# **ASX RELEASE**

11 June 2025

# RARE EARTHS AND NIOBIUM DRILLING UNDERWAY AT THE ARAXÁ PROJECT, BRAZIL

- **Major drill campaign has commenced.** More than 10,000m of drilling planned in St George's inaugural drill campaign at the Araxá Project in Minas Gerais, Brazil comprising auger, reverse circulation (RC) and diamond drilling over a 12 to 16 week campaign.
- Clear purpose to grow the Araxá resource. With mineralisation open in all directions and significant mineralisation below 100m from surface not yet included in the current Mineral Resource Estimate (MRE)<sup>1</sup> there is potential for a substantial increase in the already globally significant resource defined by St George of:
  - o 40.64Mt @ 4.13% TREO
  - o 41.2 Mt @ 0.68% Nb₂O₅
- High-grade mineralisation from surface: Drilling will aim to expand high-grade zones of mineralisation identified by past drill results at Araxá that included more than 500 intercepts of high-grade mineralisation starting from surface with grades up to 8% (80,000ppm) Nb<sub>2</sub>O<sub>5</sub>, 33% (330,000ppm) TREO and 32% P<sub>2</sub>O<sub>5</sub> (using a cut-off of 1% Nb<sub>2</sub>O<sub>5</sub> and 2% TREO)<sup>2</sup> including:
  - 43m @ 1.5% Nb<sub>2</sub>O<sub>5</sub> from surface
  - 20m @ 2.4% Nb<sub>2</sub>O<sub>5</sub> from surface incl. 10m @ 3.2% Nb<sub>2</sub>O<sub>5</sub> from 2m
  - 33m @ 2.1% Nb<sub>2</sub>O<sub>5</sub> from 4m
  - 13m @ 2.8% Nb<sub>2</sub>O<sub>5</sub> from 20m incl. 1.2m @ 8.3% Nb<sub>2</sub>O<sub>5</sub> from 26m
  - 11m @ 3% from Nb<sub>2</sub>O<sub>5</sub> from 5m
- 60m @ 11.1% TREO from surface incl. 30m @ 16.9% TREO from 27.5m

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- 45m @ 14.4% TREO from 15m incl. 7.5m @ 31.5% TREO from 40m
- 29m @ 10.3% TREO from surface
- 43m @ 6.8% TREO from surface
- 17m @ 14.6% TREO from surface
- Airborne Magnetic Survey to identify further targets. A project-wide airborne magnetic survey is scheduled to commence at Araxá next week with results expected to identify and prioritise further rare earths and niobium targets for drilling.

St George Mining Limited (**ASX: SGQ**) ("**St George**" or "**Company**") is pleased to announce that it has commenced drilling at the Company's 100%-owned Araxá niobium-REE Project in Minas Gerais, Brazil.

It marks St George's first drill program at Araxá since securing ownership of this world-class project in February 2025.

Three drill rigs will be active at the Project, and samples from all drilling activities will be submitted to ALS Brazil for laboratory assay on a regular basis with assay results expected on a 4-week rolling basis.

- 1. Please see Table 2 and our ASX Release dated 1 April 2025 for more information on the Mineral Resource Estimate.
- 2. For details of historic drilling at the Araxá Project, see our ASX Release dated 6 August 2024.

ST GEORGE MINING LIMITED ACN 139 308 973 Suite 2, Level 2, 28 Ord Street West Perth WA 6005 | PO Box 100 West Perth WA 6872 www.stgeorgemining.com.au | Phone +61 8 6118 2118



### John Prineas, St George Mining's Executive Chairman, commented:

"We are delighted to have started our first phase of drilling at the Araxá Project. The Project has already delivered more than 500 intercepts of high-grade rare earths and niobium from past drilling, and we expect to add significantly to this tally by the time we complete our 10,000m drilling campaign. It promises for exciting newsflow of results over the coming weeks and months.

