Sahara

On behalf of:

Spark Energy Minerals Inc.

Technical Report NI43-101 for Arapaima Lithium and Rare Earth Elements project, Brazil

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Document Information Page

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1 SUMMARY

1.1 Introduction

Spark Energy Minerals Inc. (SEM) has commissioned E2M Ltd (Sahara) to compile a Technical Report for the Arapaima Lithium and REE project (project), located in Minas Gerais state of Brazil. This report has been completed in accordance with the guidelines of Canadian Institute of Mining (CIM) National Instrument 43-101 and accompanying documents 43-101.F1 and 43-101.CP ("NI43-101").

In 2023, the government of Minas Gerais launched the Lithium Valley Brazil initiative (Vale do Litio - or Jequitinhonha Valley) with the aim of developing cities in the Northeast and North regions of the state around the lithium production chain.

1.2 Location

The Arapaima Project area extends across 919km^2 of the "Lithium Valley".

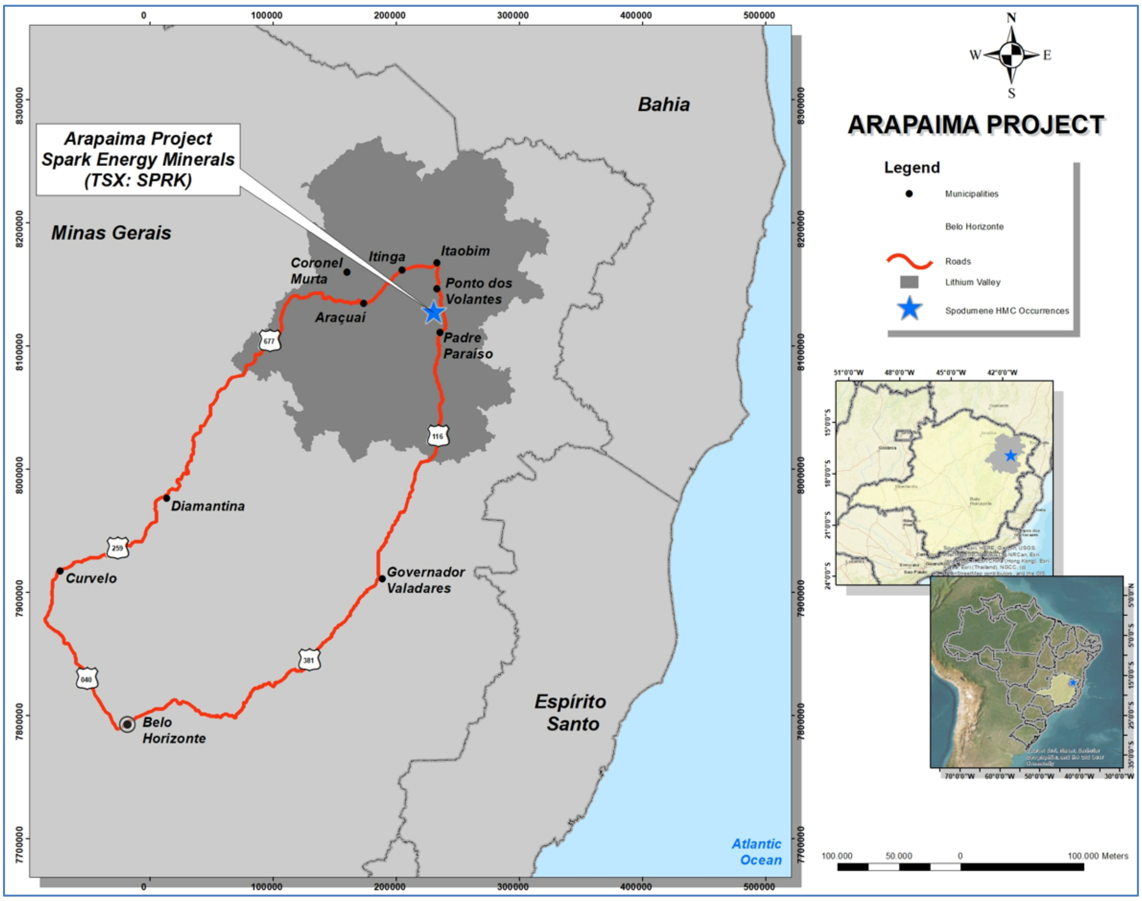
The main cities in the Lithium Valley are Araçuaí, Capelinha, Coronel Murta, Itaobim, Itinga, Malacacheta, Medina, Minas Novas, Pedra Azul, Virgem da Lapa, Teófilo Otoni, Turmalina, Rubelita, and Salinas.

Access to the Arapaima Lithium and REE Project from the state of Minas Gerais capital city of Belo Horizonte, is via the 550km (~ 8.5 hours' drive) BR381 and BR116 highways. The roads are sealed the entire way. There is also an option to fly to some of the closer regional centres then drive by road (Figure 1.2_1).

The town of Padre Paraiso, located right at the "gateway of the Lithium Valley", is a short distance from the southern blocks of SEM's tenement package and is currently used as a base camp.

The Sigma Lithium mine is located approximately 15km west of the Arapaima Lithium and REE project.

Figure 1.2_1
Arapaima Lithium and REE project – Access

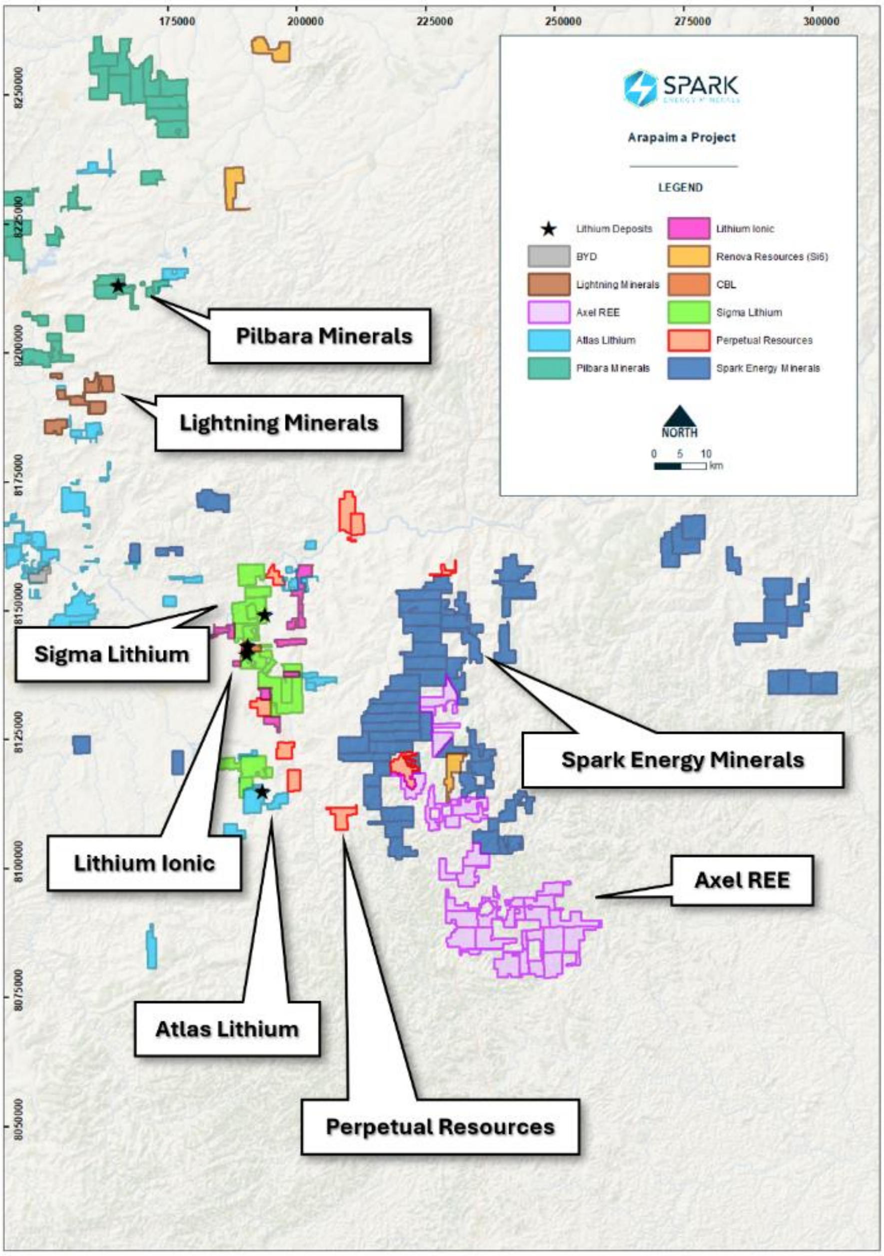


1.3 Ownership and Permitting

SEM´s Arapaima Lithium and REE project includes a total of 58 granted Exploration Licenses (EL) and 4 Exploration License applications which cover a total surface area of approximately 919km^2 (Figure 1.3_1).

An exploration license in Brazil is valid for 3 years and can be renewed for an additional 2 times 3-year periods.

Figure 1.3_1
Arapaima Lithium and REE project – Permits



Brazil's "Lithium Valley," has become a focal point for lithium and rare earth element (REE) exploration and development. Below is the main operators, developers and explorers in this region:

- **Sigma Lithium (TSX: SGML)**
- **Pilbara Minerals (ASX: PLS)**
- **Lithium Ionic (TSXV: LTH)**
- **Atlas Lithium (NASDAQ: ATLX)**
- **Si6 Metals Ltd (ASX: VRL)**
- **Perpetual Resources (ASX: PEC)**
- **Axel REE (ASX: AXL)**

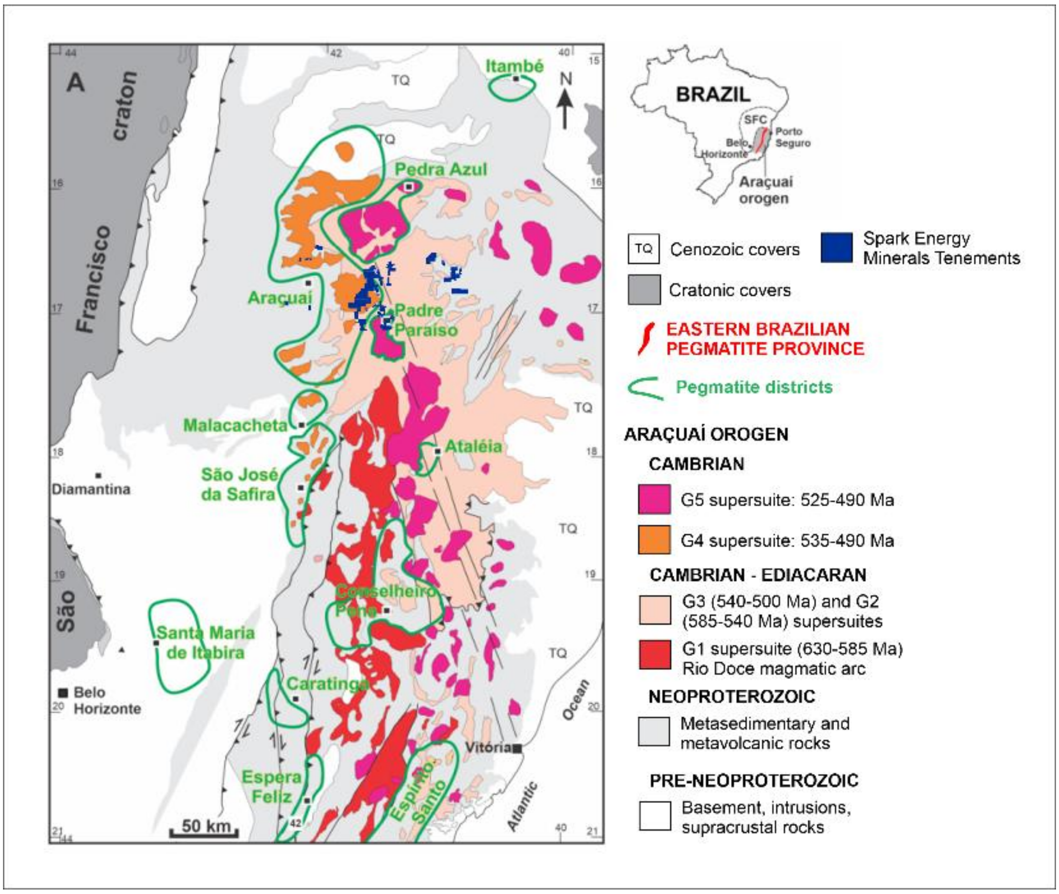
1.4 Geology

The project area lies within the Eastern Brazilian Pegmatite Province (EBPP), spanning an extensive region of approximately 150,000km^2 across the states of Bahia, Minas Gerais, Espírito Santo and Rio de Janeiro. Approximately 90% of the EBPP is in the eastern part of Minas Gerais state, where mining activities targeting gem-bearing pegmatites have been ongoing since the 17th century.

Granitic pegmatites represent silica-saturated magmas variably rich in H_2O and bearing fluids, as well as in other hyperfusible (fluxing) components (e.g., Li, Na), crystallized in rather closed chemical systems (cf. Cerný, 1991; London, 2008). The EBPP comprises the two known genetic types of pegmatites, both formed during the evolution of the Araçuaí Orogen: i) the anatectic pegmatites generated directly from the partial melting of country rocks, and ii) the residual pegmatites, representing late silicate melts released by fractional crystallization of parental granites. Genetic affiliation and other criteria allow pegmatite districts to be distinguished in the EBPP.

The Araçuaí Pegmatite district encompasses the most important lithium projects within the entire province, prominently situated in the Itinga, Coronel Murta, and Curralinho pegmatitic fields. This area is referred to as the Lithium Valley as highlighted in the green "pegmatite districts" in the figure below.

Figure 1.4_1
Regional Geology (Source: Modified from Pedrosa-Soares et al. 2011)



The Sigma Lithium deposit is located 15km west of the SEM project. The Sigma Lithium pegmatites are commonly hosted by a medium-grey, biotite-quartz schist. Typically, these pegmatites are concordant with the schist foliation which also corresponds to the overall strike of the schist-rich units of the Salinas Formation.

On the most recent government geological maps, the presence of pegmatites is not reflected in the SEM Arapaima Lithium and REE project. The geology appearing on these maps is dominated by Mica granites (G2) and Biotite granites (G4) as shown in the figure above. The Arapaima project tenement area comprises a dissected plateau characterized by a thick covering of lateritic regolith. A well-developed network of drainage is carved into the plateau exposing sections through the regolith into oxidized, granitoid intrusive rocks of the basement complex in the valley sides and floors. The granitoids are cut by an anastomosing suite of late-stage pegmatites continually identified in the windows of weathered exposure between the cover. Mapping by SEM has subsequently defined extensive pegmatite outcrop throughout the project including 123 individual pegmatite occurrences within 13 pegmatite trends over a combined strike of ~31 km.

1.5 Mineralization

The mineralization being targeted within the project area are Lithium – Cesium – Tantalum (LCT) - type pegmatites and Rare Earth Oxide (REO) Clays.

The typical pegmatites observed in the field ranged from 10cm width to zones of up to 200m width with multiple pegmatites identified. In all cases the pegmatites observed are highly weathered whereby only more resistant minerals dominantly Tourmaline + Quartz + Feldspar + Mica are readily identified.

Typical pegmatites identified during the Sahara visit are shown in the figure below.

Figure 1.5_1
Pegmatite outcrop (Source: Sahara Site Visit 2025)

	
Pegmatites located in the field	***Typical Tourmaline, Quartz and Feldspar pegmatite***

Lithium is soluble in supergene weathering profiles and is often leached from Lithium bearing minerals like Spodumene and Lepidolite under surface oxidation and tropical weathering.

