Third Brazil Drill Program to Commence in the Lithium Valley

Key Highlights

- **Third drill program to commence in Brazil, targeting lithium and rare earth elements**
- **The Padre Paraíso project is located in the Lithium Valley, Minas Gerais in close proximity to Sigma's Grota Do Cirilo lithium-producing mine and Latin Resources' Colinas Resource**
- **Drill program to test regolith profile on thorium anomalies for potential ionic adsorption clay-rich rare earth elements as well as following up previous lithium soil anomaly of 103ppm in the north east of the project area**
- **This is the third drill program of the Company's Brazil exploration campaign with two rare earth elements programs at the Poços de Caldas rare earth elements rich intrusive complex in progress**

Si6 Metals Limited ("**Si6**" or "the **Company**", ASX: **Si6**) is pleased to announce that a 20-hole auger drill program is set to commence at the Company's Padre Paraíso project, located in the north-eastern region of the state of Minas Gerais in Brazil, known as the "Lithium Valley" (Figure 1). This project area is prospective for both lithium (**Li**) and rare earth elements (**REE**).

The Eastern Brazilian pegmatite province, globally recognised as the Lithium Valley, is one of the world's largest lithium spodumene districts and is also prospective for REE. This region is host to several world-class Lithium deposits including Sigma Lithium Corporation's (NASDAQ: SGML) Grota Do Cirilo, which is approximately 40 km's to the west of the Padre Paraíso project, Latin Resources (ASX: LRS) Colinas resource and Rio Tinto's (ASX: RIO) significant land holding to the north.

Managing Director, Jim Malone commented,

"We are delighted that our third auger drilling program has commenced in the Lithium Valley. This project area is well located near some major Lithium discoveries including Sigma Lithium Corp's world class Grota Do Cirilo project, which sits 40km's from our license. The area is also highly prospective for REE.

Si6 now has three drilling programs occurring concurrently at three of our 10 joint venture projects in Brazil. This once again demonstrates our plan to aggressively explore our strategically acquired projects in Brazil".