"The Araxá Project has many competitive advantages that make it a stand-out project in the rare earths and niobium space. Mineralisation starts from surface and is free-digging, supporting a potential low cost open-pit mining operation. The Project is in an established mining region with well-understood permitting and environmental management, providing an expedited pathway to potential development and strong ESG credentials.

"Araxá's key feature, of course, is the large, high-grade resource – an enviable development opportunity at a time when global economies are scrambling to establish new supply chains for critical metals, particularly magnet rare earths.

"One of the largest producing hard-rock rare earths mines outside of China is the Mt Weld mine owned by the \$8 billion Lynas Rare Earths Lynas (ASX: LYC) with a total resource of 106Mt @ 4.1% TREO. St George's Araxá Project already has a total JORC resource of 40.64Mt @ 4.13% TREO, illustrating the potential value upside for St George as we progress through development studies and resource expansion drilling to demonstrate the potential for a commercial rare earth mining operation.

"At a time when investors are increasingly looking to Brazil for the next generation of quality, hard-rock rare earths and niobium development opportunities, Araxá is in pole position to deliver sustained value for St George shareholders."





Figure 1 – Left: John Prineas at Araxá with samples from the augur drilling. Right: John Prineas, John Dawson, and Thiago Amaral inspecting the augur drilling.



# **Major Drill Campaign Underway**

The 10,000m campaign at the Araxá Project will comprise a combination of auger, RC and diamond drilling. Auger drilling, which commenced this week, will focus on testing the geology of the fringe areas within the project tenure that have not been drilled extensively.

RC and diamond drilling will focus on resource expansion as well as upgrading the inferred resource to the indicated category thereby improving confidence in the resource model.

Drilling will also test extensions of known mineralised zones and follow up on targets generated from previous exploration and ongoing geophysical work. See Figure 2 for a map showing the planned drilling.

Auger drilling is currently in progress in an area to the east of the footprint of the current MRE. Augur drill holes are drilled vertically for upto 15m from surface into the weathered profile that is known to host high-grade rare earths and niobium across the project tenure. RC and diamond drilling will commence over the next two weeks.



*Figure 2 – plan view map of the project tenure showing planned drill hole collars.* 





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*Figure 3 – Oblique view of the project tenure showing planned drill hole and current niobium resource.* 



*Figure 4 – Auger drilling underway at the Araxa Project.* 

# **High-Resolution Magnetics Survey for Target Generation**

A high-resolution drone airborne magnetometry survey is scheduled to commence next week and will cover the entire Araxá Project area with flight lines spaced 25 metres apart. This geophysical program will be carried out in parallel with the ongoing resource development drilling and is designed to collect ultra-detailed magnetic data across the tenement package.



The results will assist in refining the geological model of the carbonatite-hosted mineralisation at Araxá, improve structural interpretation and help identify additional targets for follow-up drilling, supporting the broader strategy to define and expand the mineral resource base.

# Large, High-Grade Rare Earths Deposit

The maiden JORC compliant MRE for the Araxá Project is 40.64Mt @ 4.13% TREO with contained TREO of 1.7Mt. For full details of the MRE see Table 2 and our ASX release dated 1 April 2025 "*High-Grade Niobium and REE JORC Resource for Araxa*".

The grade and size of the resource compares favourably with world-class rare earths mines such as Mt Weld in Western Australia and Mountain Pass in California – see Table 1 and Figure 5.

Significantly, when the Mt Weld concentration plant was commissioned in 2011, the resource at Mt Weld stood at 17.49Mt @ 8.1% TREO for contained TREO of 1.4Mt<sup>1</sup>. The current total resource for Mt Weld is 106Mt @ 4.1% TREO.

The high-grade niobium and rare earths mineralisation at Araxá – with grades up to **82,970ppm (8.29%) Nb<sub>2</sub>O<sub>5</sub>** and **329,800ppm (32.98%) TREO** – remains open in all directions with current drilling designed to deliver a large increase in the MRE.