This weathering results in relatively low tenure Lithium results from samples collected from oxidized and leached surface of the pegmatites (lower tenure but still above detection, and anomalous relative to background crustal abundances) have been found to reflect significantly higher grade, potentially economic, Lithium mineralization hosted by these pegmatites at depth.

In addition, there are several pathfinder elements that help define fertile pegmatites These include:

- Potassium / Rubidium (K/Rb) ratios reflecting melt fractionation at levels consistent with the evolved melts required for lithium pegmatite formation;
- very high correlation between Lithium and Niobium;
- highly anomalous Tin, Tantalum, Gallium, and Niobium and
- a low Tantalum / Niobium ratio which is important in identifying spodumene rich pegmatites.

1.6 Exploration History

Prior to SEM commencing field-based exploration work in November 2024, exploration activities were focused on desktop target generation utilizing public domain data available.

Two government reports in 2016 and 2023 highlighted prospectivity for Lithium in the region, based on identification of Lithium minerals in heavy mineral pan concentrates along with pathfinder elements. The reports presented a drainage prospectivity ranking exercise, based on the stream sediment and pan concentrate results that highlighted several drainage basins with the highest rankings in the SEM project.

Additionally, SEM commissioned Avant Geofísica, a Brasil (Avant), who undertook reprocessing, interpretation and targeting of airborne geophysical data (magnetics and radiometrics) along with a multi-spectral remote sensing interpretation and a pegmatite targeting exercise.

The SEM geology team commenced field reconnaissance mapping and sampling in November 2024. Geochemical sampling has included Stream Sediment Sampling, Soil Sampling, and Rock Chip Sampling split between outcrop grab sampling and channel sampling where possible from small-scale workings.

The table below summarises exploration work completed to date.

Table 1.6_1
Arapaima Lithium and REE project - Summary of Historical Exploration Work

Date	Company	Summary of Work
Pre - 2024	Government Geological Survey of Brazil	Regional Geochemistry and Mapping & Regional Airborne Magnetics and Radiometrics compiled within two government reports:
2024 to present	SEM	• Geophysical and remote sensing reprocessing and reinterpretation • Geological Mapping, • ~397 preliminary Geochemistry samples collected including stream sediments, soils, rock chip - grab /channel sampling • 401 geological observations • 123 pegmatite occurrences identified within 13 pegmatite trends • 66 artisanal workings throughout the tenements

1.7 Historical Mining

No large-scale mining has been undertaken within the project. There are extensive small-scale informal miners that operate within the region. They typically target pegmatites for Aquamarine and Beryl crystals. The images below show small-scale operations noted during the Sahara visit.

Figure 1.7_1
Active Small-scale mining (Source – Sahara 2025)

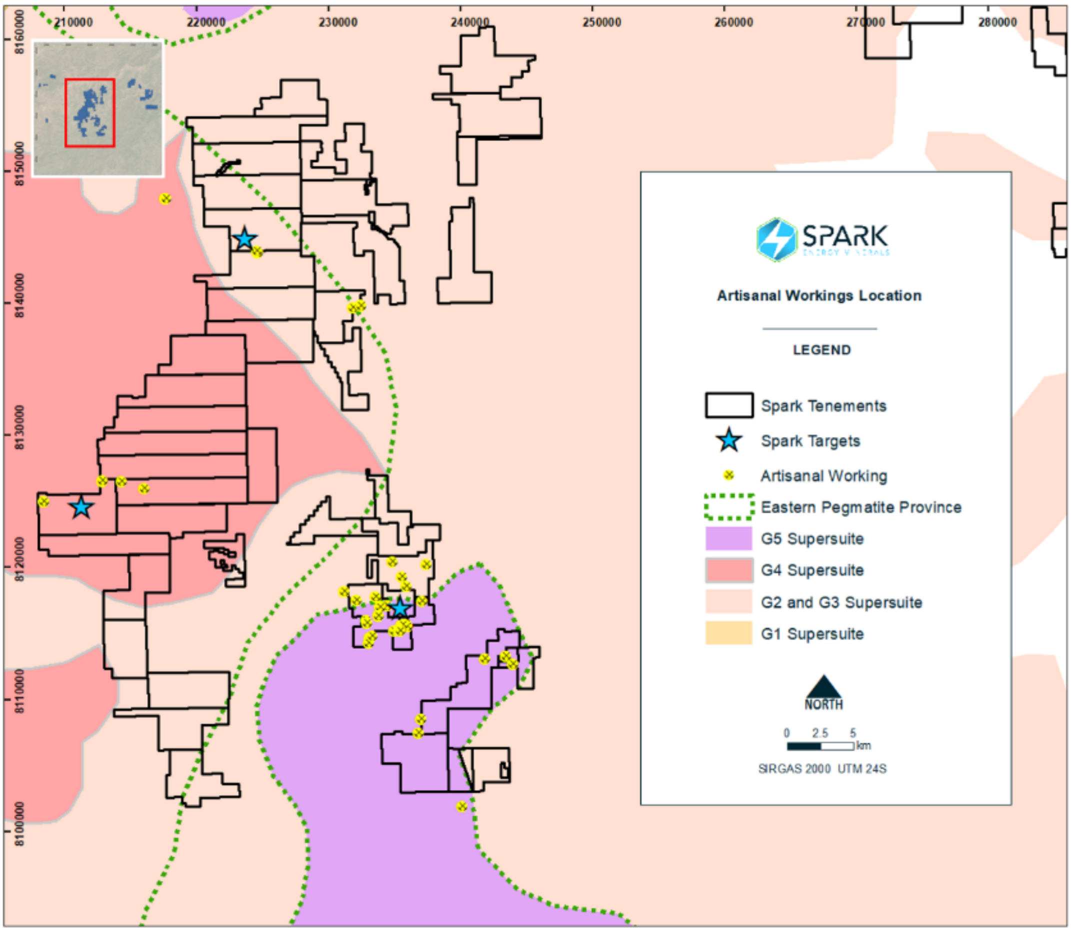
Active small scale Aquamarine mine within the project

Active small scale Aquamarine mine within the project

Small scale Beryl mine at Cruzeta prospect

SEM geological teams have identified over 66 small scale underground workings associated with pegmatite swarms with locations shown in the figure below. These areas have identified small tubular pegmatites hosted within the Caladão Granite, which presents the mineral association of feldspar, quartz, muscovite, biotite, beryl and topaz, of which aquamarine, topaz and rock crystal (hyaline and smoky quartz) have economic use.

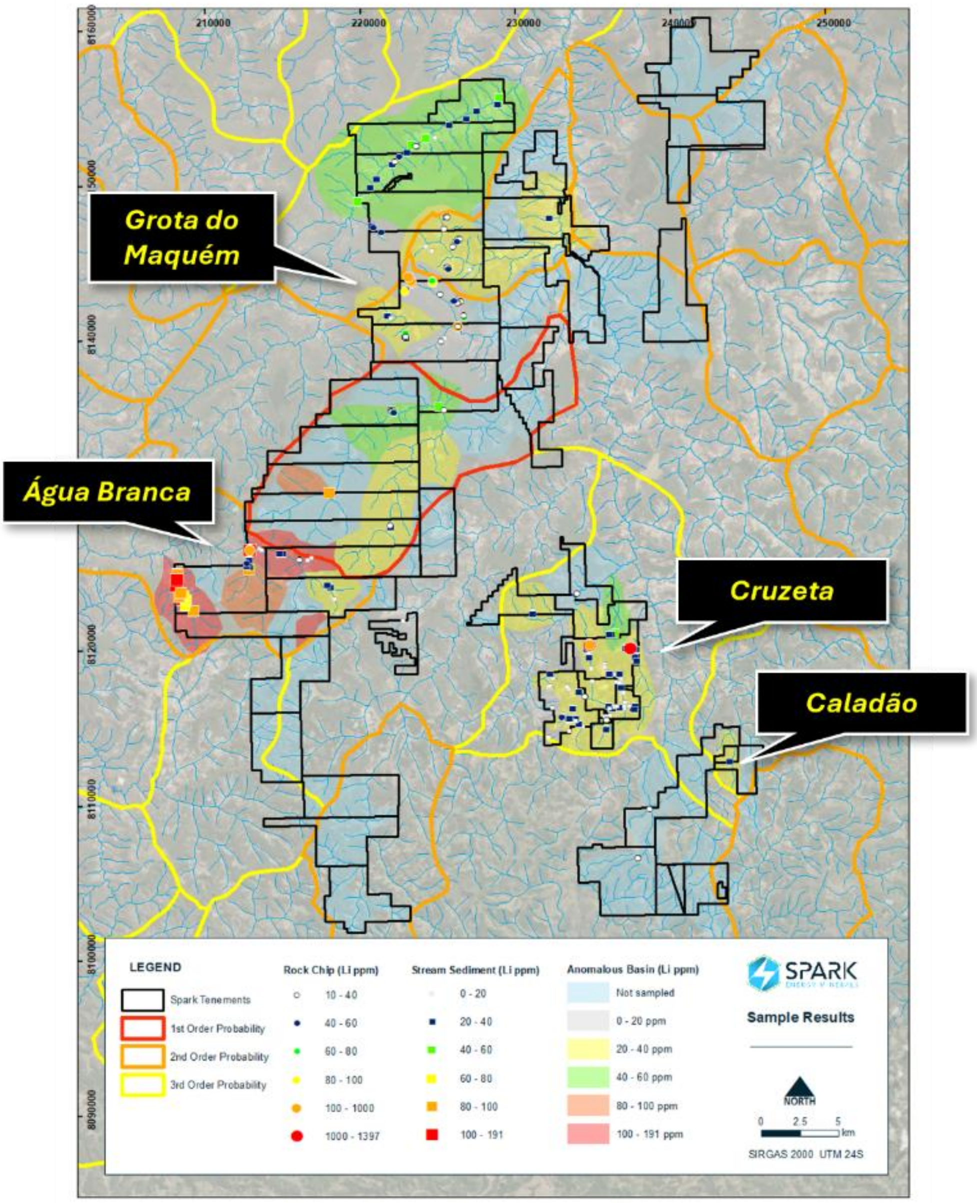
Figure 1.7_2
Location of Artisanal Workings (Source: SEM, March 2025)



1.8 Exploration targets

Based on the exploration works completed to date, SEM have identified 123 individual pegmatites within 13 pegmatite trends over a combined 31km of strike. In addition, SEM have defined anomalous REE from stream sediment and soil samples collected from the Caladão Granite which is considered prospective for REO clays. SEM has identified 4 prospective targets across the tenement package for immediate follow-up exploration including Grota do Maquém, Água Branca, Cruzeta and Caladão with 61 sub-drainage basins throughout the tenements remaining to be explored (Figure 1.8_1).

Figure 1.8_1
Exploration Targets



1.8.1 Remote Sensing Targets

SEM initially undertook reprocessing and targeting of Airborne Geophysical data along with remote sensing targeting. A series of targets have been identified and ranked / prioritised for ground follow-up. These targets are presented below in the figures below and are being followed up by SEM field mapping.

Figure 1.8.1_1
Multispectral Targets – Sentinel 2 PCA (Source: Avant 2024)

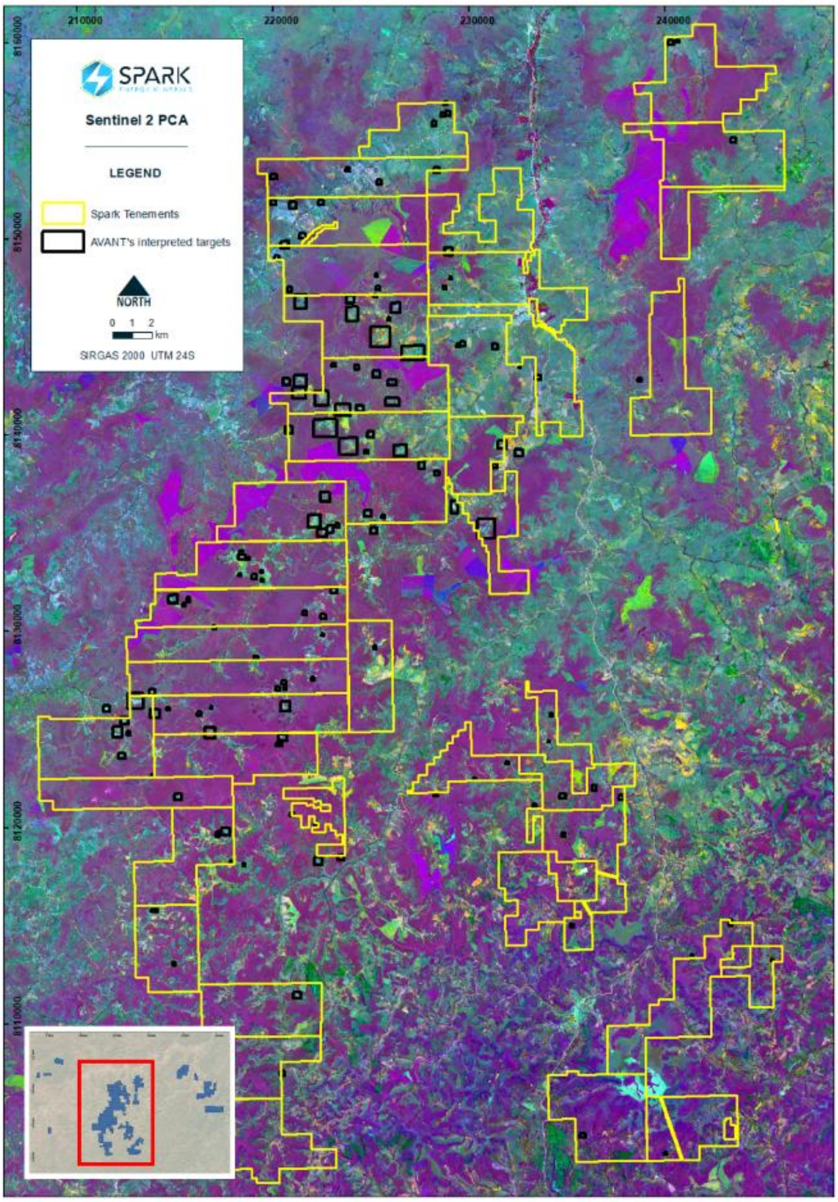
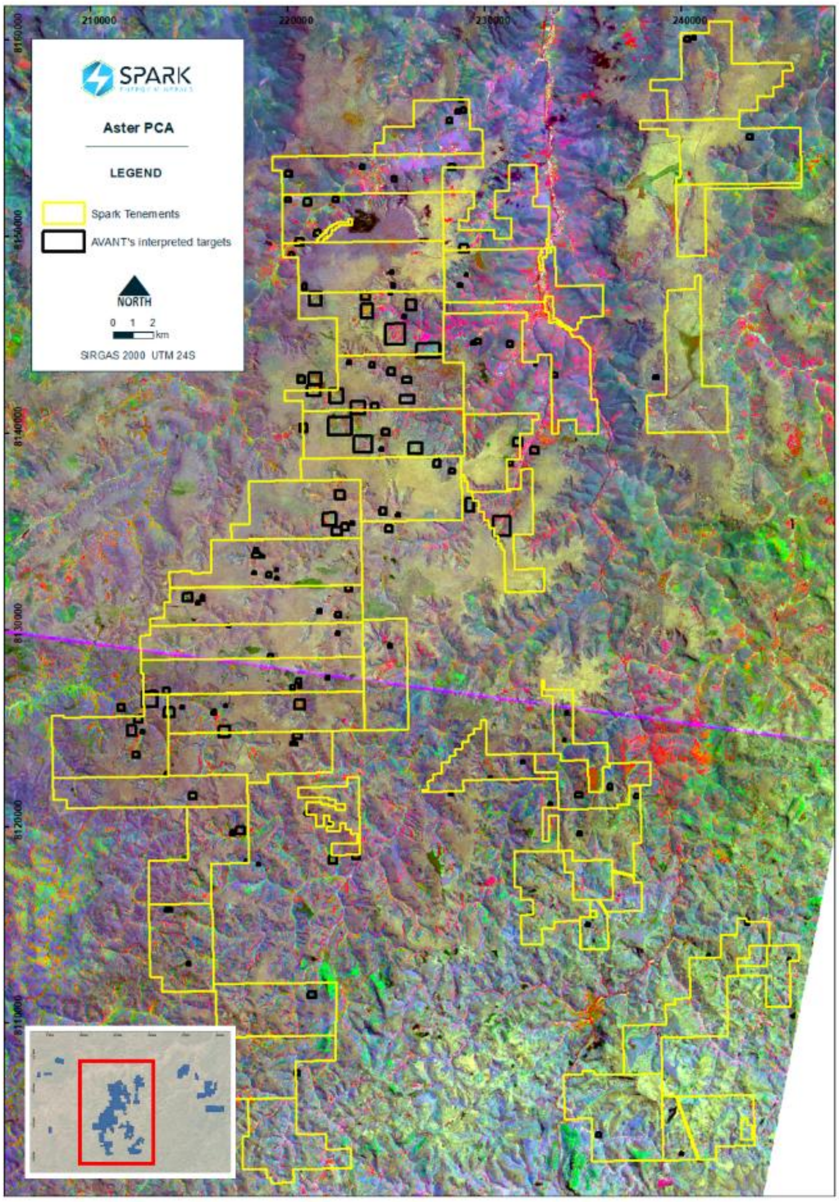


