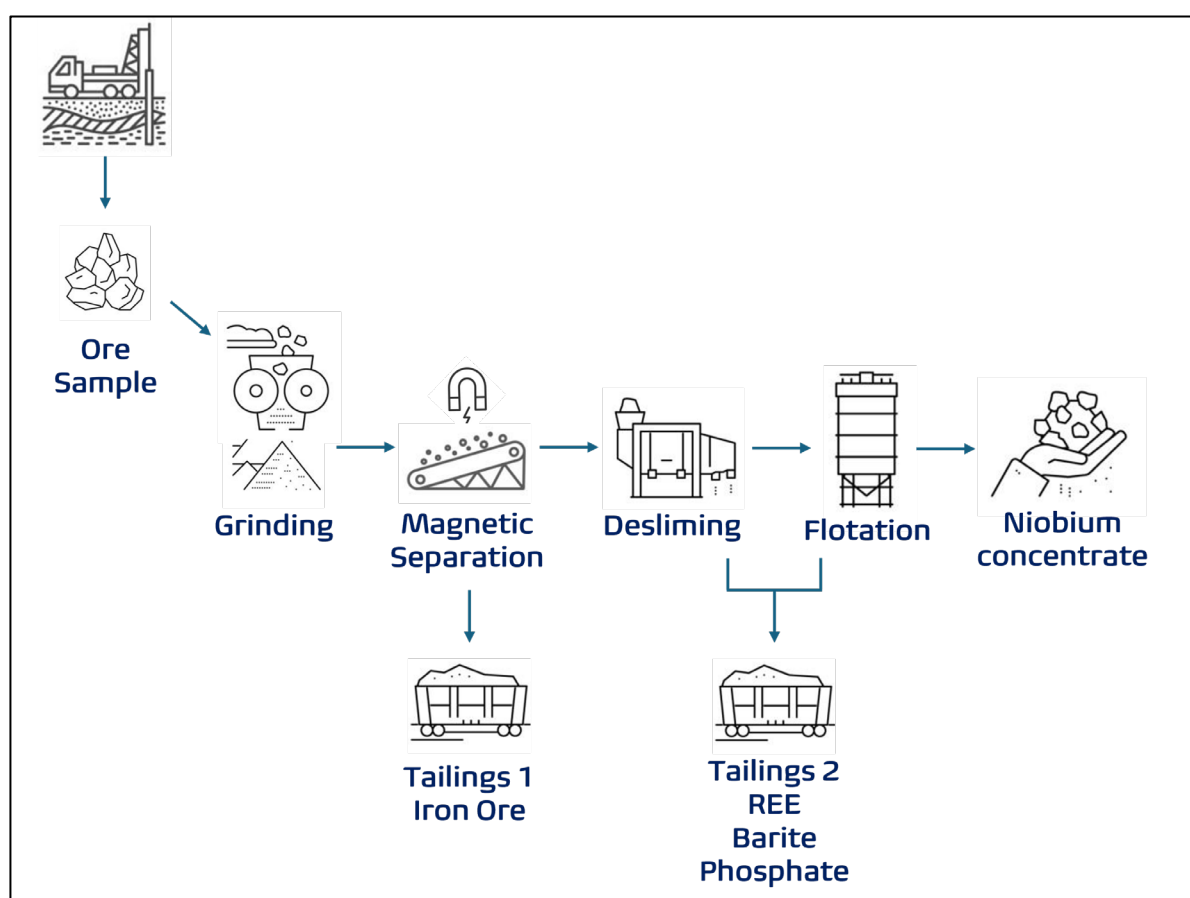
**Table 2: Assays results from historical diamond drilling for intervals selected for the metallurgical testwork.**