Company	St George	Lynas	МР	Arafura
Market cap and stock exchange	A\$74 million ASX: SGQ	A\$8.6 billion ASX: LYC	US\$4.5 billion NYSE: MP	A\$430 million ASX: ARU
Project	Araxá, Brazil	Mt Weld, Australia	Mountain Pass, USA	Nolans, Australia
Deposit style	Hard-rock	Hard-rock	Hard-rock	Hard-rock
Stage	Development studies	Producing	Producing	Development studies; financing
REE Product	Oxide	Oxide	Oxide	Oxide
Mineral resource (Mt)	Measured: 1.9 Indicated: 7.37 Inferred: 31.37 Total: 40.64	Measured: 20 Indicated: 15.5 Inferred: 71.1 Total: 106.6	Measured: 0.1 Indicated: 31.5 Inferred: 9.1 Total: 40.6	Measured: 4.9 Indicated: 30 Inferred: 21 Total: 56
TREO grade (%)	Measured: 5.44% Indicated: 4.76% Inferred: 3.9% Total: 4.13%	Measured: 7.2% Indicated: 4.3% Inferred: 3.2% Total: 4.1%	Measured: 9.5% Indicated: 6.2% Inferred: 5.1% Total: 5.9%	Measured: 3.2% Indicated: 2.7% Inferred: 2.3% Total: 2.6%
NdPr grade (%)	<b>Total</b> : 0.78%	<b>Total</b> : 0.61%	<b>Total</b> : 0.93%	<b>Total</b> : 0.69%
Contained NdPr (Mt)	0.32	0.65	0.38	0.38

Table 1: Peer benchmarking of major hard-rock rare earths deposits (ex-China). (For source data, seeAppendix 1 of this ASX Release).

<sup>&</sup>lt;sup>1</sup> See ASX Release by Lynas Corporation Ltd dated 18 January 2012 'Increase in Mt Weld Resource Estimate'



# **Table 2: Globally Significant Resource**

Rare earths – total resource:

40.6 Mt at 4.13% TREO (41,300ppm TREO) comprising (at a cut-off of 2% TREO):

Niobium – total resource:

41.2 Mt at 0.68% Nb<sub>2</sub>O<sub>5</sub> (6,800ppm Nb<sub>2</sub>O<sub>5</sub>) comprising (at a cut-off of 0.2% Nb<sub>2</sub>O<sub>5</sub>):

	Niobium		Total rare earths		ths
Resource Classification	Million Tonnes (Mt)	Nb₂O₅ (%)	Million Tonnes (Mt)	TREO (%)	MREO (%)
Measured	1.90	1.19	1.90	5.44	1.04
Indicated	7.37	0.93	7.37	4.76	0.90
Inferred	31.93	0.59	31.37	3.90	0.74
Total	41.20	0.68	40.64	4.13	0.78

Notes to the MRE:

- 1. The MREs are classified and reported in accordance with JORC Code (2012).
- 2. The entire MRE is interpreted to be amenable to open pit mining.
- 3. The MREs are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting. Rounding may cause computational discrepancies.
- 4. The total MRE is inclusive of the Inferred category. The Inferred portion is reported separately and should not be included for economic considerations.

#### Total rare earth oxides (%) x NdPr (%) ratio



Figure 5 -The high-grade and large volume of the rare earths at Araxá make it a globally significant REE deposit. The bubble chart shows the ratio of NdPr to total TREO resource (Y axis) and the grade of the total TREO resource (X axis). The size of each bubble represents the size of the total TREO resource in Mt. (For source data, see Appendix 1 of this ASX Release).



### 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.

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 and 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.

Extensive high-grade niobium and REE mineralisation at the Araxá Project has been confirmed by past drilling. High-grade mineralisation commences from surface, with more than 500 intercepts of high-grade niobium (>1% Nb2O5) with grades up to 8% Nb<sub>2</sub>O<sub>5</sub> plus rare earths with grades up to 33% TREO.

On 1 April 2025, St George announced a maiden resource for the Project which represents both a globally significant niobium and rare earths resource.