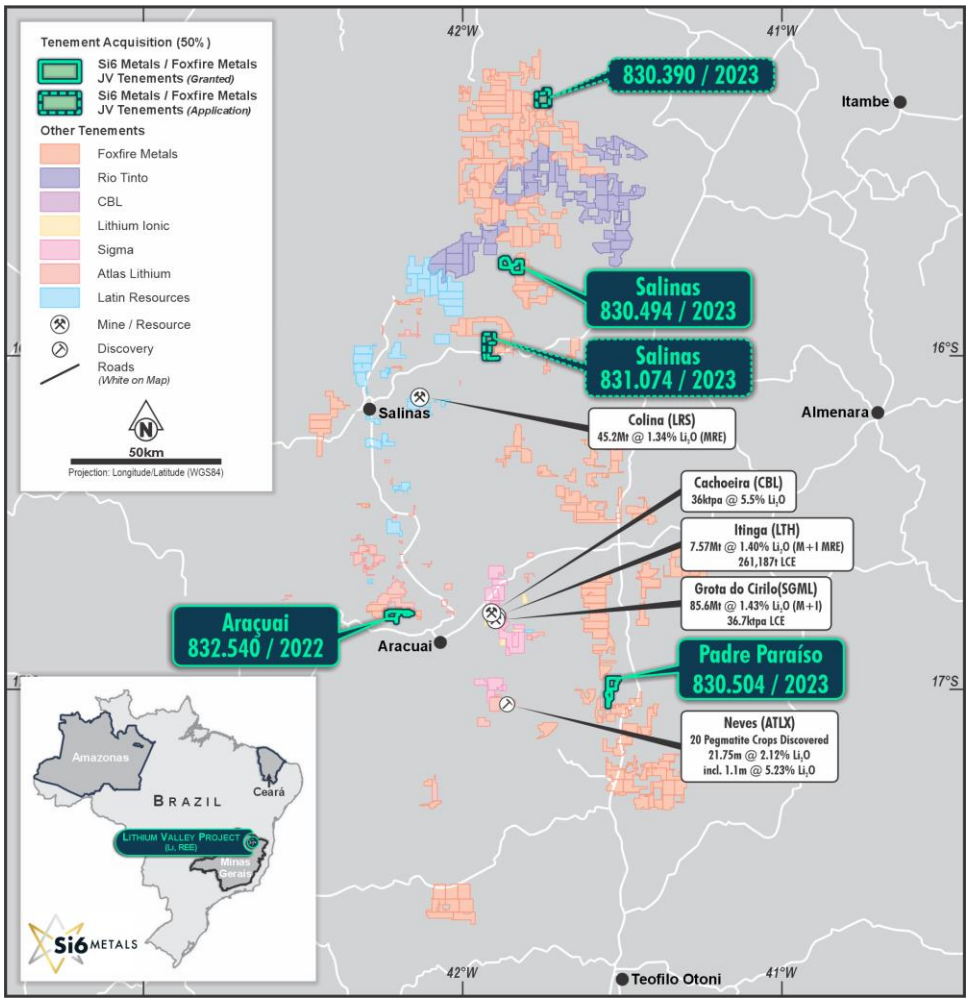

Figure 1: Padre Paraíso Project (and other SI6-Foxfire Metals JV projects) in the Lithium Valley, amongst major lithium discoveries (Sigma, CBL, Atlas Lithium, Latin Resources).

The auger program (Figure 2) is planned across 400 metre spacings with an average depth of 12 metres and is designed to test the regolith profile on thorium anomalies as well as to follow up on previous work that identified anomalous soil samples which include 103ppm Li in the north-east of the license (Table 1). Drilling in the south-east of the license will test previously completed geochemical results which have detected soil samples grading up to 711ppm total rare earths oxide (TREO).

The drilling will run in conjunction with the Company's two REE drill programs currently taking place at its two Caldera projects at the Poços de Caldas Alkaline Complex in southern Minas Gerais (see ASX announcements 26 March 2024 and 3 April 2024) which are targeting clay-hosted REE.