Sample ID	Hole ID (Auger)	Parent Hole (DD)	From	To	$\text{Nb}_2\text{O}_5$ %	$\text{Fe}_2\text{O}_3$ %	BaO %	$\text{P}_2\text{O}_5$ %	$\text{SiO}_2$ %	$\text{Al}_2\text{O}_3$ %	TREO %	MREO %
SGAXMET001	AAXTR0042	AAXDD009	2	3	2.9	8.9	6.1	6.8	5.7	14.2	11.8	2.2
SGAXMET002	AAXTR0041	AAXDD008	4	5	2.7	17.7	4.8	13.4	18.4	10.9	14.2	2.7
SGAXMET003	AAXTR0045	AAXDD012	7	8	1.6	24.7	4.1	10.2	21.7	7.3	8.4	1.6

### Bench-Scale Testwork Design

Each bench-scale test requires approximately 3kg of material allowing for multiple test iterations per sample selected for testwork (each sample is approx. 60kg in weight). St George will use testwork to assess various technological methods to maximise niobium recovery and enhance the Project's sustainability. The samples are currently being processed at EMBRAPII-SENAI's laboratory facility in Belo Horizonte, Minas Gerais.

The standard test flow diagram is shown in Figure 2. The flow diagram will be modified as required based on lab-scale test results, leveraging the expertise of EMBRAPII-SENAI and St George's technical team. First results are expected in Q2 2025.



**Figure 2: Typical Nb concentrate test flow diagram.**

### Standard Flowsheet

The process begins with a screening test to determine the size distribution and analyse the chemical and mineral composition of each fraction. This is followed by a series of standard tests designed to optimise niobium concentrate production comprising:

- **Initial Grinding Stage**

The mineralisation undergoes grinding to achieve the optimal particle size for subsequent separation processes. This step is crucial for liberating niobium-bearing minerals from the surrounding material, enhancing recovery efficiency.

- **Magnetic Separation**

A high-intensity magnetic separator is used to extract iron-bearing minerals. This process results in the first tailings stream, primarily composed of magnetite iron ore as a by-product. The remaining material moves to the next stage.

- **Desliming**

The material is subjected to a desliming process to remove ultra-fine particles (slimes) that can interfere with flotation. This step improves the effectiveness of flotation by ensuring only appropriately sized particles are processed. The process generates a first pass of the second tailings stream, which contains rare earth elements (REE) and valuable by-products such as barite and phosphate.

- **Flotation**

A series of flotation steps are conducted to separate non-niobium minerals from the concentrate. The process generates a second pass of the second tailings stream, which contains further valuable concentrations of REE, barite and phosphate.

- **Final Product – Niobium Concentrate**

The remaining high-purity material is the niobium concentrate, which is the main target product of the process. This concentrate is further analysed to assess its grade and recovery efficiency before moving to potential refining/conversion or commercial applications.

The second tailings stream will be utilised for the processing development of rare earths, phosphate, iron ore, and barite products – all by-products of the niobium processing route.

### **Future Testwork Programs**

The overall testwork program has been designed as a three-step process to provide progressive validation of the material's quality and economic potential, minimising technical risks while maximising efficiency. By following this structured approach, the program aims to establish a clear pathway from raw material to market-ready niobium products and valuable by-products, supporting the Project's long-term commercial viability and optimising resource utilisation.

Future testwork will focus on the two next steps in niobium production: (1) refining the niobium concentrate, traditionally by leaching and/or calcining; and (2) advancing towards the conversion (thermal reaction) of final niobium products. The follow-up work will build upon the initial testwork results to ensure that the concentrate meets the required specifications for downstream applications.

St George will also investigate new technologies for refining and conversion. The refining process will optimise purity levels while the final production stage will evaluate different pathways for producing high-value niobium products and potential by-products.

Future testwork will also focus on the potential for commercial REE production from the by-product material generated in the niobium flotation process.

### **About the Araxá Project:**

St George acquired 100% of the Araxá Project on 27 February 2025. Araxá is a de-risked, potentially world-class project in Minas Gerais, Brazil, located adjacent to CBMM's world-leading niobium mining operations.