# Appendix 1:

Source reference data for resources referred to in Table 1 and Figure 5 is set out below. For market capitalisation, values are based on closing prices as at 10 Junel 2025 in the ASX for Lynas, Arafura and St George; and on the closing price for MP Materials as at 9 June 2025 in the NYSE.

#### Lynas, Mt Weld:

Resource details are from the ASX announcement dated **5** August 2024: "2024 Mineral Resource and Reserve Update" and from the Annual Report FY2023 released to ASX on 12 October 2023.

# Arafura:

Resource details are from ASX announcement dated 11 November 2022 "Nolans Project Update".

#### **MP Materials:**

Resource details are from SEC filing: "FORM 10-K" dated 28 February 2022. Measured Resource assumed to be equal to Proven Reserves. Indicated Resource assumed to equal Probable Reserves.

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

John Prineas	Peter Klinger
Executive Chairman	Media and Investor Relations
St George Mining	Purple
+61 411 421 253	+61 411 251 540
john.prineas@stgm.com.au	pklinger@purple.au



#### **Competent Person Statement – Mineral Resource Estimate**

Mr. Beau Nicholls: The information in this ASX Release that relates to Mineral Resource Estimate and historical/foreign results is based upon, and fairly represents, information and supporting documentation reviewed and compiled by Mr. Beau Nicholls, a Competent Person who is a Fellow of The Australian Institute of Geoscientists. Mr Nicholls is the Principal Consultant of EM2 Ltd (Sahara), an independent consultancy engaged by St George Mining Limited for the review of historical data and preparation of the Mineral Resource Estimate for the Araxá Niobium & Rare Earth Project under the JORC guidelines of 2012. Mr Nicholls 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. Leandro Silva: The information in this ASX Release that relates to Mineral Resource Estimate is based upon, and fairly represents, information and supporting documentation reviewed and compiled by Mr Leandro Silva, a Competent Person who is Member of The Australian Institute of Geoscientists. Mr Silva is the Consulting Geologist of EM2 Ltd (Sahara), an independent consultancy engaged by St George Mining Limited for the review of historical data and preparation of the Mineral Resource Estimate for the Araxá Niobium & Rare Earth Project under the JORC guidelines of 2012. 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 announcement contains information related to the following reports which are available on the Company's website at <u>www.stgm.com.au</u>:

• 1 April 2025 Maiden High-Grade Niobium and Rare Earth Resource Estimate for the Araxá Project, Brazil

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.

#### **Competent Person Statement – Exploration Results**

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 is 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 announcement contains information related to the following reports which are available on the Company's website at <u>www.stgm.com.au</u>:

- 6 August 2024 Acquisition of High-Grade Araxá Niobium Project
- 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.



#### **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.

#### **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 and 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.

# Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Sampling techniquesNature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools 	Drilling programme will be completed by mechanised Auger, Reverse Circulation (RC) and Diamond Core drilling
		Auger Drilling: All samples from the auger drilling are taken as 1m samples from surface to the maximum depth achieved for laboratory assay, expected to be at the maximum depth of 20m or until blade refusal.
	limiting the broad meaning of sampling.	RC Drilling: All samples from the RC drilling are taken as 1m samples to total depth for laboratory assay. Samples are collected using cone or riffle splitter.
		Diamond Core Sampling: 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, NQ2 or HTW core are cut just to the right of the orientation line where available, using a diamond core saw, with half core sampled lengthways for assay.
		Appropriate QAQC samples (standards, blanks and duplicates) are inserted into the sequences as per industry best practice for all samples collected in the different drilling methods.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Auger Drilling: Samples are taken on a one metre basis and collected using uniquely numbered bags. The remaining material for that metre is collected and stored in a plastic bags marked with that specific metre interval and hole ID. A blank sample is inserted at the beginning of each hole, and a duplicate sample is taken every 40th sample. A certified sample standard for niobium and REE is also added according to geology, but at no more than 1:40 samples.
		RC Sampling: Samples are taken on a one metre basis and collected using uniquely numbered bags. The remaining material for that metre is collected and stored in a green plastic bag marked with that specific metre interval and hole ID. The cyclone is cleaned with compressed air after each plastic and calico sample bag is removed. If wet sample or clays are encountered, then the cyclone is opened and cleaned manually and with the aid of a compressed air gun. A blank sample is inserted at the beginning of each hole, and a duplicate sample is taken every 40th sample. A certified sample standard for niobium and REE is also added according to geology, but at no more than 1:40 samples.
		Diamond Core Sampling: For diamond core samples, blank samples are inserted in the first position of the batch and a duplicate sample is taken every 40th sample. A certified sample standard for niobium and REE is also added according to geology, but at no more than 1:40 samples. Core recovery calculations are made through a reconciliation of the actual core and the driller's records.
		For all drilling methods, the number of samples per batch varies between 30 to 46 samples.
		For all drilling, a percentage of the samples will be selected to be assayed by the same method by a different laboratory for umpire checks.
		Downhole surveys will be conducted for both RC and Diamond, with aim to measure the dip and azimuth deviation of the holes