Figure 1.8.1_2

Multispectral Targets – Aster PCA (Source: Avant 2024)

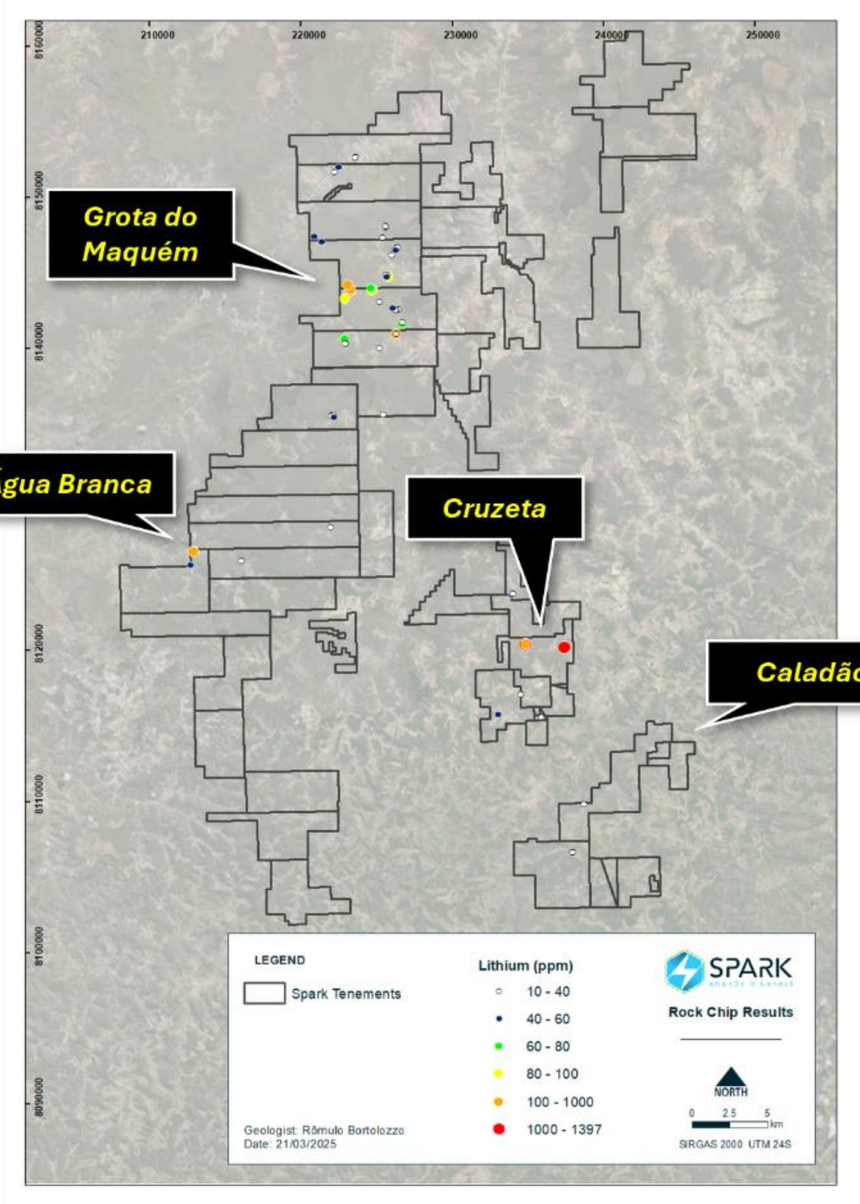


1.8.2 Lithium Targets

Surface mapping and sampling by SEM geology team has defined 13 pegmatite trends over 31km of strike with pegmatites reaching greater than 100m width as defined by mapping in the field.

The following figure shows the Rock Chip results for Lithium along with the main pegmatite trends defined by mapping.

Figure 1.8.2_1
Rock Chip Results - Lithium (Source: SEM, March 2025)



The Rock Chip sampling has defined anomalies with up to 1,397ppm Li along with Stream Sediment sampling with anomalies up to 191ppm Li. These results are significantly above background levels for Lithium. Additionally, samples in the Cruzeta target returned Potassium/Rubidium (K/Rb) ratios as low as 23.84 pointing to highly evolved and fractionated LCT pegmatites which are characterized by this ratio and pathfinder element association.

This is early-stage exploration but demonstrates good correlation with surficial mapping and pegmatites defined on surface and shows the presence of lithium mineralization.

Figure 1.8.2_2
Grota do Maquém Target – Sample Results (Source: SEM, March 2025)

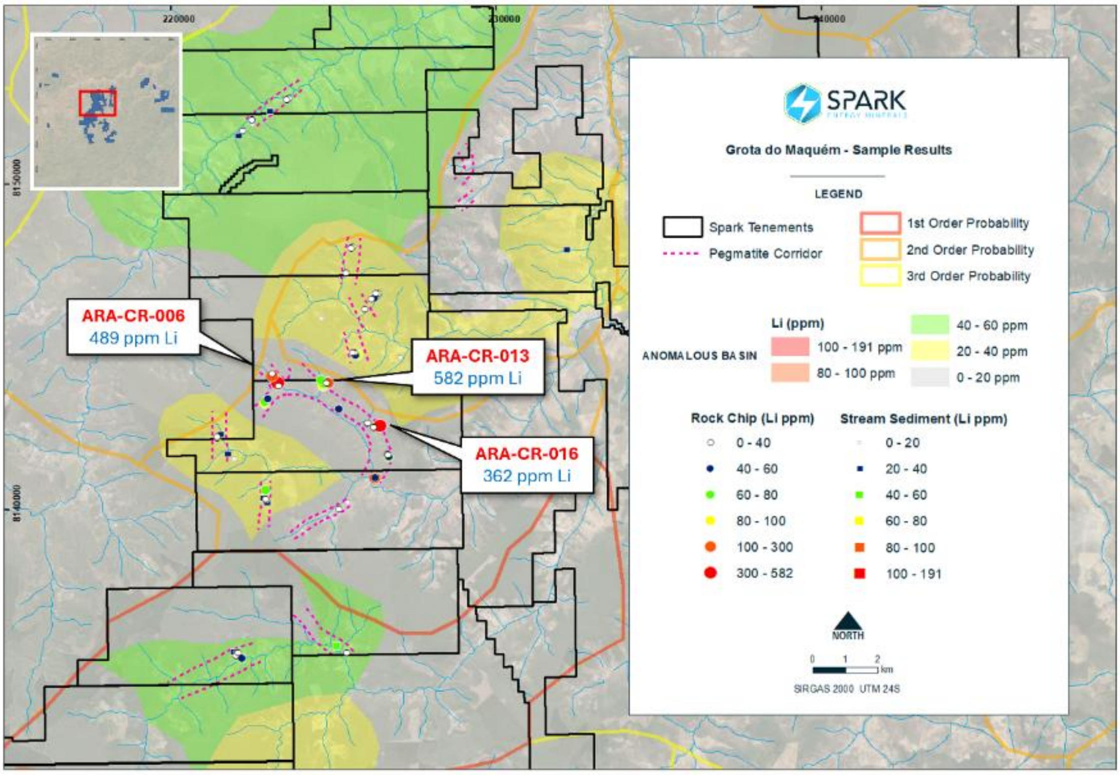


Figure 1.8.2_3
Água Branca Target – Sample Results (Source: SEM, March 2025)

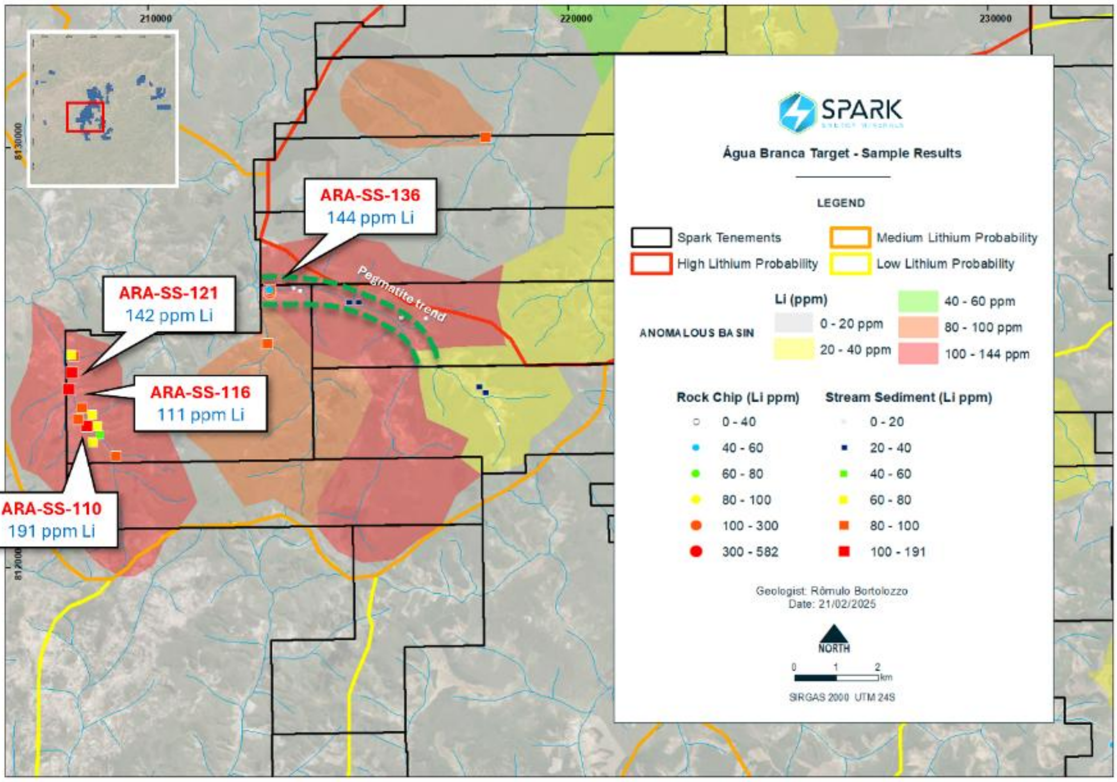
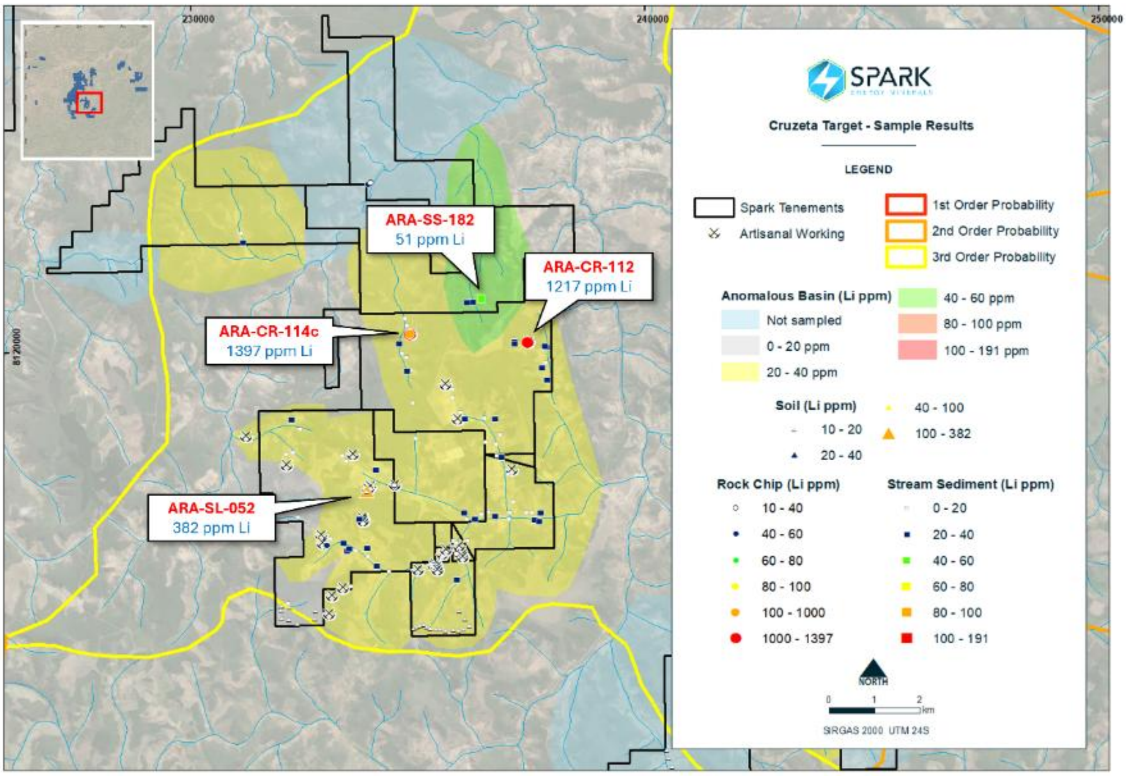


Figure 1.8.2_4
Cruzeta Target – Sample Results (Source: SEM, March 2025)



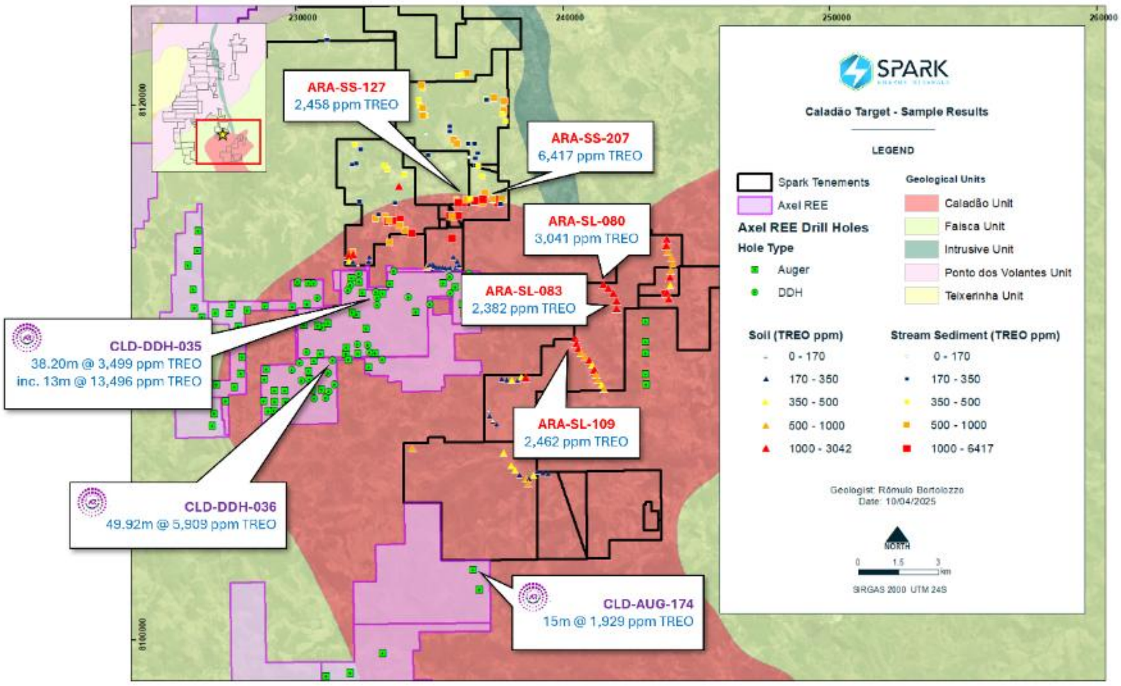
1.8.3 Rare Earth Element Targets

SEM has commenced reconnaissance geological mapping over areas where their Exploration Licenses cover the Caladão Granite. The Caladão Granite is located in the northeast portion of the State of Minas Gerais, and the overall geological setting includes a sequence of Neoproterozoic sedimentary sequences that were intruded by late-tectonic alkaline granites consistent with the geology observed on the SEM tenements in this area. These granites have undergone intense tropical weathering, resulting in the development of a thick regolith profile that can reach up to 60m and contain abundant clay minerals.

