

7 October 2025

# Government support for pilot plant for the world-class rare earths and niobium Araxá Project in Minas Gerais, Brazil

St George Technological Centre to be established at CEFET University and includes a new pilot plant for downstream studies by St George as well as research programs by CEFET on sustainable mining and processing innovation

- St George advances downstream studies in partnership with CEFET: St George and CEFET The Federal Center for Technological Education of Minas Gerais, a Government funded public technological institution in the State of Minas Gerais will collaborate on the construction of a new large-scale pilot plant which will be the foundation for the new St George Technological Centre at CEFET's Araxá Campus.
- New pilot plant will build on exceptional historical metallurgical test results: A continuous nine-month pilot plant study completed at the Araxá Project before St George acquired the Project produced rare earth oxalate at > 99% purity with overall recoveries of 86% TREO and successful removal of radionuclides (thorium, uranium).<sup>1</sup>
- Government backing for St George: Significant financial support provided by Government recognises the potential for St George's upstream mine development at Araxá to support a supply chain of critical metals for Brazilian industry and strategic international partners.
- Appointment of metallurgical experts boosts project delivery team: St George has engaged highly experienced experts with industry leading credentials to drive metallurgical studies on rare earths and niobium from the Araxá Project:
  - Mr Alaercio Viera, St George's in-country Metallurgical Consultant previously Metallurgy Manager at Serra Verde, Brazil's only producing rare earth mine, and Process Expert at the world's two largest niobium mines, CBMM in Araxá and CMOC at Catalão, Brazil
  - Mr Gavin Beer, Metallurgical Consultant to St George and competent person for testwork results
  - IMO (Independent Metallurgical Operations) technical manager Mr Peter
     Adamini leading the IMO team and also competent person for testwork results
- St George's Araxá Project the largest and highest-grade carbonatite-hosted REE resource in South America and second highest grade REE resource in the Western world: JORC-compliant Mineral Resource Estimate of 40.6Mt @ 4.13% TREO<sup>2</sup> with a major drill program underway to expand and upgrade the resource.
- 1. See Schedule A below for a technical discussion of the previous metallurgical results.
- 2, See Table 2 below and our ASX Release dated 1 April 2025 'High-Grade Niobium and REE JORC Resource for Araxa' for more information on the Mineral Resource Estimate



St George Mining Limited (ASX: SGQ) ("St George" or "the Company") is pleased to announce the signing of an important partnership agreement with CEFET to establish the St George Technological Centre which will include the construction of a new large-scale pilot plant for use in downstream studies for the high-grade rare earths and niobium from the Company's 100%-owned Araxá Project in Minas Gerais, Brazil.

The St George Technological Centre will be housed at CEFET's university campus in the city of Araxá, close to where the Company's Araxá Project is located.

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

"The downstream collaboration with CEFET, which will include the commissioning of a new pilot plant, marks an important milestone in executing our strategy of an integrated mine-to-market operation.

"We are delighted with the strong government support for the St George Technological Centre and are proud to also be contributing to the community through the Centre being available for educational and industry research.

"The Federal Government agreement to partner with St George in developing the Technological Centre highlights the Company's important role in developing Brazil's critical metals supply chain. The support for the new pilot plant builds on the government relationships forged by St George to date including processing study work by EMBRAPII – a leading Federal Government-funded scientific agency, with 60% of the costs borne by government. We are also part of the MagBras Project – a public-private partnership to establish rare earths magnet making in Brazil – with St George the first rare earths developer to provide product to MagBras for completion of testwork.

"The previous pilot plant study for the Araxá Project delivered excellent results with a final rare earths product of 99% purity and 86% total rare earth recoveries which confirmed the potential to produce a rare earth product that could be used in commercial applications.

"The new pilot plant will allow us to build on these historical results by testing new, innovative processing solutions utilising CEFET's expertise in materials science. We are confident of developing optimised and sustainable production technologies that will support downstream offtake relationships with strategic partners in Brazil, the US and elsewhere.