Criteria	JORC Code explanation	Commentary
		The drill-hole collar locations are recorded using a handheld GPS and after completion the final drill hole location will be recorded using a high-precision DGPS station which as expected accuracy of +/- 10cm.
		Geological logging of core is completed at site with core being stored in drill core trays and RC chips in chip trays, the remaining of the auger material that hasn't been sampled is also stored for future reference.
	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	Auger Sampling: Each 1m composite bulk sample is naturally dried, clumps/lumps are diminished with the help of a sieve, the full content of the bulk sample are than homogenised, divided in quarters and collected for assay, typically weighs 2-3kg, and once dried, is prepared for the laboratory as per the sample method below. RC Sampling: A 1m composite sample is taken from the bulk sample of RC chips that may weigh in excess of 40 kg. Each sample collected for
	other cases more explanation may be required, such as where there is coarse gold	assay typically weighs 2-3kg, and once dried, is prepared for the laboratory as per the sample method below.
	that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Diamond Core Sampling: Diamond core (both HTW, HQ and NQ2) are half-core sampled to geological boundaries with an average sample size of 1 meter. A minimum size of 20 cm and maximum of 1.2m. 95% of samples are expected to be less or equal than 1 metre.
		The samples are prepared by the laboratory according to the following procedure:
		Whole samples drying and weighing, crushing of sample to -2mm followed by homogenization and splitting to a 250g sub-sample. Samples pulverization to 85% passing 75 micron and splitting of pulverized material to 50-gram pulp.
		Elements for all suites go through the following analytical method:
		Elements are analysed by ALS Laboratories using Lithium Metaborate fusion and an ICP-MS/AES finish. These elements are: La2O3, CeO2, Pr6O11, Nd2O3, Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Lu2O3, Ho2O3, Er2O3, Y2O3, Yb, Tm2O3, Nb2O5, Hf, Rb, Sn, Ta, Th, U, V, W, Zr, Sc, SiO2, Na2O, P2O5, Al2O3, K2O, SrO, Fe2O3, Cr2O3, BaO, CaO, TiO2, MgO, MnO and LOI.
		Elements are analysed by SGS Laboratories using Lithium Metaborate fusion and an ICP-MS/XRF finish. These elements are: La2O3, CeO2, Pr6O11, Nd2O3, Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Lu2O3, Ho2O3, Er2O3, Y2O3, Yb, Tm2O3, Nb2O5, Hf, Rb, Sn, Ta, Th, U, V, W, Zr, Sc, SiO2, Na2O, P2O5, Al2O3, K2O, SrO, Fe2O3, Cr2O3, BaO, CaO, TiO2, MgO, MnO and LOI.
		Due to the high-grade nature of the deposit, assays results that are reported above the upper detection limit for the methods above mentioned will be subject to determination by XRF finish.
		Prior to be analysed by the methods above mentioned, the samples will be analysed using a Sciapps X555 portable XRF, the results obtained from the portable XRF analyses are indicative only and will only be used as preliminary indication of mineralisation occurrences and for the purposes of geological interpretation.
Drilling techniques	Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Banaka.	Drilling programme will be completed by mechanised Auger, Reverse Circulation (RC) and Diamond Core drilling
·	sonic, etc) and details (eg core diametre, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method atc)	Auger Drilling: The auger holes are drilled from surface to planned depth or until blade refusal, samples are collected from the auger blade sampler every 1 metre.
		RC Drilling: The RC holes are drilled from surface through the regolith to planned depth, samples are collected every 1 metre using cone or riffle splitter