Australian junior explorer Axel REE Limited (Axel) has reported significant Gallium and REE results within the Caladão Granite. SEM tenements are contiguous with Axel. Axel's Caladão Project has returned high-grade REE and gallium mineralization after completing a first phase drill program. Results include 49.92m @ 5,909ppm TREO with 1m @ 22,115ppm TREO.

Initial soil and stream sediment samples collected by SEM within their contiguous tenements have returned anomalous TREO results > 3000ppm in soils and > 6000ppm TREO in stream sediment samples. The figure below highlights the Axel drilling results which are directly south of the SEM geochemical targets.

Figure 1.8.3_1
Caladão Target – REE Results from Axel drilling and SEM Stream Sediment & Soil Sampling
(Source: SEM, March 2025)



1.9 Conclusions

The SEM project covers an extensive area of 919km^2 with the tenements spanning over 30km wide by 50km long. This is an exceptionally large contiguous exploration package located in the highly prospective "Lithium Valley" of Minas Gerais State, Brazil.

Sahara consider the project an early-stage exploration project with high potential to define Lithium bearing Pegmatites along with REE clay/ Ionic clay type deposits. The project area is large and requires systematic and staged exploration which is currently underway.

Surface mapping and sampling by SEM geology team has defined thirteen pegmatite trends over 31km of strike with greater than 100m width defined in the field. The geochemistry has defined anomalous lithium in stream sediment and grab sampling which is extremely encouraging given the early stage of the project.

1.10 Recommendations

Sahara have the following recommendations for the SEM project with the clear focus to continue staged exploration to expand on defined targets. The project has excellent exploration potential. Sahara provides the following specific recommendations

Undertake a detailed structural interpretation of the project as the pegmatites will follow zones of least resistance, which is typically faults and shear zones within the granites.

Continue systematic regional geological mapping and sampling.

Undertake systematic stream sediment sampling across all permits and follow up with targeted Auger grid sampling. The project has significant soil cover > 1m and requires mechanised Auger to undertake effective geochemistry.

Undertake road-based Auger drilling campaign utilising existing road access. The potential for extensive REE has been defined by ongoing stream and grab sampling along with publicly available information from peer explorers within the region.

Once Geochemical targets have been defined then drilling can be assessed to test the mineralization. Often in high rainfall environments, Lithium mineralization can be leached and depleted in the top 40m, and deeper drilling is required.

Due to the exceptionally large extent of the tenement package, work should continue with first pass exploration coverage across the remaining un-explored areas whilst in parallel, positioning to focus on priority targets for follow up and potential drill targeting as results are reported.

2 INTRODUCTION

SEM has commissioned Sahara to compile a Technical Report for the Arapaima Lithium and REE project, located in Minas Gerais state of Brazil. This report has been completed in accordance with the guidelines of Canadian Institute of Mining (CIM) National Instrument 43-101 and accompanying documents 43-101.F1 and 43-101.CP (“NI43-101”).

The word Arapaima comes from a large freshwater fish native to the Amazon Basin in Brazil and other parts of South America. It's one of the largest freshwater fish species in the world, known to grow up to 3m in length and weigh over 200kg.

2.1 Forward Looking Information

This report contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, statements related to the capital and operating costs of the Arapaima Lithium and REE project, the price assumptions with respect to production rates, the economic feasibility and development of the Arapaima Lithium and REE project and other activities, events or developments that SEM expects or anticipates will or may occur in the future. Forward-looking information is often identified by the use of words such as "plans", "planning", "planned", "expects" or "looking forward", "does not expect", "continues", "scheduled", "estimates", "forecasts", "intends", "potential", "anticipates", "does not anticipate", or "belief", or describes a "goal", or variation of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

Forward-looking information is based on several factors and assumptions made by the authors and management, which are considered reasonable at the time such information is made, and forward-looking information involves known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking information. Such factors include, among others, obtaining all necessary financing, permits to explore and develop the project; successful definition and confirmation based on further studies and additional exploration work of an economic mineral resource base at the project.

Although SEM has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate. The forward-looking statements contained herein are presented for the purposes of assisting investors in understanding SEM’s plan, objectives and goals and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking information. SEM and the authors do not undertake to update any forward-looking information, except in accordance with applicable securities laws.

2.2 Principal Sources of Information

In addition to a site visit undertaken by Beau Nicholls (Sahara Principal Consultant) to the Arapaima Lithium and REE project between 7th to 10th January 2025, the author has relied on information provided by SEM, along with discussions with SEM technical personnel and on information obtained from publicly available sources.

The author has made enquiries to establish the completeness and authenticity of the information provided and identified. The author has taken all appropriate steps in his professional judgement, to ensure that the work, information or advice contained in this report is sound and the author does not disclaim any responsibility for this report.

Additional information relied upon during the completion of the technical work have been listed in Section 27 (References) of this Technical Report.

2.3 Qualifications and Experience

The “qualified person” (as defined in NI 43-101) for this report is Mr. Beau Nicholls (Sahara).

Mr. Nicholls is Principal Consultant for Sahara with 30 years’ experience in the mining sector. Mr. Nicholls is a registered Fellow of the Australian Institute of Geosciences (FAIG) and is responsible for all sections of this report.

The qualified person of this report does not have any material interest in SEM or related entities or interests. His relationship with SEM is solely one of professional association between client and independent consultant. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

2.4 Units of Measurements and Currency

Metric units are used throughout this report unless noted otherwise. Currency is United States dollars ("US$").

2.5 Abbreviations

A full listing of abbreviations used in this report is provided in Table 2.5_1 below.

Table 2.5_1
List of Abbreviations

	Description		Description
$	United States of America dollars	LREO	Light rare earth oxides
“	Inches	M	million
µ	microns	m	metres
3D	three dimensional	Ma	thousand years
4WD	four-wheel drive	Mg	Magnesium
AAS	atomic absorption spectrometry	ml	millilitre
bcm	bank cubic metres	mm	millimetres
CC	correlation coefficient	Mtpa	million tonnes per annum
CFC	CFC Amazonia	N (Y)	northing
Cr	Chromium	Nb	niobium
SEM	Spark Energy Minerals Ltd	Ni	Nickel
Co	Cobalt	NPV	net present value
CRM	certified reference material or certified standard	NQ_2	Size of diamond drill rod/bit/core
Cu	Copper	ºC	degrees centigrade
CV	coefficient of variation	OK	Ordinary Kriging
DDH	diamond drill hole	P_{80} -75µ	80% passing 75 microns
DTM	digital terrain model	Pd	palladium
E (X)	Easting	ppb	parts per billion
EDM	electronic distance measuring	ppm	parts per million
Fe	Iron	psi	pounds per square inch
G	Gram	PVC	poly vinyl chloride
g/m^3	grams per cubic metre	QA	quality assurance
g/t	grams per tonne of gold	QC	quality control
HARD	Half the absolute relative difference	QQ	quantile-quantile
HDPE	High density polyethylene	REE	rare earth elements
HQ_2	Size of diamond drill rod/bit/core	REO	rare earth oxide
Hr	Hours	RL (Z)	reduced level
HRD	Half relative difference	ROM	run of mine
HREO	Heavy rare earth oxides	RQD	rock quality designation
ICP-AES	inductivity coupled plasma atomic emission spectroscopy	SD	standard deviation
ICP-MS	inductivity coupled plasma mass spectroscopy	SG	Specific gravity
ISO	International Standards Organisation	Si	silica
kg	Kilogram	SMU	selective mining unit
kg/t	kilogram per tonne	Sn	Tin
km	Kilometres	t	tonnes
km^2	square kilometres	t/m^3	tonnes per cubic metre
kW	Kilowatts	Ta	tantalum
kWhr/t	kilowatt hours per tonne	tpa	tonnes per annum
$l/hr/m^2$	litres per hour per square metre	TREO	Total rare earth oxide
Li	Lithium	UC	Uniform conditioning
		w:o	waste to ore ratio

3 RELIANCE ON OTHER EXPERTS

The authors have relied on legal documents provided by SEM pertaining to the title of the permits. Sahara has not independently verified the title and ownership aspects of the permits.

4 PROPERTY DESCRIPTION AND LOCATION

SEM´s Arapaima Lithium and REE project includes a total of 58 granted Exploration Licenses (EL) and 4 Exploration License Applications (total 62) which cover a total surface area of approximately 919km^2. The Sigma Lithium mine is located approximately 15km west of the Arapaima Lithium and REE project. (Figure 4.1_1).

4.1 Company Details and Tenement Status

The SEM Exploration Licences package has been acquired by Spark via several separate transactions as follows.

44 Exploration Licenses comprising 41 granted Exploration Licenses (granted between 2021 -2024) and 3 Exploration License Applications originally owned by “Canopis Geologia e Projectos Ltda (Canopis) were transferred to SEM´s Brasilian subsidiary in 2024.

12 Areas known as Joaima (11 granted Exploration Licenses and 1 Exploration License Application) were acquired by SEM from LATAM and incorporated into the Arapaima Project in 2024 and

6 granted Exploration Licenses were acquired by SEM from NEXT LITHIUM in 2024.

An exploration license in Brazil is valid for 3 years and can be renewed for an additional 2 times 3-year periods.

Figure 4.1_1
Arapaima Lithium and REE Project - Permits (Source: SEM 2025)

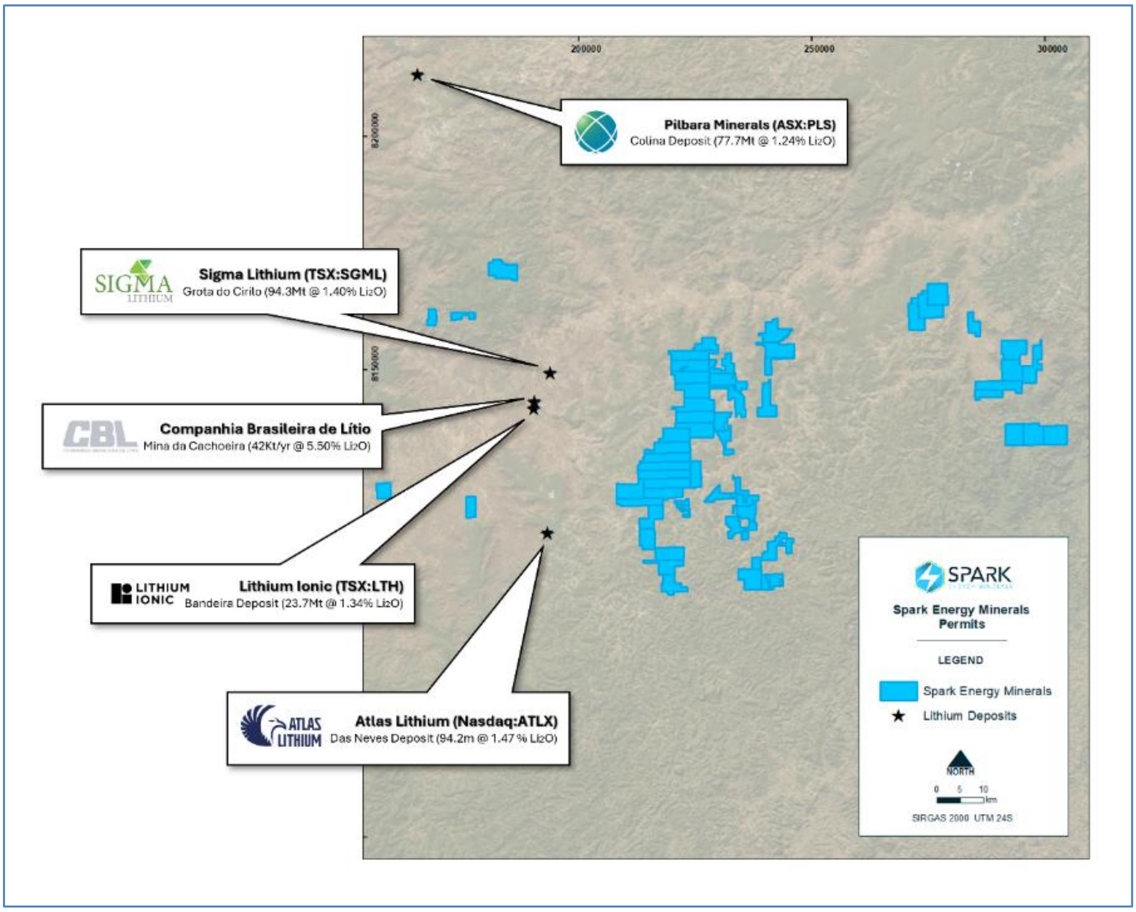


Table 4.1_1 Tenement Schedule			
Permit name	**Permit Status**	**Company**	**AREA_HA**
830035/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,927.83
830036/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,986.89
830037/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,980.37
830038/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,984.44
830039/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,944.72
830040/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,946.91
830041/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,789.11
830043/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,102.16
830044/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,922.15
830045/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,982.07
830046/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	639.75
830047/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,809.61
830187/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,254.88
830188/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,136.16
830190/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	479.49
830191/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,913.84
830192/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	907.42
830577/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,359.84
830578/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,923.56
830579/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,619.00
830580/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,086.42
830581/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	965.60
830582/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	657.55
830583/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	902.41
830584/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	601.98
830585/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,653.10
830587/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,473.53
830588/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,410.58
830869/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,682.86
830874/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,987.18
830881/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,985.62
830884/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,988.33
830886/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,969.68
830887/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,985.64
830891/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,962.25
830892/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,021.61
830896/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,988.19
830903/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,928.84
830922/2024	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	932.97
831302/2023	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	274.71
832091/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	629.60
832092/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	637.69
832886/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	984.25
832888/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,986.21
832889/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	897.61
832890/2021	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	999.99
833061/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,759.48
833064/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,993.37
833066/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,918.27
833067/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,949.06
833068/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,954.40
833069/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,977.51
833071/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,934.23
833072/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,534.22
833074/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,579.62
833076/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,385.35
833077/2022	Granted	CANOPUS GEOLOGIA E PROJETOS LTDA	1,271.69
830189/2023	Requested	CANOPUS GEOLOGIA E PROJETOS LTDA	1,875.66
830878/2024	Requested	CANOPUS GEOLOGIA E PROJETOS LTDA	1,732.09
831855/2024	Requested	CANOPUS GEOLOGIA E PROJETOS LTDA	344.24
831922/2024	Requested	CANOPUS GEOLOGIA E PROJETOS LTDA	599.62
TOTAL			**91,913.57**

4.2 Mining Code

The **Brazilian Mining Code** (Código de Mineração) governs mineral exploration and mining activities in Brazil and is primarily regulated by the **National Mining Agency (ANM)**.