"We are very pleased with the first-rate metallurgical team we have assembled. Australian-based Gavin Beer and Peter Adamini are internationally recognised for their expertise in rare earths and critical metals metallurgy while Alaercio Viera has hands-on metallurgical experience in rare earths and niobium mines in Brazil, adding to our considerable senior-level, in-country operational experience.

"The qualifications and track record of the team are exemplary and our ability to attract such a high calibre team to St George speaks volumes for the quality of our Araxá Project.

"The collaboration with CEFET to establish the St George Technological Centre is an important milestone for the Company and the Araxá Project. We look forward to reporting more exciting project news as we continue to build our business in Brazil."



#### Research and downstream collaboration

CEFET, The Federal Center for Technological Education of Minas Gerais, is a Government funded public technological institution in the State of Minas Gerais, Brazil, with industry leading credentials in materials science and innovation in critical minerals processing.

CEFET and St George have entered into a binding Memorandum of Understanding ("MOU") under which they will work together to establish the St George Technological Centre at the Araxá campus of CEFET. The new Centre will focus on research, development and innovation activities to support sustainable mining and mineral processing including downstream studies for St George's Araxá Project.

The MOU contemplates the following arrangements:

#### **Pilot Plant**

- (a) CEFET will provide workspace at its Araxá Campus to accommodate the construction and operation of a large-scale pilot plant without any rental charges to St George.
- (b) The pilot plant will be designed in collaboration between CEFET and St George, with St George making available equipment from the 2013 hydrometallurgical pilot plant used for prior metallurgical studies at the Araxá Project.
- (c) The pilot plant will have capacity for both mineral processing and hydrometallurgical refinement with an input of 200kg to 300kg per hour with potential to produce sample products of ferroniobium and rare earths – including rare earth concentrate, MREC (mixed rare earth carbonate) and rare earth oxides.

#### **St George Technological Centre**

- (d) St George shall arrange acquisition of all equipment for the pilot plant based on the final design agreed with CEFET with government concessions for sales tax and import tax expected to reduce the total cost by 50%.
- (e) The Centre will be available for metallurgical testing and associated research and development activities by St George within a broader mandate to carry out research, development and innovation for educational purposes as well as to support the development and production of strategic minerals projects in Minas Gerais.
- (f) St George will have exclusivity to commercialise any intellectual property ("**IP**") it develops at the Centre during the first five years from commissioning of the pilot plant and a right to co-ownership of any other IP developed at the Centre with the percentage of co-ownership to reflect the value added by the contribution of each party.
- (g) St George will finance construction works and equipment acquisition, and implement the pilot-scale conditions over the first three years after commissioning; a two-year transition period (years 4 and 5) in which St George and CEFET will jointly operate the Technological Centre ensuring knowledge transfer, joint process optimisation, and gradual assumption of operational responsibilities by CEFET; full transfer of operational and management responsibility of the Centre to CEFET at the end of year five.

The parties will bear their own costs in progressing the Technological Centre other than as outlined above.



# Pilot plant produces 99% purity of rare earth product

A rare earths oxalate was produced from the chemical refinement of the rare earths from the Araxá Project in a pilot plant study completed in 2012/13, before St George took over ownership of the Project. That pilot plant is in St George's possession and a review will be completed jointly by CEFET and St George as to how the previous equipment can be utilised in the new St George Technological Centre.

Samples of the rare earth oxalate, which were retained by St George when the Company acquired the the Araxá Project, have been delivered to MagBras for completion of magnet making testwork; see the Company's ASX Release dated 29 July 2025 *Araxa Rare Earths Delivered for Magnet Production Study*.

REAlloys, under the US strategic alliance announced on 10 September 2025, is also conducting downstream studies on the Araxa rare earth oxalate; see the Company's ASX Release dated 10 September 2025 *US Strategic Alliance for Araxa Rare Earths*.