Extensive high-grade niobium and REE mineralisation at the Araxá Project was confirmed by past drilling. High-grade mineralisation commences from surface, with more than 500 intercepts of high-grade niobium (>1% Nb<sub>2</sub>O<sub>5</sub>) with grades up to 8% Nb<sub>2</sub>O<sub>5</sub> plus rare earths with grades up to 33% TREO.

The region around the Araxá Project has a long history of commercial niobium production and provides access to infrastructure and a skilled workforce. St George has negotiated government support for expedited project approvals, assembled a highly experienced in-country team and established relationships with key parties and authorities in Brazil to drive the Project through exploration work and development studies.

Authorised for release by the Board of St George Mining Limited.

**John Prineas**

Executive Chairman

St George Mining

+61 411 421 253

[john.prineas@stgm.com.au](mailto:john.prineas@stgm.com.au)

**Peter Klinger**

Media and Investor Relations

Purple

+61 411 251 540

[pklinger@purple.au](mailto:pklinger@purple.au)

**Competent Person Statement:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves for the Araxá Project is based on information compiled by Mr Wanderly Basso, a Competent Person who is a Member of The Australasian Institute of Geoscientists. Mr Basso is employed by St George Mining Limited to provide technical advice on mineral projects, and he holds performance rights issued by the Company.

Mr Basso has sufficient experience that is relevant to the style of mineralisation and type of deposit 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'. Mr Basso consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Competent Person Statement – Previously Released**

The information in this ASX Release that relates to historical and foreign results is based upon, and fairly represents, information and supporting documentation reviewed by Mr. Carlos Silva, Senior Geologist employed by GE21 Consultoria Mineral and a Competent Person who is a Member of The Australian Institute of Geoscientists.

GE21 an independent consultancy engaged by St George Mining Limited for the review of historical exploration data. Mr Silva has sufficient experience that is relevant to the style of mineralisation and type of deposit 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".

This ASX Release contains information extracted from the following reports which are available on the Company's website at [www.stgm.com.au](http://www.stgm.com.au):

*6 August 2024 Acquisition of High-Grade Araxa Niobium Project*

The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in any original market announcements referred to in this report and that no material change in the results has occurred. 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 market announcements.

This ASX announcement contains information related to the following reports which are available on the Company's website at [www.stgm.com.au](http://www.stgm.com.au):

- 12 December 2024 *St George signs partnership for downstream niobium and rare earth processing and production in Brazil.*
- 9 January 2025 *St George commences program to optimise niobium and rare earths downstream processing for the Araxá Project.*

The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in any original market announcements referred to in this report and that no material change in the results has occurred. 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 market announcements.

#### **Forward Looking Statements:**

This announcement includes forward-looking statements that are only predictions and are subject to known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of St George, the directors and the Company's management. Such forward-looking statements are not guarantees of future performance.

Examples of forward-looking statements used in this announcement include use of the words 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of the announcement, are expected to take place.

Actual values, results, interpretations or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements in the announcement as they speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, St George does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

This announcement has been prepared by St George Mining Limited. The document contains background Information about St George Mining Limited current at the date of this announcement.

The announcement is in summary form and does not purport to be all inclusive or complete. Recipients should not rely upon it as advice for investment purposes, as it does not take into account your investment objectives, financial position or needs. These factors should be considered, with or without professional advice, when deciding if an investment is appropriate.

The announcement is for information purposes only. Neither this announcement nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. The announcement may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply to their own jurisdiction as a failure to do so may result in a violation of securities laws in such jurisdiction.

This announcement does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this announcement are not intended to represent recommendations of particular investments to particular person.

Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments. To the extent permitted by law, no responsibility for any loss arising in any way (including by way of negligence) from anyone acting or refraining from acting as a result of this material is accepted by St George Mining Limited (including any of its related bodies corporate), its officers, employees, agents and advisers.