4.2.1 Mineral Rights and Licensing

Exploration Authorization (Autorização de Pesquisa): Granted for up to 3 years (renewable) for mineral exploration.

Mining Concession (Concessão de Lavra): Required for commercial mining, granted after exploration proves economic viability.

Mining Permit (Licença de Lavra): Issued for small-scale mining operations.

PLG (Permissão de Lavra Garimpeira): For artisanal mining (garimpos).

Mineral rights are not private property but are granted by the government.

4.2.2 Environmental and Social Regulations

Environmental Licenses (EIA/RIMA): Required before mining begins, including environmental impact assessments.

Community and Indigenous Rights: Consultation required for projects near indigenous lands.

4.2.3 Taxation and Royalties

CFEM (Compensação Financeira pela Exploração de Recursos Minerais): Royalties on mineral production (e.g., 1%–4% based on mineral type).

Corporate Taxes and Other Fees: Income tax, import duties, and specific state taxes may apply.

4.2.4 Reporting and Compliance

Companies must submit annual exploration reports and comply with ANM regulations.

JORC and NI 43-101 reports are not officially recognized, but resources can be classified using international standards.

4.2.5 Foreign Investment and Restrictions

Foreigners can hold mining rights but must establish a Brazilian company.

Special rules apply for strategic minerals and border areas

4.3 Royalties and Agreements

Sahara is not aware of any Royalties and agreements associated with the project.

4.4 Environmental Liabilities

Sahara is not aware of any Environmental Liabilities associated with the project.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Project Access

Access to the Arapaima Lithium and REE project from the state capital city Belo Horizonte, is via the 550km (~ 8.5 hours' drive) BR381 and BR116 highways. The roads are sealed the entire way. There is also an option to fly to some of the closer regional centres then drive (85km) by road (Figure 5.1_1). The town of Padre Paraiso, located right at the "gateway of the Lithium Valley", is a short distance from the southern blocks of SEM's tenement package and is currently used as a base camp.

Figure 5.1_1
Arapaima Lithium and REE project – Access

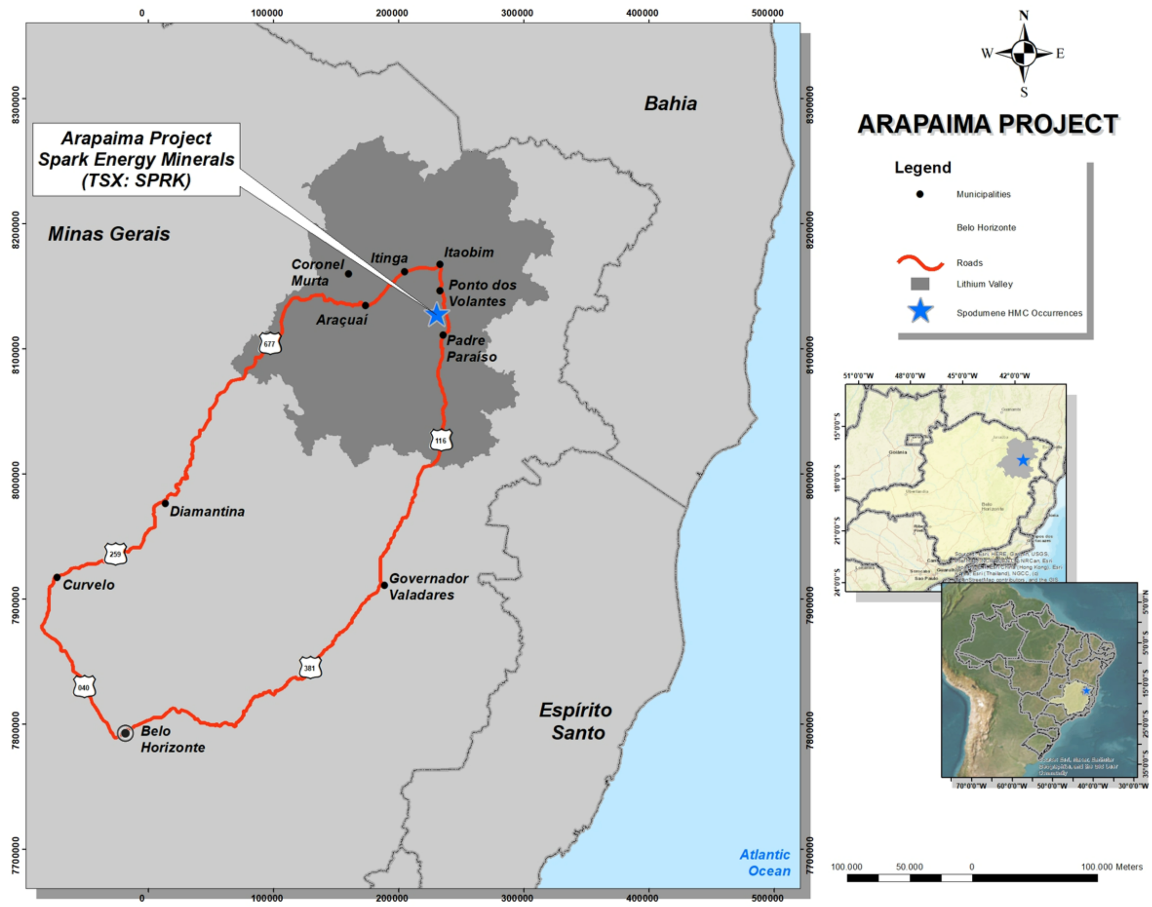


Figure 5.1_2
SEM Project – Access roads (Source: Sahara 2025)

	
Access Tracks in project	Access Tracks in project

5.2 Physiography and Climate

5.2.1 Physiography

Padre Paraíso is in the northeastern region of the state of Minas Gerais, Brazil, within the physiographic zone known as the Vale do Jequitinhonha, characterized by rugged terrain, rolling hills, and dissected landscapes typical of the Brazilian Highlands. The region is predominantly composed of metamorphic and sedimentary rock formations, contributing to a varied topography with elevations ranging from approximately 300m to 1,200m above sea level, with the town itself situated at an elevation of approximately 664m.

The terrain features a mixture of moderate to steep slopes, with valleys carved by seasonal and perennial waterways. The predominant vegetation in the area is a combination of Atlantic Forest (Mata Atlantica) remnants and semi-deciduous tropical forest, interspersed with areas of secondary growth and agricultural development. Soil types in the region are typically classified as ferrosols and latosols, which are weathered, nutrient-poor, and often require enrichment for agricultural purposes.

The physiographic conditions pose logistical challenges for exploration and development, with access to remote areas often constrained by natural barriers and limited infrastructure. Seasonal erosion and runoff from rainfall events further impact accessibility and site stability.

Figure 5.2_1
Arapaima Lithium and REE project – Physiography (Source: Sahara 2025)

5.3 Climate

Padre Paraíso region experiences a tropical climate with distinct wet and dry seasons, classified under the Koppen-Geiger system as Aw, meaning a tropical savanna climate with pronounced seasonal precipitation patterns. The average annual temperature ranges between 18°C and 28°C, with higher temperatures observed during the austral summer months (October to March).

Wet Season (October – March): Characterized by high humidity, frequent rainfall, and predominantly cloudy conditions. The region receives the bulk of its annual precipitation during this period, with average rainfall ranging between 900 mm to 1,200 mm per year. Thunderstorms and heavy downpours are common, which may impact field operations, causing access difficulties and potential delays in exploration activities.

Dry Season (April – September): Defined by lower humidity, minimal precipitation, and generally clear skies. The temperature during this period remains warm but more moderate, with cooler nights. This season provides favourable conditions for exploration activities and fieldwork due to improved ground stability and accessibility.

5.4 Local Infrastructure and Services

Padre Paraíso, is a municipality with a population of 20,252 as of 2020, covering an area of 543km².

5.4.1 Transportation Infrastructure:

The municipality is strategically situated along the Rio-Bahia highway (BR-116), a major federal roadway facilitating north-south transit across Brazil. This highway enhances connectivity to significant urban centres, including Teófilo Otoni, approximately 94 km away, and Belo Horizonte, the state capital, approximately 542km distant.

5.4.2 Utilities and Energy:

Padre Paraíso is part of the planned Padre Paraíso 2-Governador Valadares 6 C2 transmission line project, which aims to enhance the regional electrical grid by connecting the Padre Paraíso 2 substation to the Valadares 6 substation. This project is expected to improve energy reliability and support local development.

5.4.3 Agricultural Services:

The local economy is primarily based on cattle raising, services, and subsistence agriculture, with main crops including coffee, beans, manioc, sugarcane, and corn.

5.4.4 Financial Services:

The municipality had access to several banking institutions within the area.

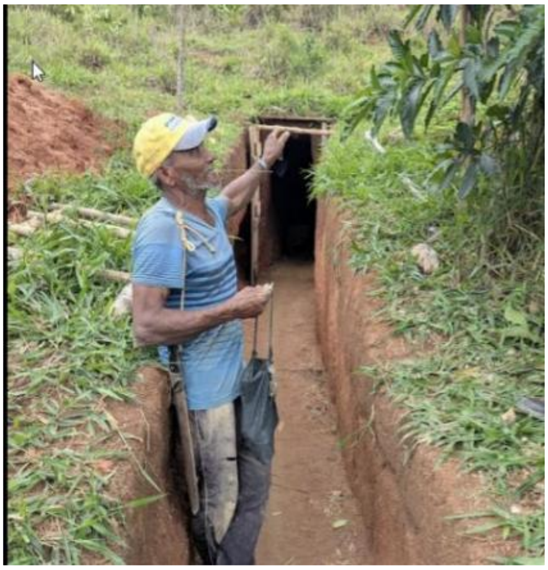
5.4.5 Communication Services:

Efforts to modernize communication infrastructure include the implementation of digital television services, enhancing information access and connectivity for residents.

Overall, while Padre Paraíso possesses basic infrastructure and services, ongoing development projects, such as the transmission line, aim to bolster local resources and support economic growth.

Figure 5.3_1
Local Infrastructure and Services (Source: Sahara 2025)

Secondary roads throughout the project	*Eucalypt plantations throughout the project*



Small scale cattle farming	*Small scale Miners for Aquamarine*

6 HISTORY

6.1 Historical Exploration

The project has had limited historical exploration completed as summarised in the Table below.

Table 6.1_1 Arapaima Lithium and REE project - Summary of Historical Exploration Work		
Date	**Company**	**Summary of Work**
Pre - 2024	Government Geological Survey of Brazil	Regional Geochemistry and Mapping & Regional Airborne Magnetics and Radiometrics compiled within two government reports: *Source 1 – 2016: ''Evaluation of the Lithium Potential in Brasil" – Mid – Jequitinhonha River, North -East Minas Gerais`` ministry of Mines and Energy, Secretary of Geology, Mines and Development, the Geological Survey of Brazil promoting mineral research. Technical Report – 2016* *Source 2 – 2023: ''Lithium Potential Assessment Project in Brasil" in the Eastern Pegmatite Province of Brasil: the Geological Survey of Brazil promoting mineral research. Technical Report 19 – August 2023 DOI: 10.29396/ITCPRM.2023.19*
2024 to present	SEM	• Geophysical and remote sensing reprocessing and reinterpretation • Geological Mapping, • ~397 preliminary Geochemistry samples collected including stream sediments, soils, rock chip - grab /channel sampling • 401 geological observations • 123 pegmatite occurrences identified within 13 pegmatite trends • 66 artisanal workings throughout the tenements

SEM´s geological team recommended the areas within the project to be staked (2020-21) based on a geological concept that predicted the EBPP extended under shallow lateritic and younger sedimentary cover sequences to the east beyond its limits as depicted on the published geological maps available in 2020-21. At the time of ground acquisition, the geological concept was supported by analysis of the available government geophysical data (aeromagnetic) which displayed a similar geophysical response across the boundary of the where the lithium bearing geology was exposed at surface and where this geology disappeared towards the east under cover.

Subsequent to acquiring the SEM licences the geological team identified two important government publications (1. 2016, 2. 2023 - see below) which presented results of regional stream sediment and heavy mineral concentrate sampling campaigns across the region where the SEM tenements are located. In summary, both reports highlight the significant lithium potential in Minas Gerais, particularly in the Mid-Jequitinhonha River region and the Eastern Pegmatite Province, suggesting promising opportunities for lithium research and exploration in Brazil.

Source 1 – 2016: ''Evaluation of the Lithium Potential in Brasil" – Mid – Jequitinhonha River, North -East Minas Gerais`` ministry of Mines and Energy, Secretary of Geology, Mines and Development, the Geological Survey of Brazil promoting mineral research. Technical Report – 2016

Source 2 – 2023: ''Lithium Potential Assessment Project in Brasil" in the Eastern Pegmatite Province of Brasil: the Geological Survey of Brazil promoting mineral research. Technical Report 19 – August 2023 DOI: 10.29396/ITCPRM.2023.19

2016 Report:

This study analysed 45 lithium deposits and occurrences in the Mid-Jequitinhonha Valley region, identifying 20 new occurrences that had not been previously documented. Additionally, new areas with potential for lithium deposits were discovered, and the prospective zones of already known mineralized domains were expanded. (rigeo.sgb.gov.br)

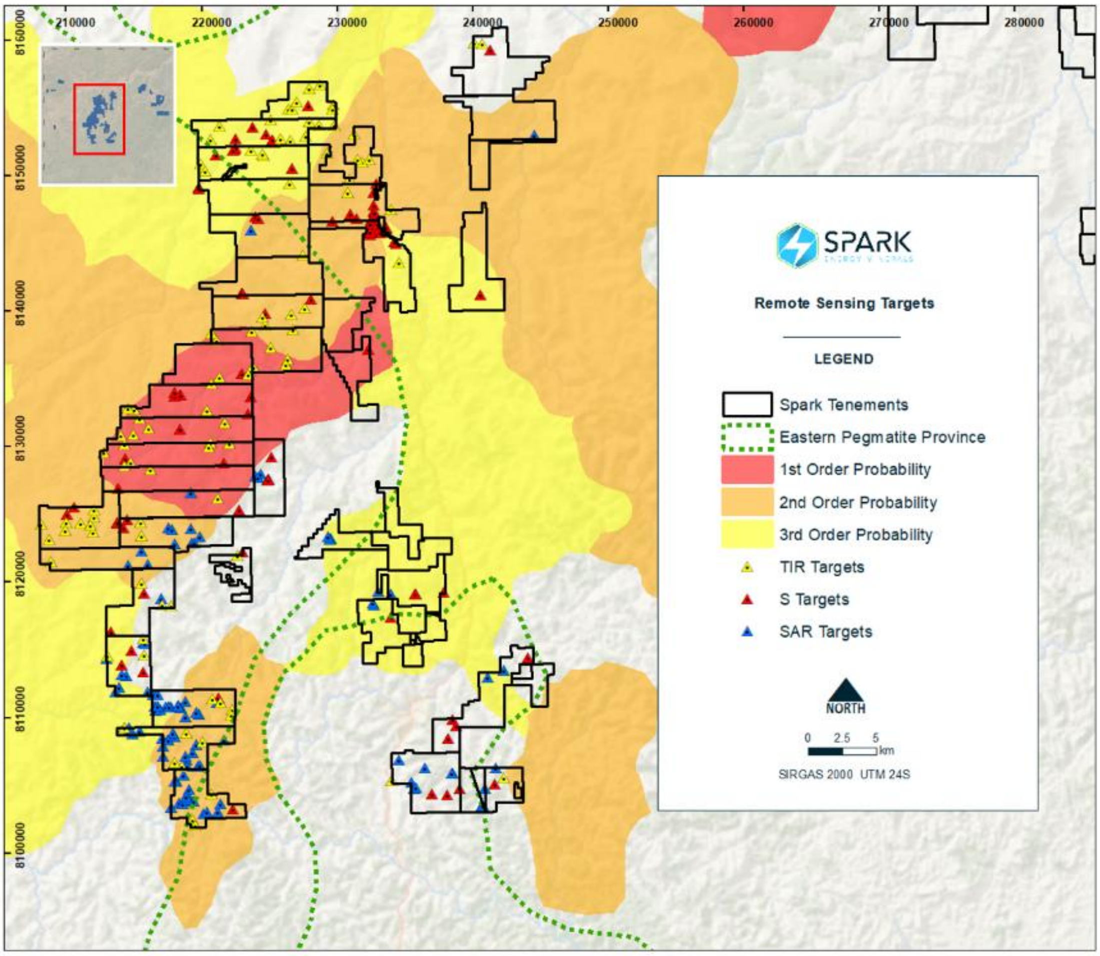
2023 Report:

This technical report provided a regional overview of the lithium potential in the Eastern Pegmatite Province of Brazil, based on previous studies and the analysis of low-density stream sediment geochemical data. The preliminary results reinforce the importance of this province as a priority target for assessing the country's lithium potential. (sgb.gov.br)

These publications presented sampling data confirming the areas prospectivity for Lithium based on both the identification of Lithium minerals Spodumene and Lepidolite in heavy mineral pan concentrates and Lithium and pathfinder elements, specifically Beryllium, Niobium, Tin and Cesium in regionally wide spaced, stream sediment samples. Importantly the reports presented a drainage prospectivity ranking exercise, based on the stream sediment and pan concentrate results that highlighted several drainage basins with the highest rankings occurring within SEM´s tenements and these results were used by the SEM team to identify and prioritise exploration focus on these priority, highly ranked drainage basins. The data and conclusions presented in these reports was particularly valuable to SEM in that it demonstrated preliminary work that SEM would have needed to perform as a vital preliminary exploration phase and importantly has essentially saved the 12-18 months that would have been required to achieve this as well as the associated expenses (see figure 6.1_1).