The rare earth deportment (expressed as a percentage of contained TREO) in the two batches of rare earth oxalate products delivered to MagBras (around 15kg each) Is given in Table 1:

Table 1 – Rare Earth Oxalate Products from 2012/13 Pilot Plant:

		Individual Rare Earth Deportment as a % of TREO Content							
	La <sub>2</sub> O <sub>3</sub>	CeO₂	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Dy <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	TREO
Rare earth oxalate pilot plant campaign batch 01	25.82	49.46	4.82	15.6	1.53	0.78	0.15	0.29	98.44
Rare earth oxalate pilot plant campaign batch 00	25.26	49.02	4.77	15.4	1.46	0.71	0.19	0.75	97.56

Critical magnet rare earths ("NdPr") correspond for more than 20% of the content of TREO and heavy rare earths around 5% from where it shows high levels of Samarium and Dysprosium, which are also strategic for magnets production. For a further discussion of the 2012/13 pilot plant study, see Schedule A below.

#### Senior metallurgical appointments position St George for project delivery

St George has made three key appointments to boost its metallurgical expertise and further build its Araxá Project delivery team.

Mr Alaercio Viera has been appointed as Metallurgical Consultant and will manage all in-country processing testwork. Mr Viera has extensive metallurgical experience in Brazil including senior metallurgical roles at:

- Serra Verde, the only producing rare earths mine in Brazil.
- CBMM's Araxá, the world's largest niobium mine
- Catalao, the niobium mine of the CMOC Group in Brazil that is the second largest niobium producer in world
- Taboca, a major tin and alloy mine in Brazil also producing niobium as by-product

Mr Viera provides St George with further specialist in-country expertise and knowledge for metallurgical processing.



St George has also engaged leading Australian-based metallurgical experts in rare earths and critical metals – Mr Gavin Beer, Principal Consultant at Met-Chem Consulting Pty Ltd and Mr Peter Adamini, technical manager at the SGS Australia owned Independent Metallurgical Operations Pty Ltd (IMO).

With Met-Chem Consulting and IMO leading the metallurgical program for the Araxá Project, St George aims to deliver an efficient, integrated process from "mine to magnets" entirely within Brazil.

#### SCHEDULE A – METALLURGICAL TESTWORK AT THE ARAXA PROJECT

#### **Key Highlights**

- **Pilot plant success:** A nine-month program in 2013 produced high-purity rare earth oxalate (up to 99% purity) with recoveries of up to 86%.
- **Comprehensive flowsheet evaluation:** More than 50 digestion tests assessed multiple processing routes; sulphuric acid leaching emerged as the preferred option.
- **Extensive sampling:** A 170kg master composite, prepared from 140 individual samples, formed the basis of the major digestion study.
- **Strong beneficiation potential:** Earlier limitations in monazite liberation are expected to be overcome using modern flotation technology.

# Historical Metallurgical Results – Long pedigree of testwork

Metallurgical investigations at the Araxá Project have spanned nearly five decades, providing a robust foundation for today's development:

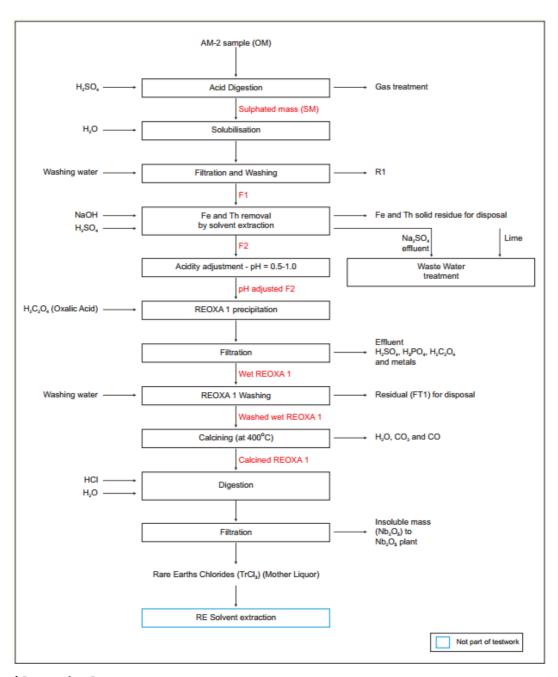
- 1975 (IPR): Initial hydrometallurgical tests on a two-tonne composite achieved rare earth recoveries close to 90%. These early studies confirmed that Araxá mineralisation was amenable to acid processing.
- **2010–11 (Extramil/MBAC):** Bench-scale beneficiation work highlighted the challenge of liberating rare earth-bearing monazite from fine fractions, suggesting that flotation would be required to unlock value.
- 2012 (CETEM/MBAC): Mineralogical characterisation confirmed monazite as the dominant host mineral. A 170kg master composite was subjected to more than 50 digestion tests, covering alkaline, hydrochloric, nitric, ammonium chloride fusion, and sulphuric acid bake routes.
- 2013 (MBAC Pilot Plant): A nine-month continuous operation at Nomos Analises Minerais in Belo Horizonte validated lab-scale results. The plant produced 9kg of rare earth oxalate at >99% purity with overall recoveries of 86%. Radionuclides (Thorium, Uranium) were successfully removed while by-products including niobium and phosphate were also demonstrated.