# JORC Code, 2012 Edition – Table 1 report

## 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>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Core Sampling ("the Parent Hole"): The sections of the core that are selected for assaying are marked up and then recorded on a sample sheet for cutting and sampling at the certified assay laboratory. Samples of HQ core are cut using a diamond core saw, with half core sampled lengthways for assay. This process was executed by previous explorers in 2012.</li> <li>The core samples were prepared according to the following procedure:  Whole samples drying and weighing, crushing of sample to -2mm followed by homogenization and splitting to a 1kg sub-sample. Samples pulverization to 95% passing -150 mesh and splitting of pulverized material to 50-gram pulp.  Elements for all suites go through the following analytical method:  Elements were analysed by ALS Laboratories using Lithium Metaborate fusion and an ICP-MS/XRF finish. These elements are: As, Ba, Bi, Co, Cr, Cu, Fe, Mn, Mo, Nb, Ni, P, Pb, Rb, S, Sb, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, Zn, Zr, Al2O3, CaO, CeO2, HfO2, La2O3, MgO, SiO2, TiO2, Y2O3.</li> <li>Metallurgical testwork sampling: The samples were obtained through a program of helical drilling, also executed by previous explorers in 2012. The helical drilling was undertaken at the collars of pre-existing diamond drill holes that had mineralisation confirmed by laboratory assay ("the Parent Hole").</li> <li>Samples were collected on a 1m-by-1m basis.</li> <li>The helical samples were not assayed; however, the Parent Hole samples underwent laboratory assay, providing confirmation of</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p><i>mineralisation in those holes.</i></p> <ul style="list-style-type: none"> <li><i>The samples were stored in barrels that were properly labelled, catalogued, and archived</i></li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li><i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Diamond holes were drilled with HQ (63.5mm) rods to enable sufficient material recovery.</i></li> <li><i>Helical drilling technique was subsequently employed at the collars of the pre-existing diamond drill holes, using a large diameter auger with a spiral or helical design. This method involved advancing the auger in 1-meter intervals, with samples being collected at each meter. The extracted material was then stored in properly labeled drums, catalogued, and archived for further analysis. This technique ensured that each 1-meter interval was represented by a discrete sample, providing consistent and high-quality sampling throughout the drilling program.</i></li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Samples for the metallurgical tests were collected at 1m intervals from historical helical drilling conducted by previous explorers in 2012. Samples were selected from the historical helical drilling based on assays from intervals in the same spatial location as the parent holes.</i></li> <li><i>For the parent diamond drill holes, recovery was calculated by manoeuvre. No sample bias was recorded.</i></li> <li><i>The sampling process for the helical drilling involved collecting the full content of the metre sampled and storing it in individual barrels to optimise sample representativeness.</i></li> <li><i>Samples for each individual metre were homogenised prior to collection to be submitted for metallurgical testwork.</i></li> <li><i>No composite samples were used.</i></li> </ul>
Logging	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</i></li> </ul>	<ul style="list-style-type: none"> <li><i>All samples selected for metallurgical testwork were logged in sufficient detail to support these tests. The geological team conducted</i></li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p><i>both qualitative and quantitative logging, focusing on key aspects such as geology, alteration, and mineralisation. The logs were recorded digitally and verified for accuracy.</i></p> <ul style="list-style-type: none"> <li>• <i>The Parent Holes drilled by diamond drilling were also logged in detail, logging was carried out on-site to ensure the data collected was precise and comprehensive. Both qualitative and quantitative geological, alteration, and mineralisation data were logged by the previous company's geological personnel and reviewed by the company's geological team, the drill logs were digitally recorded and verified.</i></li> </ul>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>The HQ diameter core from the parent diamond drill holes was cut using a saw, with half of the core collected for analysis. These samples were sent to the ALS Laboratory in Vespasiano, Minas Gerais (MG), for processing and analysis.</i> <ul style="list-style-type: none"> <li>○ <i>Assay preparation procedures include drying and weighing of whole sample are crushed to -2mm. Sample homogenization and splitting to a 1kg sub-sample. Pulverization to 95% passing -150 mesh and splitting of pulverized material to 50-gram pulp.</i></li> <li>○ <i>Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks with each sample batch. QAQC results are routinely reviewed to identify and resolve any issues.</i></li> <li>○ <i>Duplicate samples are selected during analysis at the laboratory. Samples comprise of coarse rejects of the original sample were submitted to a rate of 3.56% of all samples.</i></li> <li>○ <i>The sample sizes are considered to be appropriate to correctly represent type and style of mineralisation and associated geology based on: Style (supergene deposit), the thickness and consistency of the intersections and the sampling methodology.</i></li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Assay intervals from the parent holes were used as a reference to select the mineralized intervals for the metallurgical samples referred below:</li> <li>• Metallurgical test samples were collected from helical drilling conducted by the previous company undertaken at the collars of pre-existing diamond drill holes (Parent Holes). <ul style="list-style-type: none"> <li>○ Each metallurgical sample was individually homogenized, with approximately 60kg of material collected per sample.</li> <li>○ The samples were appropriately packed in individual barrels and sent to the EMBRAPII-SENAI Laboratory in Belo Horizonte, Minas Gerais (MG) for testing.</li> <li>○ The sample size and the nature of the material were deemed suitable and representative of the deposit.</li> </ul> </li> </ul>
<p>Quality of assay data and laboratory tests</p>	<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>• The assay method and detection limits are appropriate for analysis of the elements required.</li> <li>• Laboratory QAQC involves the use of internal lab standards using certified reference material (CRMs), blanks and pulp duplicates as part of in-house procedures. The previous company also submitted a suite of CRMs, blanks and selects appropriate samples for duplicates. Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75µm is being attained.</li> <li>• The samples from the auger drilling have not been assayed.</li> </ul>
<p>Verification of sampling and assaying</p>	<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> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant intersections and assays are verified by the Company's Technical Team and Consulting Geologist.</li> <li>• Mineralized intersections have been verified against the downhole geology and laboratory analysis.</li> </ul>