Figure 6.1_1

Remote Sensing Targets over CPRM (2023) 1st, 2nd and 3rd Order Lithium Prospective Drainage Basins



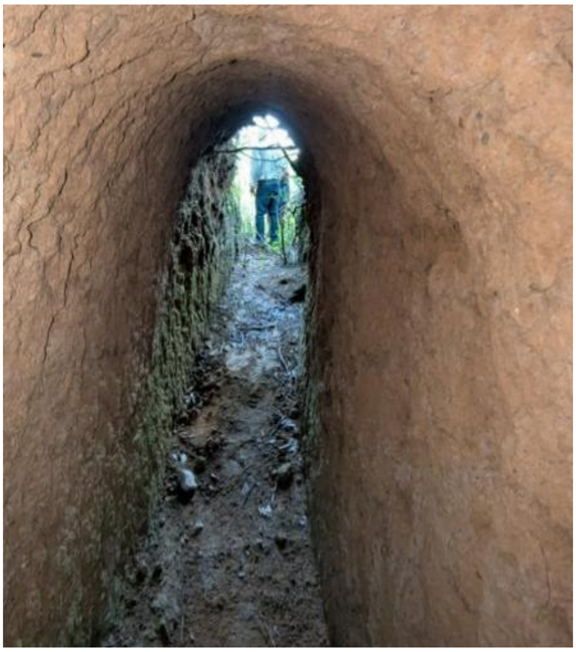
6.2 Historical Resource Estimates

There are no recorded historical resource estimates in the project.

6.3 Historical Mining

No large-scale mining has been undertaken within the project. Numerous small-scale miners have and still operate within the permit with a selection of active small-scale workings shown in the images below.

Figure 6.3_1
Active Small-scale mining (Source: Sahara 2025)



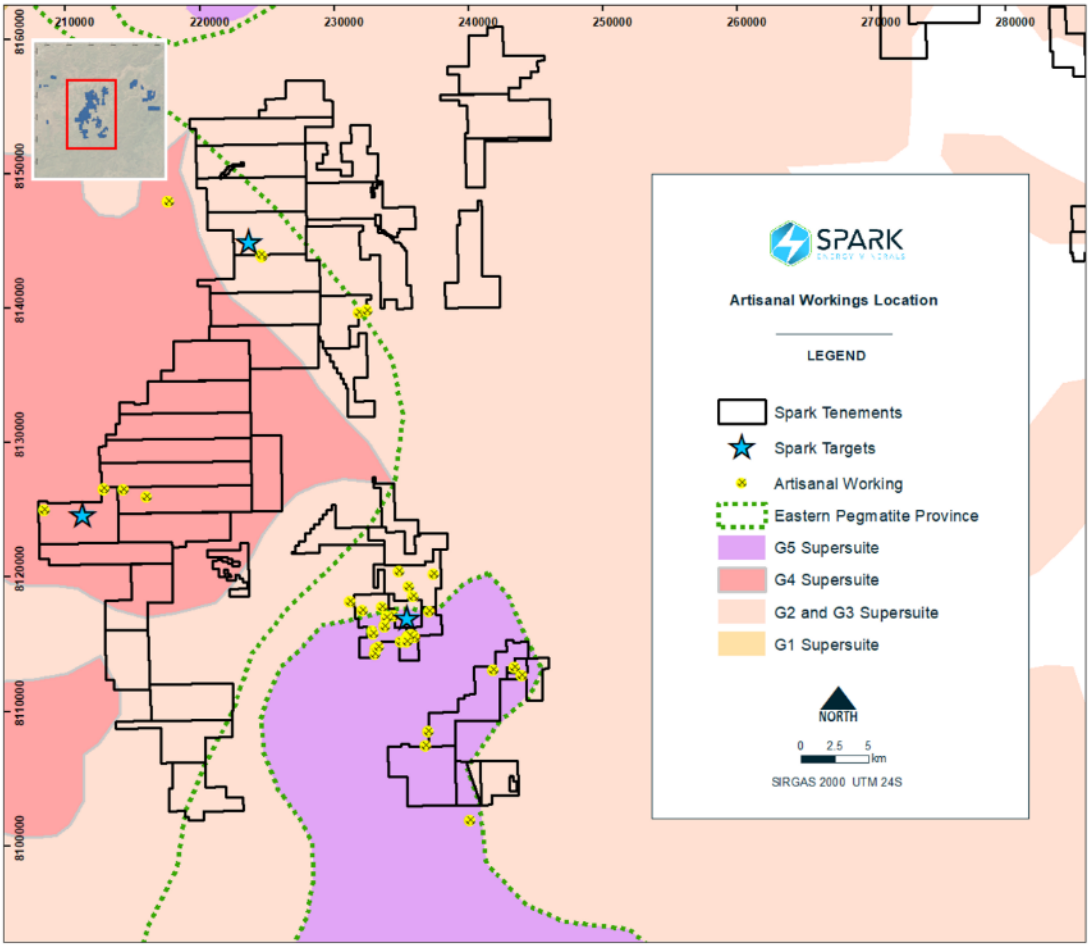
Active small scale Aquamarine mine within the project

Active small scale Aquamarine mine within the project

Small scale Beryl mine at Cruzeta prospect

A total of 66 small scale workings associated with pegmatite occurrences have been defined by SEM to date as shown in the figure below. These areas have identified small tubular pegmatites hosted within the Caladão Granite, which presents the mineral association of feldspar, quartz, muscovite, biotite, beryl and topaz, of which aquamarine, topaz and rock crystal (hyaline and smoky quartz) have economic use.

Figure 6.3_2
Location of Artisanal Workings



7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The project area lies within the Eastern Brazilian Pegmatite Province (EBPP), spanning an extensive region of approximately 150,000km^2 across the states of Bahia, Minas Gerais, Espírito Santo and Rio de Janeiro. Approximately 90% of the EBPP is in the eastern part of Minas Gerais state, where mining activities targeting crystal gem-bearing pegmatites have been ongoing since the 17th century (Paes et al., 2016).

The pegmatite units are part of the Araçuaí Orogen that developed during the late Neoproterozoic to Cambrian. Its tectonic evolution is characterized by a series of events typical of collisional orogens, beginning with the formation of the precursor basin rift that evolved to a passive margin, during the Tonian and Cryogenian (ca. 900 to 650 Ma). Subsequent stages witness the emergence of a continental magmatic arc (ca. 630-585 Ma) and supracrustal sequences linked to the arc, followed by syn-collisional anatexis (ca. 575-540 Ma) and by extensive post-collisional magmatism (530-480 Ma). One notable aspect of the Araçuaí Orogen is the enduring succession of granite production events encompassing approximately 630 to 480 Ma, which stand out as the predominant records of its evolutionary history. These rocks, including associated pegmatites, have been categorized into five supersuites representing different plutonic assemblages related to distinct petrogenetic processes (Pedrosa- Soares et al., 2009). These are identified as G1 (pre-collisional, ca. 630–580Ma), G2 (syn-collisional, ca. 585–540 Ma), G3 (late collisional to post-collisional, ca. 545–500 Ma), G4 (late collisional to post-collisional, ca. 530–490 Ma) and G5 (post-collisional, ca. 530–480 Ma) (Pedrosa-Soares et al., 2007).

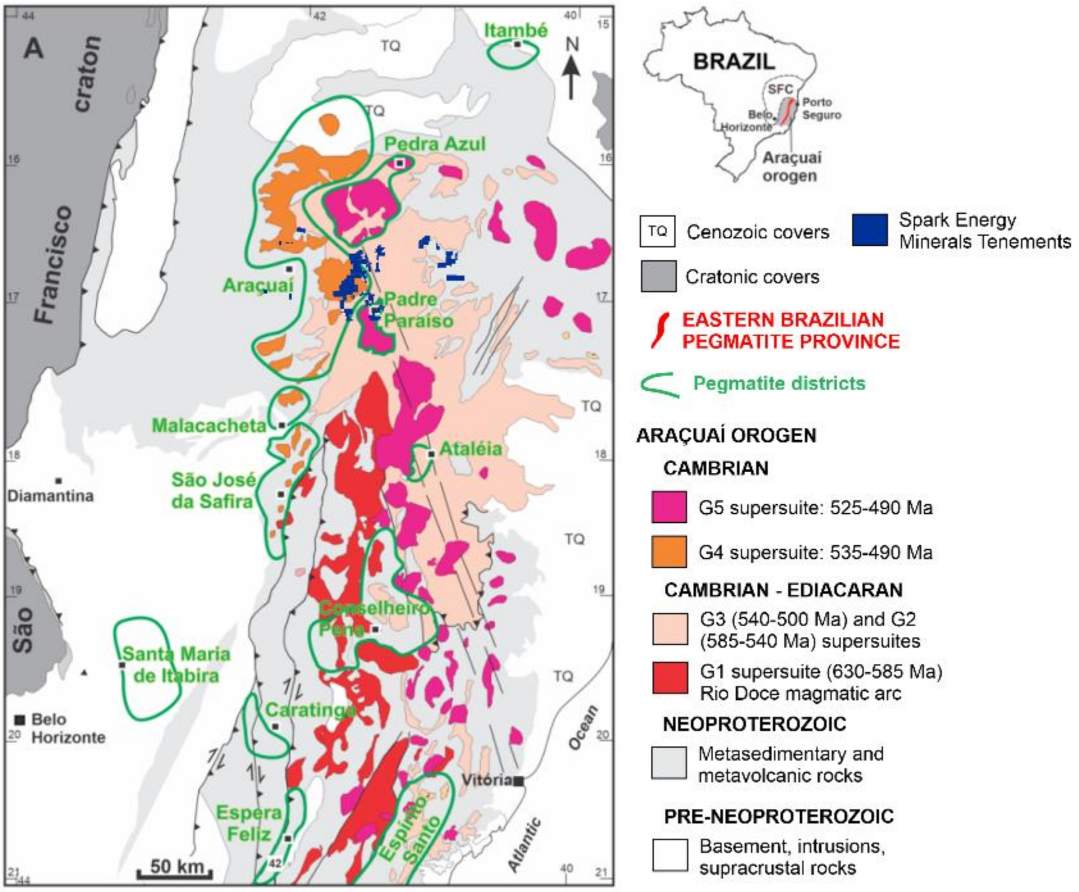
The significant pegmatite populations within the EBPP crystallized from ca. 630 Ma to ca. 490 Ma and could be categorized into two types: anatectic or residual. Most anatectic pegmatites formed during the collisional stage of the Araçuaí orogen. They are commonly associated with migmatites and granulites, and may bear deposits of kaolinite, K-feldspar, mica, corundum, and quartz (e.g., Correia-Neves et al. 1986; Morteani et al. 2000; Netto et al. 2001; De Campos et al. 2004; Horn 2007). Residual pegmatites, on the other hand, form through magmatic differentiation and originate from parent granites formed during the syn-collisional (G2) and post-collisional (G4 and G5) stages (Pedrosa-Soares et al., 2011).

The interaction between these two types of pegmatites, along with their host rocks and parent granitoids, as well as considerations of geographical distribution and mineralogical enrichment, have delineated the pegmatitic populations into eleven distinct districts within the EBPP (Pedrosa-Soares et al., 2011): Araçuaí, Ataléia, Conselheiro Pena, Espera Feliz, Padre Paraíso, Pedra Azul, São José da Safira, Caratinga, Santa Maria de Itabira, Malacacheta, and Espírito Santo.

The Araçuaí Pegmatite district encompasses the most important lithium ore deposits within the entire province, prominently situated in the Itinga, Coronel Murta, and Curralinho pegmatitic fields. (Sá 1977; Afgouni & Sá1978; Sá & Ellert 1981; Correia-Neves et al. 1986; Romeiro & Pedrosa-Soares 2005; Pedrosa-Soares & Siga Jr. 1987, 1990, 2011; Paes et al. 2016).

Figure 7.1_1 is a regional-scale schematic geological plan.

Figure 7.1_1
Regional Geology (Source: Modified from Pedrosa-Soares et al. 2011)



7.2 Local Geology

Most pegmatites in the Araçuaí district are formed through the crystallization of residual melts originating from post-collisional G4 granites (Pedrosa-Soares & Siga Jr. 1987; Pedrosa-Soares et al., 2011; Paes et al. 2016). The G4 granites are S-type, sub-alkaline to alkaline, and consists of balloon-like zoned plutons composed of biotite granite cores and roots, grading into two-mica and muscovite-garnet leucogranite towards the borders, capped by pegmatoid cupolas (Pedrosa-Soares et al., 2011). These granites, as well as the related lithium-rich pegmatites, are hosted by the Salinas Formation along the regional foliation and fracture systems, dipping to SE and NW (Correia- Neves et al. 1986; Pedrosa-Soares et al. 1987; Costa 1989). The metasedimentary rocks within this Formation consist of a succession of wackes and pelites with conglomerate rock and layers of calc-silicate rock, metamorphosed in the greenschist to amphibolite facies. Its deposition occurred around 580 Ma, according to U- Pb detrital zircon ages which correspond to the maximum depositional age of the unit (Peixoto et al. 2015; Peixoto et al., 2018; Costa 2018; Deluca et al. 2019).

The Araçuaí district pegmatites exhibit a range of sizes, with the most significant comprising from medium to very large and are typically tabular or lenticular. They are external pegmatites that are embedded within the host rocks of the parent granites belonging to the S-type G4 Supersuite (Pedrosa-Soares et al., 2011a). The pegmatite populations in this district are concentrated in the Itinga fields, notable for their lithium abundance, and the Coronel Murta fields, distinguished by their boron-rich nature and no associated petalite (Pedrosa-Soares et al.,2011).