#### Lessons for today

While historical programs were technically successful, they were based largely on shallow, colluvial material. St George's drilling has since identified deeper, higher-grade zones that are expected to deliver superior beneficiation outcomes. Coupled with advances in flotation and impurity management, the Araxá Project is now positioned for better recoveries, lower costs, and a more commercially robust process.



Figure 1 – Selected Test Work Flowsheet:



# **Preferred Processing Route**

Extensive digestion testing demonstrated that multiple leach routes were viable though the sulphuric acid bake and water leach process delivered the best balance of recoveries, impurities, and downstream compatibility. This was subsequently proven in the 2013 pilot plant operation.



# **Key features of the preferred route:**

- Sulphuric acid bake at controlled temperature to crack monazite and release rare earths.
- Water leach to solubilise rare earths for downstream recovery.
- Impurity removal through solvent extraction, successfully eliminating thorium, uranium and iron.
- Final product: high-purity rare earth oxalate, suitable for conversion to individual oxides.

This outcome provides a proven flowsheet that can be refined using modern reagents and process control.

# Forward Work Plan at the Araxá Project

Building on historical success, St George is implementing a new phase of metallurgical studies that will include the outcome of a significant +10,000m drilling program underway to extend and upgrade the Mineral Resource Estimate at the Araxá Project:

*Modern beneficiation:* Bulk samples will be subjected to advanced flotation to produce high-grade concentrates.

**Flowsheet evaluation**: Both sulphuric acid bake and caustic crack routes are being assessed at bench scale.

**Downstream options:** Products under review include:

- Mixed Rare Earth Concentrate ("MREC").
- Upgraded MREC with La/Ce removal (up to 42.4% Nd/Pr).
- Separated Nd/Pr oxides with SEG/HRE carbonate by-product.

# **Next Steps**

- Continue resource drilling and expand the Mineral Resource Estimate.
- Complete beneficiation and hydrometallurgical testwork on new bulk samples.
- Deliver updated flowsheet studies and progress downstream partnerships.

#### **About the Araxá Project:**

St George acquired 100% of the Araxá Project on 27 February 2025. Araxá is a de-risked, potentially world-class rare earths and niobium 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% 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, as announced by St George on 6 August 2024.

On 1 April 2025, St George announced a MRE for the Project, which represents both a globally significant niobium and rare earths resource as shown in **Table 2** below:

#### 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>):

Resource Classification	Million Tonnes (Mt)	Nb <sub>2</sub> O <sub>5</sub> (%)
Measured	1.90	1.19
Indicated	7.37	0.93
Inferred	31.93	0.59
Total	41.20	0.68

#### Rare earths - total resource:

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

Resource Classification	Million Tonnes (Mt)	TREO (%)	MREO (%)
Measured	1.90	5.44	1.04
Indicated	7.37	4.76	0.90
Inferred	31.37	3.90	0.74
Total	40.64	4.13	0.78

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.

St George has been selected to participate in the Federal Government's MagBras Initiative – a program aimed at establishing an integrated and sustainable rare earth products supply chain including the production of permanent magnets entirely within Brazil – and has signed a cooperation agreement with the State of Minas Gerais in October 2024 pursuant to which the State will assist in expediting permitting approvals for the Araxá Project.