Criteria	JORC Code explanation	Commentary																											
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Logging and sampling data were recorded digitally in the field and all historical electronic data entry protocols and storage were verified by the Company's technical team.</li> <li>No adjustment has been made to the Nb assay results other than the accepted factors applied to report Nb<sub>2</sub>O<sub>5</sub> rather than Nb as per the industry standards</li> <li>No adjustment has been made to the Fe assay results other than the accepted factors applied to report Fe<sub>2</sub>O<sub>3</sub> rather than Fe as per the industry standards</li> <li>No adjustment has been made to the Ba assay results other than the accepted factors applied to report BaO rather than Ba as per the industry standards</li> <li>No adjustment has been made to the P assay results other than the accepted factors applied to report P<sub>2</sub>O<sub>5</sub> rather than P as per the industry standards</li> <li>No adjustment has been made to the REE assay results other than the accepted factors applied to report REO rather than REE as per the industry standards</li> <li>Multielement results (REE) are converted to stoichiometric oxide (REO) whenever it applies, using the following element-to-oxide conversion factors:</li> </ul> <table border="1" data-bbox="1355 1098 2009 1410"> <thead> <tr> <th>Element</th> <th>Conversion Factor</th> <th>Oxide</th> </tr> </thead> <tbody> <tr> <td>Ce ppm</td> <td>1.228</td> <td>CeO<sub>2</sub> ppm</td> </tr> <tr> <td>La ppm</td> <td>1.173</td> <td>La<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Y ppm</td> <td>1.27</td> <td>Y<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Dy ppm</td> <td>1.148</td> <td>Dy<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Er ppm</td> <td>1.143</td> <td>Er<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Eu ppm</td> <td>1.158</td> <td>Eu<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Gd ppm</td> <td>1.153</td> <td>Gd<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Ho ppm</td> <td>1.146</td> <td>Ho<sub>2</sub>O<sub>3</sub> ppm</td> </tr> </tbody> </table>	Element	Conversion Factor	Oxide	Ce ppm	1.228	CeO <sub>2</sub> ppm	La ppm	1.173	La <sub>2</sub> O <sub>3</sub> ppm	Y ppm	1.27	Y <sub>2</sub> O <sub>3</sub> ppm	Dy ppm	1.148	Dy <sub>2</sub> O <sub>3</sub> ppm	Er ppm	1.143	Er <sub>2</sub> O <sub>3</sub> ppm	Eu ppm	1.158	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd ppm	1.153	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho ppm	1.146	Ho <sub>2</sub> O <sub>3</sub> ppm
Element	Conversion Factor	Oxide																											
Ce ppm	1.228	CeO <sub>2</sub> ppm																											
La ppm	1.173	La <sub>2</sub> O <sub>3</sub> ppm																											
Y ppm	1.27	Y <sub>2</sub> O <sub>3</sub> ppm																											
Dy ppm	1.148	Dy <sub>2</sub> O <sub>3</sub> ppm																											
Er ppm	1.143	Er <sub>2</sub> O <sub>3</sub> ppm																											
Eu ppm	1.158	Eu <sub>2</sub> O <sub>3</sub> ppm																											
Gd ppm	1.153	Gd <sub>2</sub> O <sub>3</sub> ppm																											
Ho ppm	1.146	Ho <sub>2</sub> O <sub>3</sub> ppm																											