Pegmatites of these fields belong to a category enriched in rare elements (B, Be, Cs, Li, Sn, Ta), characteristic of lithium-cesium-tantalum (LCT) type pegmatites. Spodumene Rich Pegmatites (SRP) are a sub-class of LCT-type pegmatites, the main hard rock ore deposit type for lithium, yielding key lithium silicates like spodumene, petalite, and lepidolite, alongside several associated minerals such as lithium phosphates (e.g., amblygonite, montebrasite, lithophyllite/triphylite), tantalum oxides, cassiterite, and pollucite (e.g., Černý & Ercit, 2005). Enrichment in lithium-cesium-tantalum is predominantly, though not exclusively, associated with S-type granites derived from muscovite-rich metasedimentary rocks. The peraluminous character is indicated by the occurrence of muscovite, tourmaline, garnet, and occasionally, topaz, andalusite, and gahnite (Cerný 1991b in London 2008).

The Sigma Lithium project area 15km West, the pegmatites are commonly hosted by a medium-grey, biotite-quartz schist. Typically, these pegmatites are concordant with the schist foliation which also corresponds to the overall strike of the schist-rich units of the Salinas Formation. At the interfaces between the pegmatite and schist, recrystallization features are evident, including eye-like biotite within cordierite masses, as well as the formation of millimetre-sized black tourmaline needles, which are almost invariably perpendicular to the main schistosity.

Outcrop and subcrop exposed in erosional windows through laterite cover at The SEM project area observed to date mainly composed of granitic phases along with what appears to be structural zones that have been intruded by pegmatites. To date, mapping by SEM field geologists have identified some 123 individual pegmatite outcrops-subcrops within 13 pegmatites trends over a strike length of 31km.

7.3 Mineralization

The SEM Geology team commenced field reconnaissance mapping and sampling in November 2024. To date, the SEM team has identified some 123 individual pegmatite outcrops-subcrops within 13 pegmatites trends over a strike length of 31km.

The typical pegmatites defined in the field ranged from 10cm width to zones of up to 200m width with multiple pegmatites. The mineralogy of the pegmatites identified during the Sahara visit was Tourmaline + Quartz + Feldspar. Sahara did not identify any clear evidence of spodumene mineralization in the weathered profiles observed at surface (Spodumene is a soft mineral and can be weathered to clay at surface).

Typical examples identified during the Sahara visit are shown in the figure below.

Figure 7.3_1
Mineralization Styles (Source: Sahara Site Visit 2025)

Pegmatites located in the field	*Typical Tourmaline, Quartz and Feldspar pegmatite*

8 DEPOSIT TYPES

The mineralization being targeted within the project area are LCT-type pegmatites. Spodumene Rich Pegmatites (SRP) are a sub-class of LCT pegmatites and are the main target.

The following deposit type descriptor for such pegmatites is summarized and abstracted from Bradley and McCauley (2013).

All known LCT pegmatites are associated with convergent-margin or collisional orogens. LCT pegmatite maxima at ca. 2650, 1800, 525, 350, and 100 Ma correspond to times of collisional orogeny and, except for a comparatively minor peak at 100 Ma, to times of supercontinent assembly. The largest known deposits are Archean in age (Viana and al, 2003).

LCT pegmatites represent the most highly differentiated and last to crystallize components of certain granitic melts. Parental granites are typically peraluminous, S-type granites, although some Archean examples are metaluminous, I-type granites. LCT pegmatites are enriched in the incompatible element's lithium, cesium, tin, rubidium, and tantalum, and are distinguished from other rare-element pegmatites by this diagnostic suite of elements. The dikes typically occur in groups, which consist of tens to hundreds of individual pegmatites and cover areas up to a few tens of square kilometres. LCT pegmatites are known to form as far as 10 km from the parental granite and the more distal the pegmatite, frequently the more fractionated. The most highly fractionated rare- element-enriched pegmatites only constitute 1–2% of regional pegmatite populations.

The dikes are commonly late syntectonic to early post-tectonic with respect to enclosing rocks. Many LCT pegmatites intrude metasedimentary rocks, which are often metamorphosed to low-pressure amphibolite to upper greenschist facies.

Individual pegmatites have various forms including tabular dikes, tabular sills, lenticular bodies, and irregular masses. They are significantly smaller than typical granitic plutons and typically are of the order of tens to hundreds of metres long, and metres to tens of metres wide.

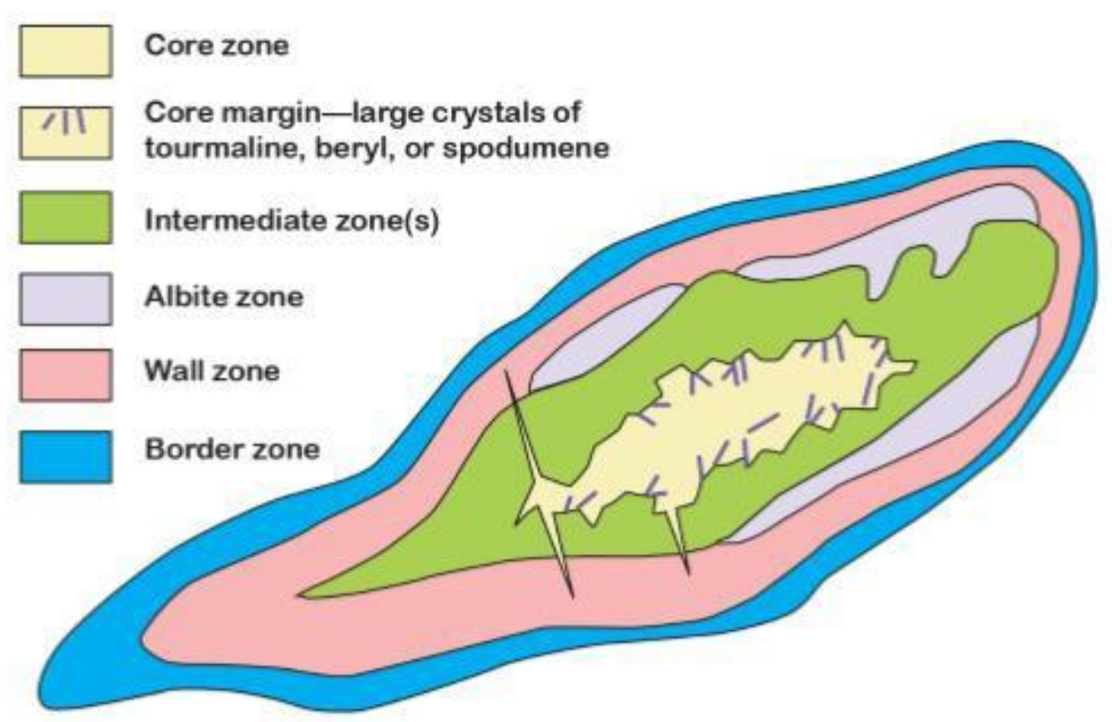
Most LCT pegmatite bodies show some sort of structural control. At shallower crustal depths, pegmatites tend to be intruded along anisotropies such as faults, fractures, foliation, and bedding planes. For example, in more competent rocks such as granites, pegmatites commonly follow fractures whereas pegmatites intruded into schists tend to conform to foliation. In higher-grade metamorphic host rocks, pegmatites are typically concordant with the regional foliation, and form lenticular, ellipsoidal, or tapered cylindrical bodies.

Lithium is mostly found in the silicates spodumene ($LiAlSi_2O_6$), petalite ($LiAlSi_4O_{10}$), and lepidolite (Li-mica, $KLi_2Al(Al,Si)_3O_{10}(F,OH)_2$). Lithium phosphate minerals, mainly montebrasite, amblygonite, lithiophilite, and triphylite, can be present in some LCT pegmatites. Tantalum mineralization predominantly occurs as columbite– tantalite ($[Mn,Fe][Nb,Ta]_2O_6$). Tin is found as cassiterite (SnO_2). Caesium is mined exclusively from pollucite ($CsAlSi_2O_6$).

Most individual LCT pegmatite bodies are concentrically, though irregularly, zoned. However, there are unzoned examples known.

Within an idealized pegmatite, four main zones can be defined (Figure 8_1).

Figure 8_1
Generalized schematic representation LCT-pegmatite –(Source - Bradley and McCauley (2013))



9 EXPLORATION

Based on the lithium exploration works completed to date, SEM have identified 123 individual pegmatites within 13 pegmatite trends over a combined 31km of strike interpreted. Among the targets evaluated, three have emerged as particularly promising: the Grota do Maquém Target (also referred to as Target 1; Figure 9.1), the Água Branca Target (also referred to as Target 5; Figure 9.2) and the Cruzeta Target [Figure 9.3].

Exploration has been focussed on field mapping along with geochemical sampling included stream sediment sampling, soil sampling, rock chip sampling split between outcrop grab sampling and channel sampling across exposure in small scale workings.

Figure 9.1
Grota do Maquém Target – Sample Results (Source: SEM, March 2025)

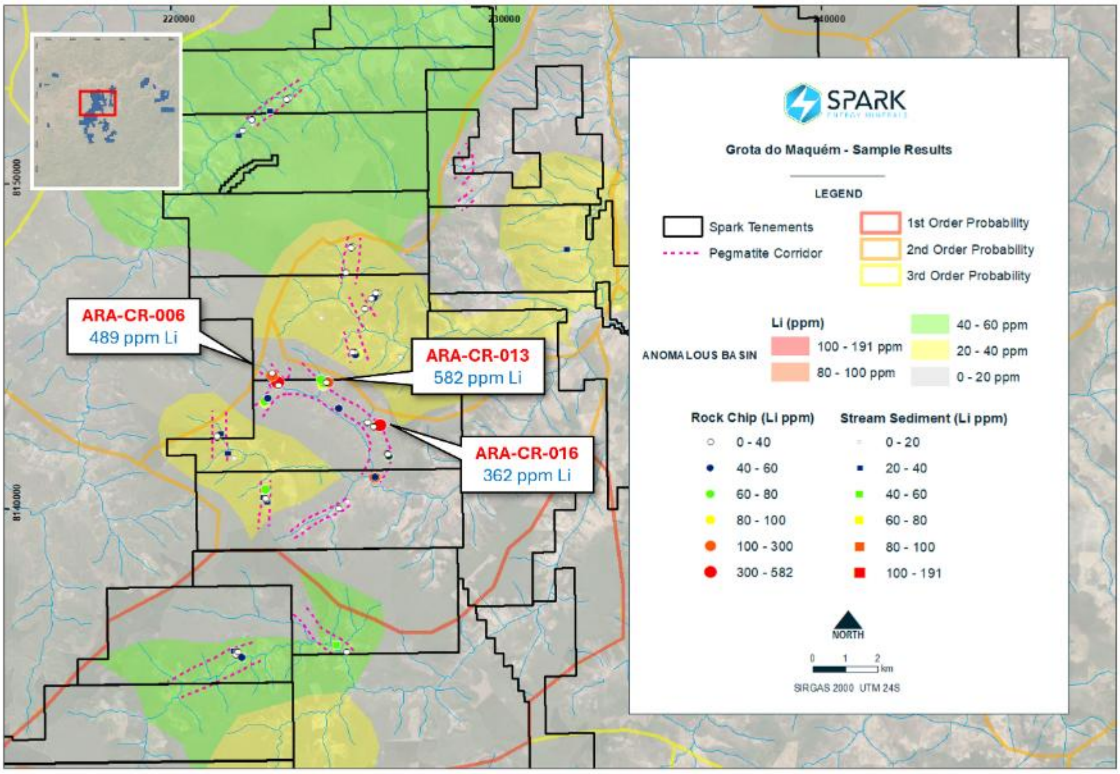


Figure 9.2
Água Branca Target – Sample Results (Source: SEM, March 2025)

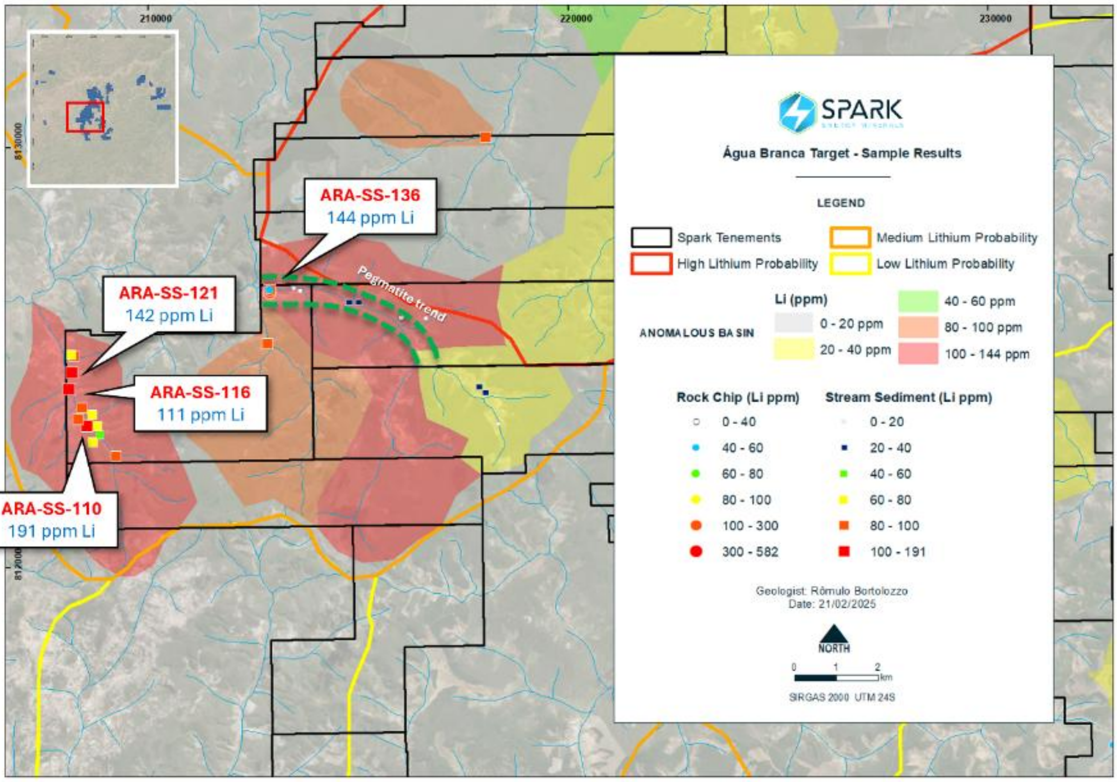
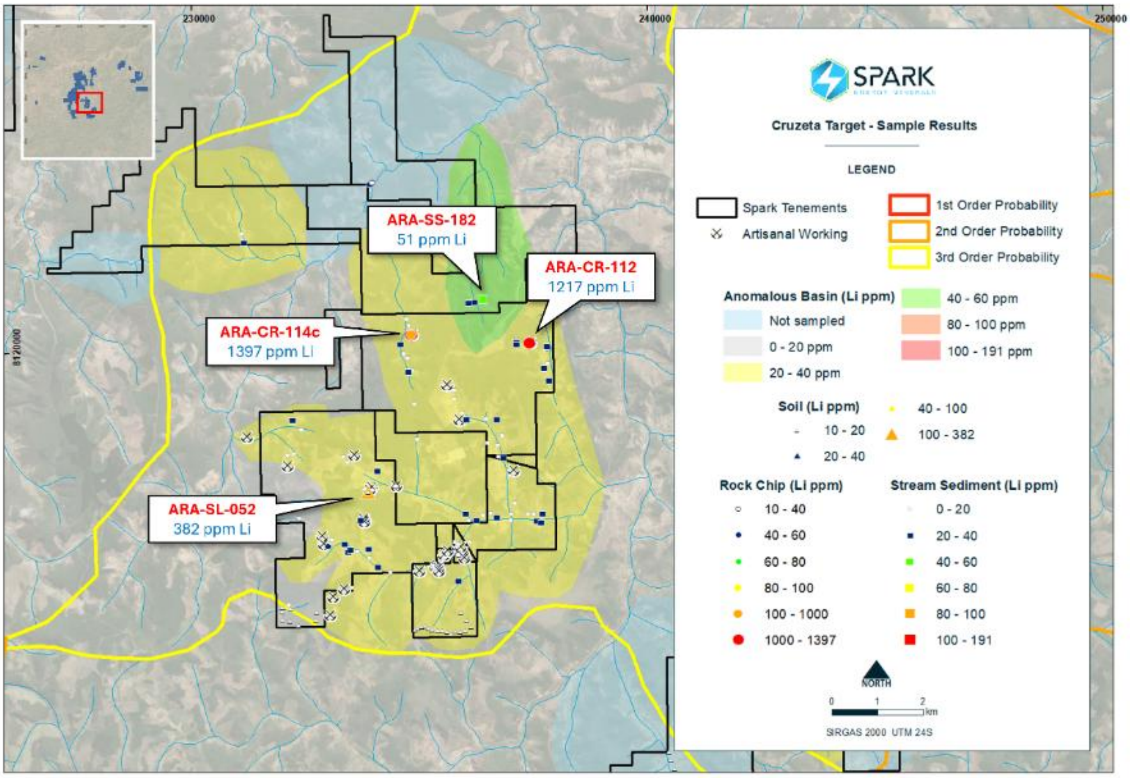