These relationships underscore St George's strategy to integrate with the Brazilian government and business sectors, as well as the local community to support unified and smooth progress in the development of the Araxá Project.

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



Page 9 of 10



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#### Competent Person Statement – Metallurgy:

The information in this document that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of SGS Australia owned Independent Metallurgical Operations Pty Ltd, a wholly owned subsidiary of SGS Australia Holdings Pty Ltd. Mr. Adamini is an independent consultant engaged by St George Mining Limited for the review of historical metallurgical data. Mr Adamini 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 Adamini consents to the inclusion in this ASX release of the matters based on his information in the form and context in which it appears.

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. Gavin Beer, Principal Consultant at Met-Chem Consulting Pty Ltd. Mr Beer is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Beer is an independent consultant engaged by St George Mining Limited for the review of historical metallurgical data. Mr Beer 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 Beer consents to the inclusion in this ASX release of the matters based on his information in the form and context in which it appears.

## **Mineral Resource Estimate:**

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

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 Mineral Resource Estimates included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource Estimates continue to apply and have not materially changed. 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.

#### **Exploration Results:**

This ASX announcement contains information extracted from the following reports which are available on the Company's website at 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 the original market announcement 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 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 persons.

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.

- Ends -

# JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> </ul>	<ul> <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> </ul>
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul> <li>The core samples were prepared according to the following procedure:</li> <li>Whole samples drying and weighing, crushing of sample to -2mm followed by homogenization and splitting to a 1kg sub-sample.</li> <li>Samples pulverization to 95% passing -150 mesh and splitting of</li> </ul>
	<ul> <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> <li>Elements for all suites go through the following analytical method:         <ul> <li>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>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 mineralisation in those holes.</li> <li>The samples were stored in barrels that were properly labelled, catalogued, and archived</li> </ul> </li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Diamond holes were drilled with HQ (63.5mm) rods to enable sufficient material recovery.</li> <li>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,</li> </ul>

Criteria	JORC Code explanation	Commentary
		catalogued, and archived for further analysis. This technique ensure that each 1-meter interval was represented by a discrete sample, providing consistent and high-quality sampling throughout the drilliprogram.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Samples for the metallurgical tests were collected at 1m intervals for 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 hole.</li> <li>For the parent diamond drill holes, recovery was calculated by manoeuvre. No sample bias was recorded.</li> <li>The sampling process for the helical drilling involved collecting the content of the metre sampled and storing it in individual barrels to optimise sample representativeness.</li> <li>Samples for each individual metre were homogenised prior to collection to be submitted for metallurgical testwork.</li> <li>No composite samples were used.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies</li> <li>.</li> </ul>	<ul> <li>All samples selected for metallurgical testwork were logged in sufficient detail to support these tests. The geological team conduct both qualitative and quantitative logging, focusing on key aspects so as geology, alteration, and mineralisation. The logs were recorded digitally and verified for accuracy.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>The Parent Holes drilled by diamond drilling were also logged in de- 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 an verified.</li> </ul>
	The total length and percentage of the relevant intersections logged.	<ul> <li>All drill holes are geologically logged in full. The data relating to the elements analysed is used to determine further information regarding the detailed rock composition.</li> </ul>
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul> <li>The HQ diameter core from the parent diamond drill holes was cut using a saw, with half of the core collected for analysis. These samp</li> </ul>