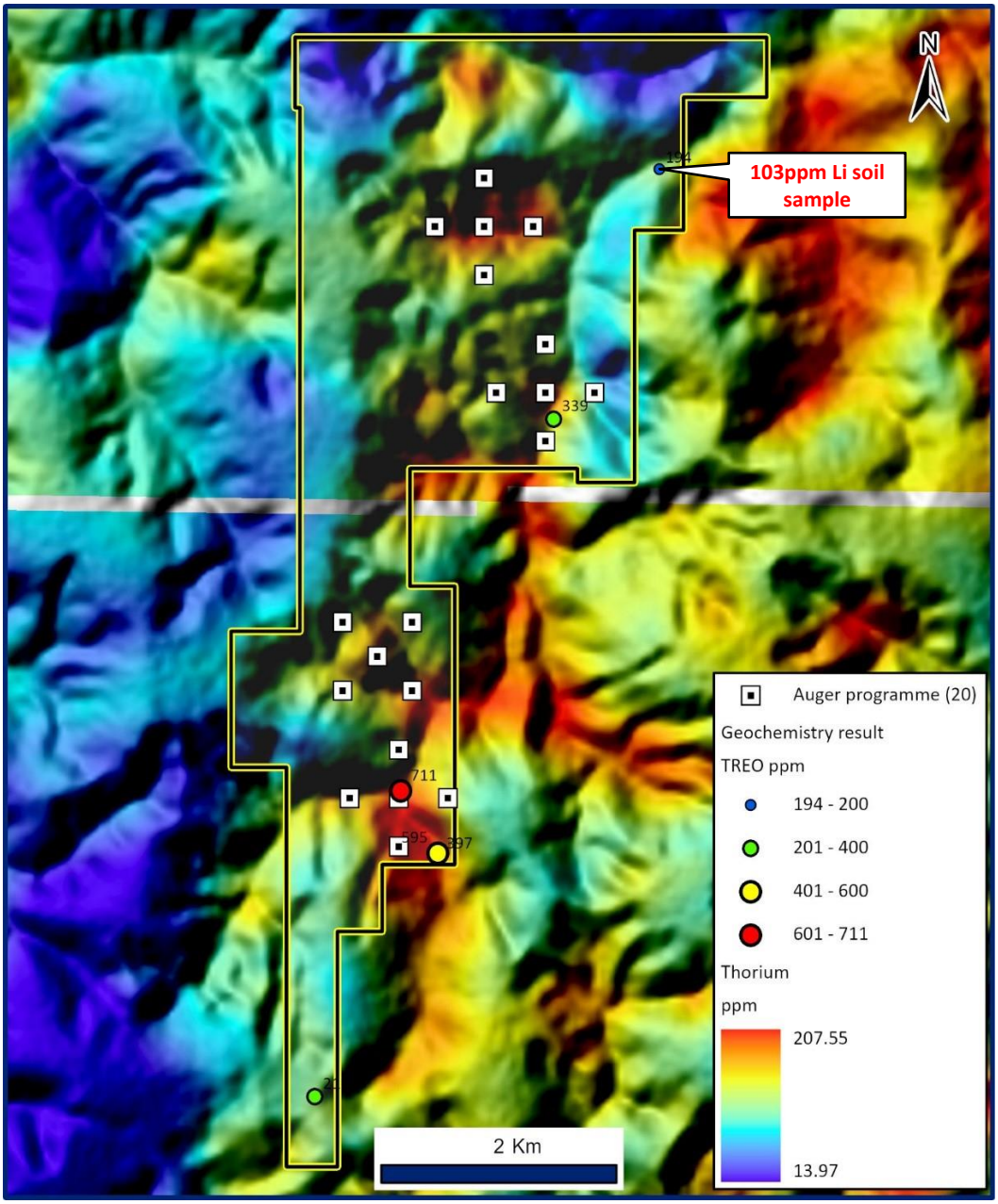

Figure 2: Plan showing the 20-hole auger drilling plans at Padre Paraíso over Thorium radiometric survey.

Table 1. Initial Sample Results at Padre Paraiso

SAMPLEID	LATITUDE	LONGITUDE	UTM_Z	SAMPLE TYPE	TREO ppm	MREO ppm	MREO/ TREO %	Li ppm
PMGLS-5 0002	-17.0275	-41.53476903	733	SOIL	595	122	21%	18
PMGLS-5 0004	-16.9952	-41.52589449	645	SOIL	339	74	22%	16
PMGLR-5 0001	-17.0278	-41.53473501	733	ROCK	397	86	22%	47
PMGLS-5 0005	-16.9765	-41.51782565	638	SOIL	194	44	23%	103
PMGLS-5 0001	-17.0457	-41.54415006	927	SOIL	213	38	18%	0.5
PMGLS-5 0003	-17.0229	-41.53760731	709	SOIL	710	149	21%	11

This announcement has been approved by the Board of Si6 Metals Ltd.

Contacts

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About Si6

Si6 is a diversified critical metals and minerals explorer with a portfolio of flagship projects in Brazil, Botswana and Western Australia.

Si6 has entered a joint venture to acquire 50% of a portfolio of critical metals exploration assets from Foxfire Metals Pty Ltd, predominantly focused on rare earth elements and lithium in Brazil including projects amongst known discoveries in the Lithium Valley (North Minas Gerais) and Poços de Caldas (South Minas Gerais).

The Company's Botswana portfolio contains three flagship projects where high-grade Cu-Ag (Airstrip and Dibete) and a Maiden JORC Inferred Resource (Maibele North) have been discovered. Maibele North currently hosts a JORC (2012) inferred resource of 2.4Mt @ 0.72% Ni and 0.21% Cu + PGE's + Co + Au and is located within 50km of the Selebi mine recently acquired by TSX-listed Premium Nickel Resources Ltd (TSX-V:PNRL).

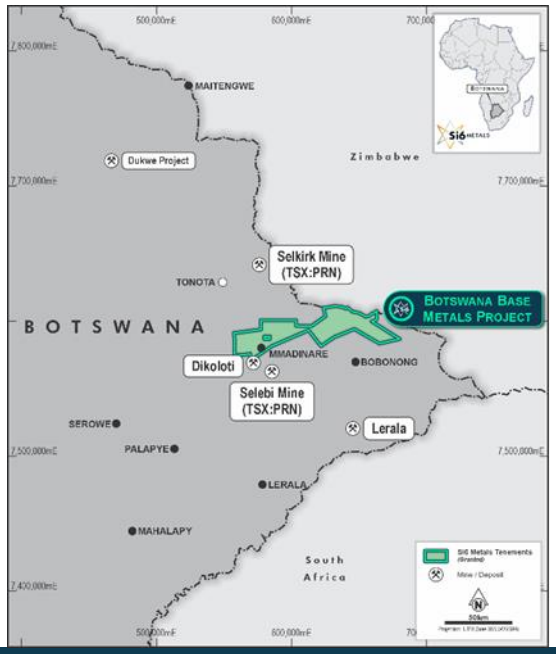
The Company also owns 100% of the Monument Gold project located in Laverton, WA that hosts a JORC-compliant (2012) Inferred Resource of 3.26Mt at 1.4 g/t Au for 154k contained ounces gold.