Criteria	JORC Code explanation	Commentary
		Diamond Core Sampling: The diamond holes are drilled from surface through the regolith to planned depth using a either a HTW, HQ or NQ2 diameter, subject to ground and geological conditions, triple-tube core barrels will be used whenever possible to preserve sample integrity.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Auger drilling: samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with remaining representative auger samples stored in plastic bags for future reference.
		RC Drillling: samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with representative RC chips stored in chip trays.
		Diamond Core Sampling: Diamond core recoveries are recorded during drilling and reconciled during the core processing and geological logging. The core length recovered is measured for each run and recorded which is used to calculate core recovery as a percentage.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Auger Drilling: Samples are collected directly from the auger blade sampler in a 1m interval and stored directly in individually labelled plastic bags. Geological logging of the samples collected is completed at site with representative samples being stored in bags.
		RC Drilling: Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.
		Diamond Drilling: Measures taken to maximise core recovery include using appropriate core diameter and shorter barrel length through the weathered zone, which at Cathedrals and Investigators is mostly <20m and Stricklands <40m depth. Primary locations for core loss in fresh rock are on geological contacts and structural zones, and drill techniques are adjusted accordingly, and if possible, these zones are predicted from the geological modelling.
	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.	To date, no sample recovery issues have yet been identified that would impact on potential sample bias in the soil/regolith profile or sampling methods.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Logging of samples records lithology, mineralogy, mineralisation, alteration, structures (core only), weathering, colour and other noticeable features to a level of detail to support appropriate Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The logging is both qualitive and quantitative in nature, with sample recovery and volume being recorded. All core trays and chip trays are photographed in sequence and in both dry and wet form.
	The total length and percentage of the relevant intersections logged.	All drill holes are geologically logged in full. The data relating to the elements analysed is later used to determine further information regarding the detailed rock composition.
		Detailed litho-geochemical information is collected by the portable XRF unit to help with lithological identification and geological interpretation.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Diamond core are drilled with HTW, HQ and NQ2 size and sampled as complete half core to produce a bulk sample for analysis. Intervals selected varied from $0.2 - 1.2m$ (maximum) where 5% of samples are expected to be less or equal than 1 metre. The HTW, HQ and NQ2 core is cut in half length ways using a diamond core saw. All samples are collected from the same side of the core where practicable.

Citteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Auger samples are collected in dry form directly from the auger blade sampler in a 1m interval and stored in individually labelled plastic bags. Geological logging of auger samples are completed at site with representative samples stored in bags for future reference.
		RC samples are collected in dry form. Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Assay preparation procedures follow a standard protocol which include drying and weighing of whole sample, samples are then crushed to - 2mm size. Sample homogenization and splitting to a 250g sub-sample. Pulverization to 85% passing 75 micron and splitting of pulverized material to 50-gram pulp.
	Quality control procedures adopted for all sub-sampling stages to maximise	Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks
	representivity of samples.	Auger Sampling: Field QC procedures maximise representivity of Auger samples and involve the use of certified reference material as assay standards, along with blanks and duplicates with each sample batch.
		RC Sampling: Field QC procedures maximise representivity of RC samples and involve the use of certified reference material as assay standards, along with blanks and duplicates with each sample batch.
		Diamond Core Sampling: Drill core is cut in half lengthways and the total half-core submitted as the sample. This meets industry standards where 50% of the total sample taken from the diamond core is submitted. QC procedures maximise representivity of diamond core and involve the use of certified reference material as assay standards, along with blanks and duplicates with each sample batch.
		For all drilling, QAQC results are routinely reviewed to identify and resolve any issues, eventual failed batches are re-analysed.
		A percentage of the global samples are selected to be assayed by the same method by a different laboratory for umpire checks.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for	Auger drilling: Duplicate samples are selected during sampling for auger by collecting a representative sample of the same homogenised/quarted pile.
	field duplicate/second-half sampling.	RC Driliing: sample duplicates are collected using two separate sampling apertures on the splitter.
		Diamond drilling: Duplicate samples comprise two quarter core samples for Diamond Core.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly represent type and style of mineralisation and associated geology based on the deposit style (supergene deposit), the thickness and consistency of the intersections and the sampling methodology.
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.	The assay method and detection limits are appropriate for analysis of the elements required.

Criteria	JORC Code explanation	Commentary
	For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Airborne "A total of 270 linear kilometres will be surveyed over a 660- hectare area at 25m spacing using a magnetometer GEMSystems GSMP 25U equipped on a Phantom 4 Pro drone platform. XRF: A handheld XRF instrument (Sciapps X555) is used to systematically analyse the drill core, auger and RC sample piles onsite. One reading is taken per half-metre, however for any core samples with expected mineralisation then multiple samples are taken at set intervals. The instruments are serviced and calibrated at least once a year following the manufacturer protocol. Field calibration of the XRF instrument using standards is periodically performed (usually daily).
		reporting of element compositions, prior to the receipt of assay results from the certified laboratory.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable	Laboratory QAQC involves the use of internal lab standards using certified reference material (CRMs), blanks, umpire assays and pulp duplicates as part of in-house procedures.
	levels of accuracy (le lack of bias) and precision have been established.	The Company also submits a suite of CRMs, blanks, umpire assays and selects appropriate samples for duplicates. Company's QAQC protocols are expected to be collected at an overall rate of 16%. Blank samples represent 4% of the database; duplicates, 4%; umpire checks, 4%; and certified reference materials, for niobium and REE, has an expected 4% insertion rate in the program.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections and assays are verified by the Company's Technical Director and Consulting Geologist.
	The use of twinned holes.	8 twinned diamond holes are planned to be drilled in this program, immediately adjacent to historical drilling for validation of historical data.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is captured onto a laptop using acQuire software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is entered into the St George Mining central SQL database which is managed by external consultants.
	Discuss any adjustment to assay data.	No adjustments or calibrations will be made to any primary assay data collected for the purpose of reporting assay grades and mineralised intervals.
		For geological analysis recognised calculations may be used to demonstrate mineralisation potential for one or more elements of interest, such as demonstrate below:
		TREO (Total Rare Earth Oxides) calculations include the summation of the following elements: La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Lu2O3 + Ho2O3 + Er2O3 + Y2O3 + Yb2O3
		MREO (Magnetic Rare Earth Oxides) calculations include the summation of the following elements: Pr6O11+ Nd2O3+ Tb4O7+ Dy2O3
		HREO (Heavy Rare Earth Oxides) calculations include the summation of the following elements: Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Lu2O3 + Ho2O3 + Er2O3 + Y2O3 + Yb2O3
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.	Drill holes have been located and pegged using a Handheld GPS system with an expected accuracy of +/-5m for easting, northing and elevation. Upon completion of drilling the holes will be be recorded using a high- precision DGPS station which as expected accuracy of +/- 10cm.