Criteria	JORC Code explanation	Commentary
sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	were sent to the ALS Laboratory in Vespasiano, Minas Gerais (MG), for processing and analysis.
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>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.</li> </ul>
)	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks with each sample batch.</li> <li>QAQC results are routinely reviewed to identify and resolve any issues.</li> </ul>
)	<ul> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second- half sampling.</li> </ul>	<ul> <li>Duplicate samples are selected during analysis at the laboratory.</li> <li>Samples comprise of coarse rejects of the original sample were submitted to a rate of 3.56% of all samples.</li> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>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.</li> <li>Assay intervals from the parent holes were used as a reference to</li> </ul>
		<ul> <li>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).</li> </ul>
		<ul> <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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>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>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>The assay method and detection limits are appropriate for analysis of the elements required.</li> </ul>
	<ul> <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> </ul>	<ul> <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.</li> <li>Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75µm is being attained.</li> </ul>
	<ul> <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>	The samples from the auger drilling have not been assayed.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>Significant intersections and assays are verified by the Company's Technical Team and Consulting Geologist.</li> </ul>
	The use of twinned holes.	<ul> <li>Mineralized intersections have been verified against the downhole geology and laboratory analysis.</li> </ul>
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <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> </ul>
	Discuss any adjustment to assay data.	<ul> <li>No adjustment has been made to the Nb assay results other than the accepted factors applied to report Nb2O5 rather than Nb as per the industry standards</li> </ul>
		<ul> <li>No adjustment has been made to the Fe assay results other than the accepted factors applied to report Fe2O3 rather than Fe as per the</li> </ul>

Criteria	JORC Code explanation	Commentary
		industry stand:
		<ul> <li>No adjustment</li> </ul>
		accepted facto
		industry standa
		No adjustment
		accepted facto
		industry stand
		<ul> <li>No adjustment</li> </ul>
		accepted facto
		industry stand
		<ul> <li>Multielement</li> </ul>
		(REO) wheneve
		conversion fac
		Eleme
		Ce pp
		La pp
		Y ppn
		<b> </b>
		Er pp
		Eu pp
		Gd pp
		Но рр
		Lu pp
		Nd pp
		Pr ppi
		Sm pp
		Tb pp
		Tm pp

ndards

- ent has been made to the Ba assay results other than the tors applied to report BaO rather than Ba as per the ndards
- ent has been made to the P assay results other than the tors applied to report P2O5 rather than P as per the ndards
- ent has been made to the REE assay results other than the tors applied to report REO rather than REE as per the ndards
- it results (REE) are converted to stoichiometric oxide ever it applies, using the following element-to-oxide actors:

	Conversion	
Element	Factor	Oxide
Ce ppm	1.228	CeO₂ ppm
La ppm	1.173	La₂O₃ ppm
Y ppm	1.27	Y₂O₃ ppm
Dy ppm	1.148	Dy₂O₃ ppm
Er ppm	1.143	Er <sub>2</sub> O <sub>3</sub> ppm
Eu ppm	1.158	Eu₂O₃ ppm
Gd ppm	1.153	Gd₂O₃ ppm
Ho ppm	1.146	Ho₂O₃ ppm
Lu ppm	1.137	Lu <sub>2</sub> O₃ ppm
Nd ppm	1.166	Nd₂O₃ 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	Yb₂O₃ ppm

TREO (Total Rare Earth Oxides) calculations include the summation of

Criteria	JORC Code explanation	Commentary
		<ul> <li>the following elements: La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Lu2O3 + Ho2O3 + Er2O3 + Y2O3 Yb2O3</li> <li>MREO (Magnetic Rare Earth Oxides) calculations include the summation of the following elements: Pr6O11+ Nd2O3+ Tb4O7+ Dy2O3</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>All holes were picked up by RR Topografia e Engenharia planialtimetr topographic surveyors using a Total Station (tacheometer) with an accuracy of +/- 10cm.</li> </ul>
	Specification of the grid system used.	<ul> <li>The coordinates were provided in following format: SAD 69 datum - georeferenced to spindle 23S.</li> </ul>
	Quality and adequacy of topographic control.	<ul> <li>Generation of planialtimetric maps was completed by RR Topografia of Engenharia using a Total Station (tacheometer) with an accuracy of +, 10cm.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <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> </ul>
	<ul> <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> </ul>	<ul> <li>The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity in the totality of the projec to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.</li> </ul>
	Whether sample compositing has been applied.	<ul> <li>The drilling carried out leaves open the geological continuity of the mineralized zone in depth and laterally. There is an opportunity to increase the volume of mineral resources with additional drilling</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material</li> </ul>	<ul> <li>No orientation-based sampling bias has been identified in the data to date.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Chain of Custody is managed by the Company until samples pass to a duly certified assay laboratory for subsampling, assaying and/or metallurgical testing.</li> </ul>
		<ul> <li>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.</li> </ul>
		<ul> <li>The chain of custody passes upon delivery of the samples to the assay laboratory.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>A due diligence has been carried by independent Brazilian-based consulting firm, GE21 Consultoria Mineral upon the process of acquisition of the project.</li> </ul>
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# **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> </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> </ul>
		• Tenement 831.972/1985 is an application for a mining concession that
	<ul> <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>	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.
		<ul> <li>Tenements 832.150/1989 (Exploration Licence) and 831.436/1988</li> <li>(Application for Mining Concession) are subject to renewal and</li> </ul>
		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.
		<ul> <li>Some areas within the project site are classified as legal reserve or</li> </ul>
		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.
		<ul> <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</li> </ul>