Botswana

- **Dibete Project** – high grade copper-silver
- **Airstrip Project** – high grade copper-silver
- **Maibele North Project** – Ni-Cu-PGE JORC Inferred Resource 2.38Mt @ 0.72% Ni + 0.21% Cu + PGE + Au

Brazil (50% Joint Venture)

- **Lithium Valley Projects**, North Minas Gerais (Lithium, Rare Earth Elements)
- **Caldera Project**, South Minas Gerais (Rare Earth Elements)
- **Apuí Project**, Amazonas (Rare Earth Elements, Gold)
- **Pedra Branca Project**, Ceara (Gold, PGE)



Competent Persons Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on recent and historical exploration information compiled by Dr Paul Woolrich, who is a Competent Person and a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Dr Woolrich 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 the reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Woolrich consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Disclaimer

In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above announcement. No exploration data or results are included in this document that have not previously been released publicly. The source of all data or results have been referenced.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Si6's mineral properties, planned exploration program(s) and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward looking statements. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

Appendix 1: Auger drill-hole Location

Hole ID	East	North	RL (m)	Depth	Azimuth	Dip	Tenement
CJV-AUG-001	230258	8116027	823	8	0	-90	830.504/2023
CJV-AUG-002	229838	8116218	733	10	0	-90	830.504/2023
CJV-AUG-003	229844	8115684	751	10	0	-90	830.504/2023
CJV-AUG-004	229407	8116018	763	10	0	-90	830.504/2023
CJV-AUG-005	229548	8116885	764	5	0	-90	830.504/2023
CJV-AUG-006	229975	8116937	690	7	0	-90	830.504/2023

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for*	• Geochemistry exploration results are based on the soil and rock sampling completed during March 2023. • Collection of rock chips samples of approximately 1.5kg/sample and soil sampling using a post hole digger at approximately 50cm below surface. • Auger sampling was carried out at 1m intervals down to the top of fresh rock and samples were logged and bagged to send to SGS for sample preparation and assaying.

	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.	
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• A motorized 2.5HP soil auger with a 3" bit was used to drill. The drilling is an open hole, meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No recoveries are recorded. • No relationship is believed to exist between recovery and grade.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Holes were logged by assigned geologist, detailing the colour, weathering, alteration, texture and any geological observations. • Qualitative logging with systematic photography of the intervals drilled. • The entire auger hole is logged.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation*
		• Auger samples were submitted to SGS-GEOSOL laboratory located in Vespasiano, Minas Gerais state, Brazil.
		• Samples preparation comprise:
		  • Drying at 105º C
		  • Crushing 90% < 2mm
		  • Homogenization and splitting with Jones splitter.
		  • Pulverization: The 250 to 300g sub-sample was pulverized using a steel mill until 90% of the

<table>
<tr><td></td><td>technique.
• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
• Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td>sample particles achieved a fineness below 200 mesh.</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>• 1 blank sample, 1 certified reference material (standard) sample and 1 field duplicate sample were inserted by company into each 25 sample sequence.
• Standard laboratory QA/QC procedures were followed, including inclusion of standard, duplicate and blank samples.
• The assay technique used was Sodium Peroxide Fusion ICP OES / ICP MS (SGS code ICM90A). Elements analyzed at ppm levels:
<table><tr><td>Ce 0.1 – 10,000</td><td>Dy 0.05 – 1,000</td></tr><tr><td>Er 0.05 – 1,000</td><td>Eu 0.05 – 1,000</td></tr><tr><td>Gd 0.05 – 1,000</td><td>Ho 0.05 – 1,000</td></tr><tr><td>La 0.1 – 10,000</td><td>Li 10 – 15,000</td></tr><tr><td>Nd 0.1 – 10,000</td><td>Pr 0.05 – 1,000</td></tr><tr><td>Sm 0.1 – 1,000</td><td>Tb 0.05 – 1,000</td></tr><tr><td>Th 0.1 – 1,000</td><td>Tm 0.05 – 1,000</td></tr><tr><td>U 0.05 – 10,000</td><td>Y 0.05 – 1,000</td></tr><tr><td>Yb 0,1 – 1,000</td><td></td></tr></table>The sample preparation and assay techniques used are industry standard and provide total analysis.
• The SGS laboratory used for assays is ISO 9001 and 14001 and 17025 accredited.</td></tr>
<tr><td>Verification of sampling and assaying</td><td>• The verification of significant intersections by either independent or alternative company personnel.
• The use of twinned holes.
• Documentation of primary data, data entry procedures, data verification, data storage</td><td>• Apart from the routine QA/QC procedures by the Company and the laboratory, there was no other independent or alternative verification of sampling and assaying procedures.
• No twinned holes were used.
• Primary data collection follows a structured protocol, with standardized data entry procedures ensure that any issues are identified and rectified. All data is</td></tr>
</table>