Criteria	JORC Code explanation	Commentary																					
		<table border="1"> <tr> <td>Lu ppm</td> <td>1.137</td> <td>Lu<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Nd ppm</td> <td>1.166</td> <td>Nd<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Pr ppm</td> <td>1.208</td> <td>Pr<sub>6</sub>O<sub>11</sub> ppm</td> </tr> <tr> <td>Sm ppm</td> <td>1.16</td> <td>Sm<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Tb ppm</td> <td>1.176</td> <td>Tb<sub>4</sub>O<sub>7</sub> ppm</td> </tr> <tr> <td>Tm ppm</td> <td>1.142</td> <td>Tm<sub>2</sub>O<sub>3</sub> ppm</td> </tr> <tr> <td>Yb ppm</td> <td>1.139</td> <td>Yb<sub>2</sub>O<sub>3</sub> ppm</td> </tr> </table> <ul style="list-style-type: none"> <li>• TREO (Total Rare Earth Oxides) calculations include the summation of the following elements: La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub></li> <li>• MREO (Magnetic Rare Earth Oxides) calculations include the summation of the following elements: Pr<sub>6</sub>O<sub>11</sub>+ Nd<sub>2</sub>O<sub>3</sub>+ Tb<sub>4</sub>O<sub>7</sub>+ Dy<sub>2</sub>O<sub>3</sub></li> </ul>	Lu ppm	1.137	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd ppm	1.166	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr ppm	1.208	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm ppm	1.16	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb ppm	1.176	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm ppm	1.142	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb ppm	1.139	Yb <sub>2</sub> O <sub>3</sub> ppm
Lu ppm	1.137	Lu <sub>2</sub> O <sub>3</sub> ppm																					
Nd ppm	1.166	Nd <sub>2</sub> O <sub>3</sub> ppm																					
Pr ppm	1.208	Pr <sub>6</sub> O <sub>11</sub> ppm																					
Sm ppm	1.16	Sm <sub>2</sub> O <sub>3</sub> ppm																					
Tb ppm	1.176	Tb <sub>4</sub> O <sub>7</sub> ppm																					
Tm ppm	1.142	Tm <sub>2</sub> O <sub>3</sub> ppm																					
Yb ppm	1.139	Yb <sub>2</sub> O <sub>3</sub> ppm																					
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>• All holes were picked up by RR Topografia e Engenharia planialtimetric topographic surveyors using a Total Station (tacheometer) with an accuracy of +/- 10cm.</li> <li>• The coordinates were provided in following format: SAD 69 datum - georeferenced to spindle 23S.</li> <li>• Generation of planialtimetric maps was completed by RR Topografia e Engenharia using a Total Station (tacheometer) with an accuracy of +/- 10cm.</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>• Hole spacing within the drilling area corresponds to less than 20% of the lease area. The spacing between holes is between 25 and 60 metres on average. In the rest of the lease area holes are spaced 200 meters apart.</li> <li>• The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity in the totality of the project, to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.</li> <li>• The drilling carried out leaves open the geological continuity of the</li> </ul>																					