Criteria	JORC Code explanation	Commentary
		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.
		<ul> <li>A royalty is payable to Extramil, a former owner of the project. The</li> </ul>
		royalty is a specified percentage of the revenue on Net Smelter
15)		Returns (NSR). The following percentages apply:
		• 3.5% NSR on phosphate;
		• 3.0% - 10.5% NSR on REEs and niobium, on a sliding scale
2		according to the actual Internal Rate of Return of the Araxá
7		Project, more specifically:
		• 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%.
		<ul> <li>A Government royalty is also payable which can range between</li> <li>0.2% to 3% of revenue depending on the product produced.</li> </ul>
		<ul> <li>The land on which the project tenements are situated is owned either</li> </ul>
		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
9 D		that access arrangements will be agreed in the future or the
		timeframe in which such arrangements can be agreed.
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Criteria	JOI	RC Code explanation	Commentary
Exploration done by other parties	٠	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historical exploration within the area of the Araxa Project is known to have occurred since 1965. Known historical exploration includes:</li> </ul>
			1965 to 1974:
5			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.
			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.
Geology • D	Deposit type, geological setting and style of mineralisation.	<ul> <li>St George is targeting Carbonatite hosted supergene style Niobium,</li> <li>+/- Rare Earth mineralisation at the Araxa project.</li> </ul>	
			<ul> <li>This is based on geological interpretations and existing operating mines within the vicinity of the Barreiro Carbonatite complex.</li> </ul>
			<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>
			This compley is known to host high grade supergone (superficial)
			<ul> <li>This complex is known to host high grade supergene (superficial) niobium, rare-earths and phosphate with two existing mines currently</li> </ul>

Criteria	JORC Code explanation	Commentary
		operating within the intrusion since as early as the 1950's.
Drill hole Information	<ul> <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> <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> </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 August 2024. For methodology of historical drilling, see Section 1 of this JORC Table and the JORC Table attached to the ASX Release of 6 August 2024.</li> </ul>
	<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> </ul>	This ASX Release is not reporting new exploration results.
	<ul> <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> </ul>	<ul> <li>For historical drill holes, see Tables 1 and 2 in the ASX Release dated August 2024. For methodology of historical drilling, see Section 1 of this JORC Table and the JORC Table attached to the ASX Release of 6 August 2024.</li> </ul>
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalents are reported.
Relationship between	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	This ASX Release is not reporting new exploration results.
mineralisation		

Criteria	JORC Code explanation	Commentary		
widths and intercept lengths	<ul> <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>August 2024. For methodology of historical drilling, see Section 1 of this JORC Table and the JORC Table attached to the ASX Release of 6 August 2024.</li> <li>The down hole length represents true width.</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 dated 6 August 2024 and subsequent announcements for exploration targeting.</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 historical drilling, see Section 1 of         this JORC Table and the JORC Table attached to the ASX Release of 6         August 2024.</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 Tables 1 and 2 in the ASX Release dated 6         August 2024. For methodology of historical drilling, see Section 1 of         this JORC Table and the JORC Table attached to the ASX Release of 6         August 2024.</li> </ul>		
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 this ASX Release and in each ASX Release reporting exploration results. Further exploration will be planned based on ongoing drill results, geophysical surveys, metallurgical testwork results and geological assessment of prospectivity.</li> </ul>		