	(physical and electronic) protocols. • *Discuss any adjustment to assay data.*	stored both in physical forms, such as hard copies and electronically, in secure databases with regular backups. • The adjustments to the data were made transforming the element values into the oxide values. The conversion factors used are included in the table below. (Source:https://www.jcu.edu.au/advanced-analyticalcentre/resources/element-to-stoichiometric-oxide-conversionfactors). • Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3 LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3 CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3

Element ppm	Conversion Factor	Oxide Form
Ce	1.2284	CeO2
Dy	1.1477	Dy2O3
Er	1.1435	Er2O3
Eu	1.1579	Eu2O3
Gd	1.1526	Gd2O3
Ho	1.1455	Ho2O3
La	1.1728	La2O3
Lu	1.1371	Lu2O3
Nd	1.1664	Nd2O3
Pr	1.2082	Pr6O11
Sm	1.1596	Sm2O3
Tb	1.1762	Tb4O7
Tm	1.1421	Tm2O3
Y	1.2699	Y2O3
Yb	1.1387	Yb2O3

		(From U.S. Department of Energy, Critical Material Strategy, December 2011) MREO (Magnetic Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3 NdPr = Nd2O3 + Pr6O11 DyTb = Dy2O3 + Tb4O7 In elemental from the classifications are: TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The UTM WGS84 zone 24S grid datum is used for current reporting. The auger holes collar coordinates for the holes reported are currently controlled by hand-held GPS.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Auger holes programmed in a cross with a spacing of 400 meters, designed for reconnaissance testing over a 4 targets area. • The data spacing and distribution is sufficient to establish the level of REE elements present in the target area and its continuity along the regolith profile. • No sample composition was applied.
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.* • *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.*	• The location and depth of the sampling is appropriate for the deposit type. • Relevant REE values are compatible with the exploration model for IAC REE deposits. • No relationship between mineralization and drilling orientation is known at this stage.

Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by field person and carefully packed in labelled raffia bags. Once packaged, the samples were transported by contracted freight company directly to the SGS-GEOSOL facility in Vespasiano, Minas Gerais state. The samples were secured during transportation to ensure no tampering, contamination, or loss. Chain of custody was maintained from the field to the laboratory, with proper documentation accompanying each batch of samples to ensure transparency and traceability of the entire sampling process.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• As of the current reporting date, no external audits or review have been conducted on the sampling techniques, assay data, or results obtained from this work. However, internal processes and checks were carried out consistently to ensure the quality and reliability of the data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All samples were acquired from tenement 830.504/2023 as owned 50% by Si6 Metals Ltd via Brazilian Mining Ventures Ltda, under a joint venture agreement with FoxFire Metals Pty Ltd. • Area: 1,647.08 hectares • Status: Exploration Licence
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No exploration by other parties has been conducted in the region.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The REE mineralisation is contained within the tropical lateritic weathering profile developed on top of granitic rocks, as per the Chinese deposits. • The REE mineralisation is concentrated in the weathered profile where it has dissolved from the primary mineral, such as monazite and xenotime, then adsorbed on to the neo-forming

Criteria	JORC Code explanation	Commentary
		fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). • This adsorbed iREE is the target for extraction and production of REO.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Auger locations and diagrams are presented in this announcement. • Details are tabulated in the announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	•
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the*	• No assay results were reported for the auger samples. • Mineralisation orientation is not known at this stage, although assumed to be flat.

Criteria	JORC Code explanation	Commentary
	drill hole angle is known, its nature should be reported. • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The downhole depths are reported, true widths are not known at this stage.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Maps and tables of the auger holes location and target location are inserted.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	•
Other substantive exploration data	• *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.*	• The thorium map is referring to the airborne geophysical survey data from Minas Gerais government. Title: Área 16 Minas Gerais - Padre Paraiso - Nanuque - Mantena year: 2010 flight line spacing - 500 metres flight line direction - N-S
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Future work may comprise additional auger drilling subject to results of this campaign