Criteria	JORC Code explanation	Commentary
		<p><i>mineralized zone in depth and laterally. There is an opportunity to increase the volume of mineral resources with additional drilling</i></p> <ul style="list-style-type: none"> <li>• <i>No compositing has been applied to the exploration results.</i></li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>The mineralisation is flat lying and occurs within the saprolite/clay zone of a deeply developed regolith (reflecting topography and weathering). Vertical sampling from the drill holes is therefore appropriate.</i></li> <li>• <i>No orientation-based sampling bias has been identified in the data to date.</i></li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Chain of Custody is managed by the Company until samples pass to a duly certified assay laboratory for subsampling, assaying and/or metallurgical testing.</i></li> <li>• <i>The sample bags and barrels are stored on secure sites and delivered to the laboratory by the Company or a competent agent. When in transit, they are kept in locked premises. Transport logs have been set up to track the progress of samples.</i></li> <li>• <i>The chain of custody passes upon delivery of the samples to the assay laboratory.</i></li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>A due diligence has being carried by independent Brazilian-based consulting firm, GE21 Consultoria Mineral upon the process of acquisition of the project.</i></li> </ul>

## 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	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>The Araxa Project is comprised of three granted permits held by Itafos Araxá Mineracao E Fertilizantes S.A (“Itafos Araxá”). St George acquired 100% of the issued shares of Itafos Araxa on 26 February 2025.</i></li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>Tenement 831.972/1985 is an application for a mining concession that is progressing through the application process. Further submissions to ANM (the relevant mining authority) are required to finalise the application including environmental and geotechnical studies. Additional information may also be requested by ANM. There is no certainty that the application will be granted or granted on conditions that are acceptable.</li> <li>Tenements 832.150/1989 (Exploration Licence) and 831.436/1988 (Application for Mining Concession) are subject to renewal and extension applications to ANM (the relevant mining authority). Additional information may be requested by ANM to complete the process for renewal or extension. There is no certainty that the renewal and extension requests will be granted or granted on conditions that are acceptable.</li> <li>Some areas within the project site are classified as legal reserve or APP. Further exploration work (including drilling), mining activities and any other suppression of vegetation in these areas will require certain submissions and undertakings to the relevant authorities and the approval of those authorities. There is no certainty that approvals will be granted in the future or granted on conditions that are acceptable.</li> <li>Some areas within the project site are a listing and preservation zone by the municipality, according to the current master plan, recognized by Brazil and the State of Minas Gerais, according to the Geoenvironmental Study of Hydromineral Sources/Araxá Project conducted by CPRM/Geological Service of Brazil. This classification is designed to protect water resources and vegetation within the designated area. Approvals are required from the relevant authorities to conduct exploration and mining activities in these areas, presenting a significant environmental management risk to the project. There is no certainty that approvals will be granted in the future or granted on conditions that are acceptable.</li> <li>A royalty is payable to Extramil, a former owner of the project. The royalty is a specified percentage of the revenue on Net Smelter Returns (NSR). The following percentages apply:</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• 3.5% NSR on phosphate;</li> <li>• 3.0% - 10.5% NSR on REEs and niobium, on a sliding scale according to the actual Internal Rate of Return of the Araxá Project, more specifically:</li> <li>• 3.0% NSR for IRR =&lt;25%;</li> <li>• 4.5% NSR for IRR =&gt;25% &lt; 30%;</li> <li>• 6.0% NSR for IRR =&gt;30% &lt; 50%;</li> <li>• 7.5% NSR for IRR =&gt;50% &lt; 70%; or</li> <li>• 10.5% NSR for IRR =&gt; 90%.</li> <li>• A Government royalty is also payable which can range between 0.2% to 3% of revenue depending on the product produced.</li> <li>• The land on which the project tenements are situated is owned either by the State of Minas Gerais or by CBMM. The approval of the landowner is required to access the project area. Access arrangements for the project have previously been agreed but there is no certainty that access arrangements will be agreed in the future or the timeframe in which such arrangements can be agreed.</li> </ul>
<p>Exploration done by other parties</p>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Historical exploration within the area of the Araxa Project is known to have occurred since 1965. Known historical exploration includes:</li> </ul> <p>1965 to 1974: Exploration by the Brazilian government under the auspices of the DNPM and by CBMM and Canopus Holding SA (Canopus). Exploration included the drilling and sampling of 24 diamond boreholes and the excavation and sampling of 59 pits.</p> <p>2004 to 2008: Exploration was conducted by Extramil and Companhia Industrial Fluminense (CIF) within the Araxá Project boundary. Exploration included the drilling and sampling of 11 diamond boreholes and 31</p>