Criteria	JORC Code explanation	Commentary
		Downhole surveys are conducted using a single shot camera approximately every 30m or downhole Gyro during drilling to record and monitor deviations of the hole from the planned dip and azimuth. Post-drilling downhole gyroscopic surveys will be conducted, which provide more accurate survey results.
	Specification of the grid system used.	The coordinates were provided in following format: SAD 69 datum - georeferenced to spindle 23S.
	Quality and adequacy of topographic control.	Elevation data will be acquired using DGPS surveying at individual collar locations and entered in a central database. A topographic surface will be created using this data and additional topographic survey at later stage.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill holes have been planned to achieve two complementary objectives: first, to convert existing resources to the Indicated category; and second, to expand the current Inferred resource. Hole spacing ranges from approximately 40 to 120 metres, depending on the specific objective being targeted in each area.
	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.	Drilling conducted to date indicates that the mineralised zone remains open both at depth and laterally, highlighting the potential for resource expansion. Ongoing drilling aims to update and increase the current resource base, supporting the definition of Mineral Resources and Reserves in accordance with the classification criteria of the 2012 JORC Code.
	Whether sample compositing has been applied.	No compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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.
	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 orientation-based sampling bias has been identified in the data to date.
Sample security	The measures taken to ensure sample security.	Chain of Custody is managed by the Company until samples pass to a duly certified assay laboratory for subsampling and assaying. The sample bags are stored on secure sites and delivered to the assay 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. The chain of custody passes upon delivery of the samples to the assay laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on the planned drilling programme.

# **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> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Araxa Project is comprised of three granted permits held by Itafos Araxá Mineracao E Fertilizantes S.A ("Itafos Araxá"), which has been acquired 100% by St George.</li> <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 designet d area. Approvals are required from the relevant authorities</li> </ul>

Criteria	JORC Code explanation	Commentary
		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.
		<ul> <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>
		• 3.5% NSR on phosphate;
		<ul> <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> </ul>
		• 3.0% NSR for IRR =<25%;
		• 4.5% NSR for IRR =>25% < 30%;
		• 6.0% NSR for IRR =>30% < 50%;
		• 7.5% NSR for IRR =>50% < 70%; or
		• 10.5% NSR for IRR => 90%.
		• A Government royalty is also payable which can range between 0.2% to 3% of revenue depending on the product produced.
		• The land on which the project tenements are situated is owned either by the State of Minas Gerais, CBMM or another third party. 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.
Exploration done by othe parties	Acknowledgment and appraisal of exploration by other parties. r	Historical exploration within the area of the Araxa Project is known to have occurred since 1965. Known historical exploration includes:
,		1965 to 1974: Exploration by the Brazilian government under the auspices of the

JORC Code explanation	Commentary
	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.
	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 auger holes.
	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.
<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>St George is targeting Carbonatite hosted supergene style Niobium, +/- Rare Earth mineralisation at the Araxa project.</li> </ul>
	• This is based on geological interpretations and existing operating mines within the vicinity of the Barreiro Carbonatite complex.
	<ul> <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> </ul>
	<ul> <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>
<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information</li> </ul>	This ASX Release is not reporting new exploration results.
<ul> <li>for all Material drill holes:</li> <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>	<ul> <li>For historical drill holes, see Tables 1 and 2 in the ASX Release dated 6 August 2024. For methodology of new drilling, see Section 1 of this JORC Table.</li> </ul>
	<ul> <li>JORC Code explanation</li> <li>Deposit type, geological setting and style of mineralisation.</li> <li>Deposit type, geological setting and style 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>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <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. For methodology of new drilling, see Section 1 of this JORC Table.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <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> <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. For methodology of new drilling, see Section 1 of this JORC Table.</li> </ul>
Diagrams	<ul> <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> <li>A prospect location map and section are shown in the body of the ASX Release.</li> </ul>
Balanced reporting	<ul> <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> <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. For methodology of new drilling, see Section 1 of this JORC Table.</li> </ul>
Other substantive exploration data	<ul> <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> <li>This ASX Release is not reporting new exploration results.</li> <li>For historical drill holes, see our ASX Release dated 6 August 2024.</li> </ul>

Criteria	JORC Code explanation	Commentary
Further work	<ul> <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> <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>