Criteria	JORC Code explanation	Commentary
		<p>auger holes.</p> <p>2011 to 2012: Exploration By Itafos (previously called MBAC Fertilizer Corp) which included mapping, topographical surveys, 36 auger drillholes and 67 diamond core drillholes. Itafos also completed preliminary metallurgical testwork and resource estimates.</p>
Geology	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• St George is targeting Carbonatite hosted supergene style Niobium, +/- Rare Earth mineralisation at the Araxa project.</li> <li>• This is based on geological interpretations and existing operating mines within the vicinity of the Barreiro Carbonatite complex.</li> <li>• The project lies within the Barreiro Carbonatite complex. The host mineral for niobium at Araxá is pyrochlore, and the host mineral for REEs is monazite.</li> <li>• This complex is known to host high grade supergene (superficial) niobium, rare-earths and phosphate with two existing mines currently operating within the intrusion since as early as the 1950's.</li> </ul>
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>• This ASX Release is not reporting new exploration results.</li> <li>• For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024 Acquisition of High-Grade Araxa Niobium Project. For methodology of historical drilling, see Section 1 of this JORC Table.</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> </ul>	<ul style="list-style-type: none"> <li>• This ASX Release is not reporting new exploration results.</li> <li>• For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024 Acquisition of High-Grade Araxa Niobium</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>Project. For methodology of historical drilling, see Section 1 of this JORC Table.</p>
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, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>This ASX Release is not reporting new exploration results.</li> <li>For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024 Acquisition of High-Grade Araxa Niobium Project. For methodology of historical drilling, see Section 1 of this JORC Table.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A prospect location map and section are shown in the body of the ASX Release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>This ASX Release is not reporting new exploration results.</li> <li>For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024 Acquisition of High-Grade Araxa Niobium Project. For methodology of historical drilling, see Section 1 of this JORC Table.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>This ASX Release is not reporting new exploration results.</li> <li>For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024 Acquisition of High-Grade Araxa Niobium Project. For methodology of historical drilling, see Section 1 of this JORC Table.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>A discussion of further exploration work is contained in the body of the ASX Release. Further exploration will be planned based on ongoing drill results, geophysical surveys, metallurgical testwork results and geological assessment of prospectivity.</li> </ul>