Figure 9.3
Cruzeta Target – Sample Results (Source: SEM, March 2025)



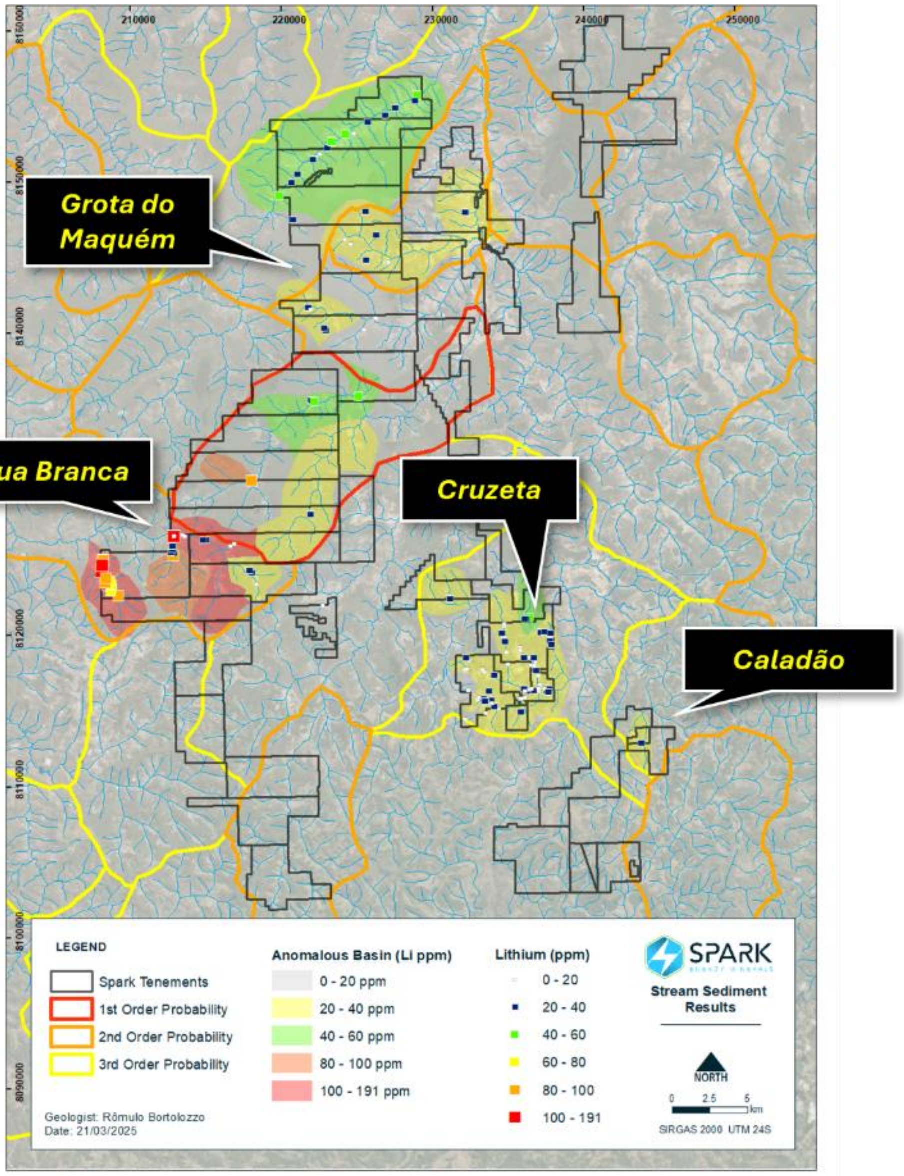
9.1 Stream Sediment Sampling

SEM have completed over 190 stream sediment samples (results available for 114 samples) since commencing field in November 2024.

The stream sediments were undertaken by collection of 1.5kg of the fine fraction on trap points.

Sahara has reviewed the available results, and the work has defined anomalous Lithium and indicator elements for LCT along with anomalous REE as shown in the following figures.

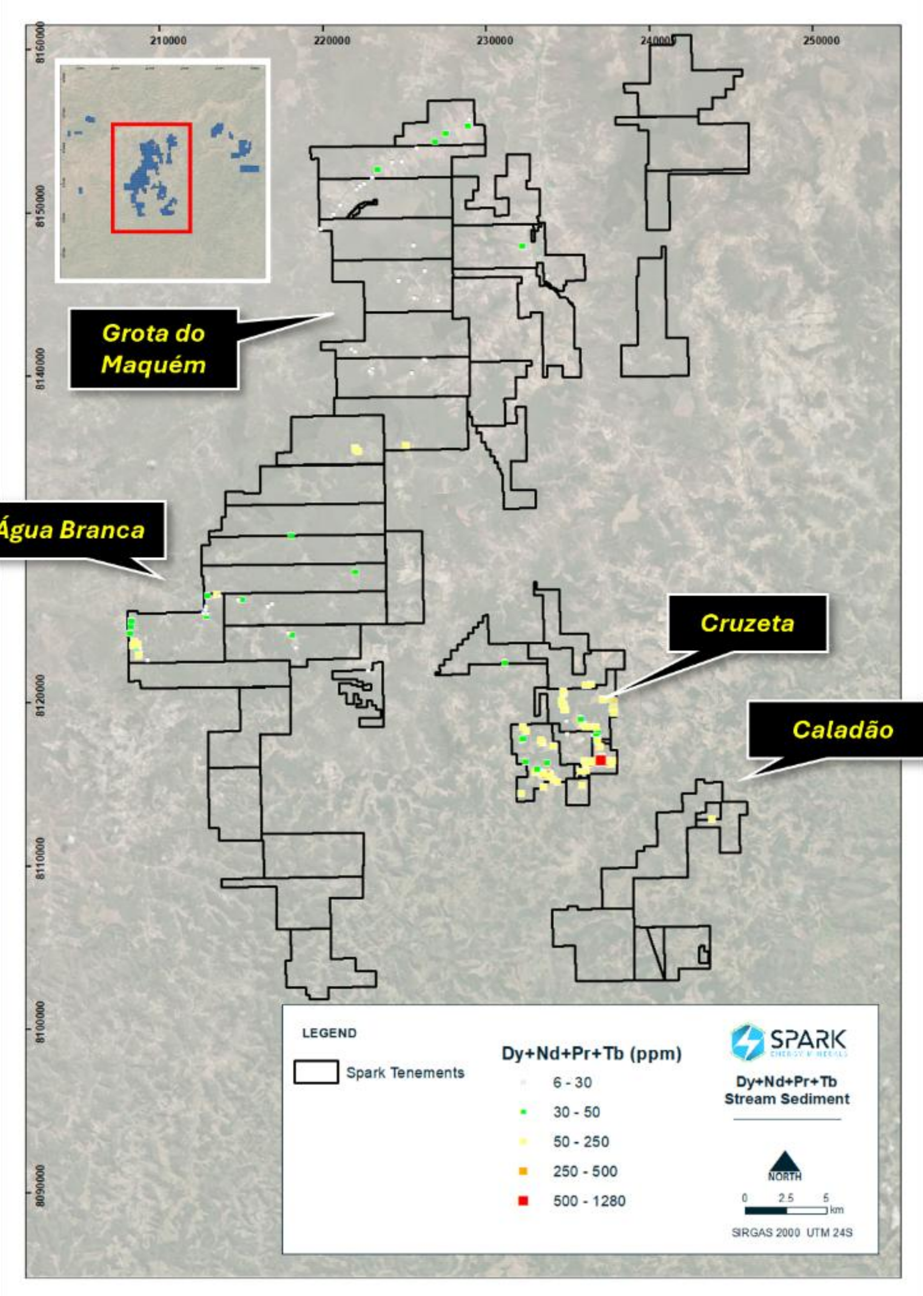
Figure 9.1_1
Stream Sediment Results – Lithium (Source: SEM, March 2025)



The Stream Sediment sampling have defined anomalies up to 191ppm Li which is significantly above the background. This is early-stage work but demonstrates good correlation with surficial mapping and pegmatites defined on surface.

The stream sediments have also highlighted anomalous REE as shown in the figure below which highlights the Magnet Rare earth elements in the figure below.

Figure 9.1_2
Stream Sediment Results - MagREE (Source: SEM, March 2025)

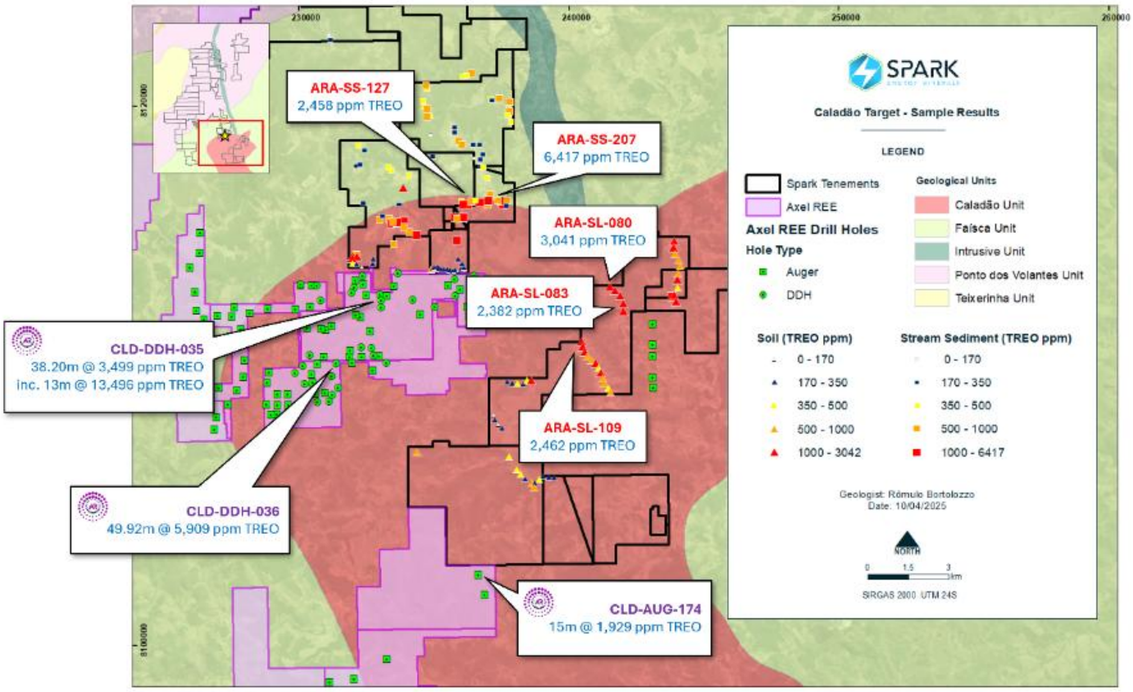


SEM has commenced reconnaissance regolith-geological mapping over areas where their Exploration Licenses cover the Caladão Granite where Australian Junior explorer Axel REE Limited (AXEL) has reported significant Gallium and REE results. Initial soil and stream sediment samples collected by SEM within their contiguous tenements have returned anomalous TREO results > 3000ppm in soils and > 6000ppm TREO in stream sediment samples that support the continuation of mineralization demonstrated by Axel (as shown in the figure below).

These results indicate that the Caladão Granite and its in-situ weathered regolith profile is a prospective target, remaining open to the southwest, with 36 pending results still under analysis at the SGS Laboratory.

The area has the potential to become a major project for the company as further exploration activities are conducted (e.g. auger drilling).

Figure 9.1_3
Caladão Target – REE Results from Axel drilling and SEM Stream Sediment & Soil Sampling
(Source: SEM, March 2025)



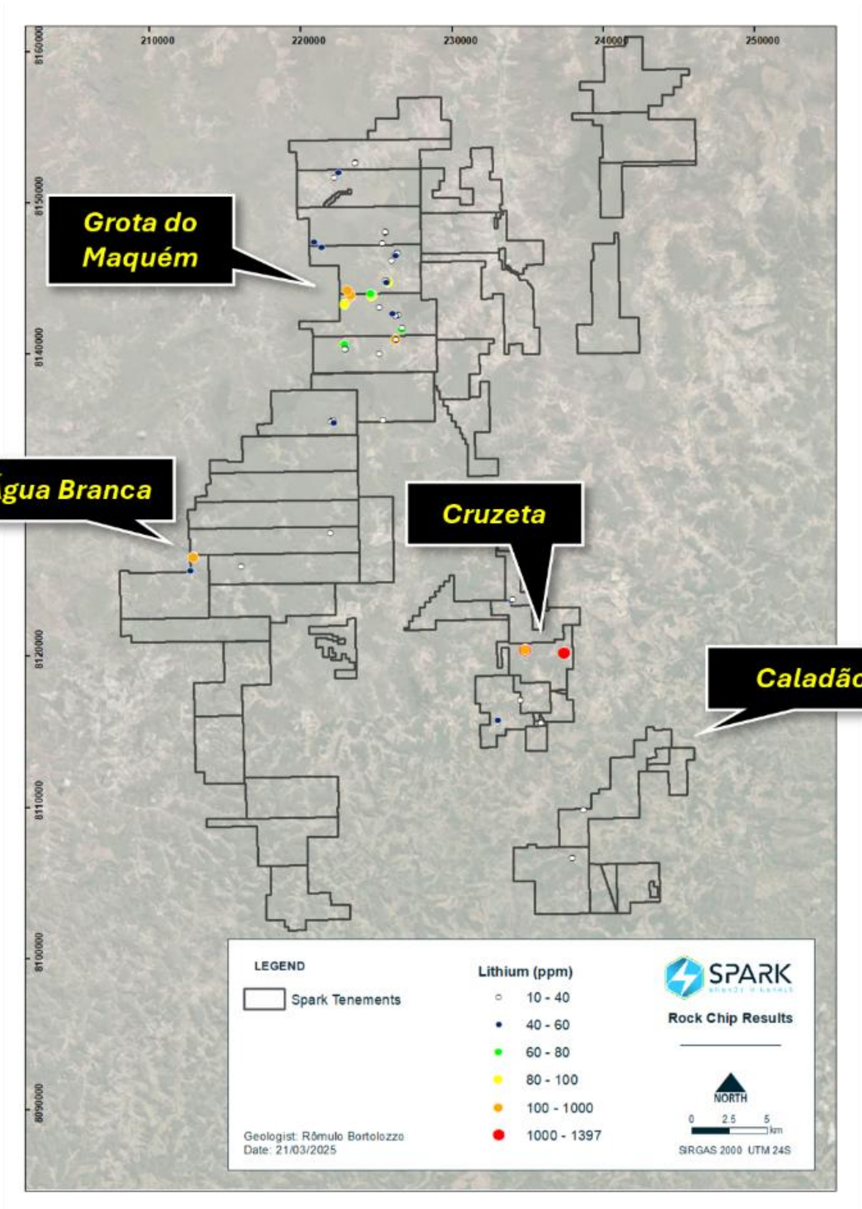
9.2 Rock Chip Sampling

SEM have completed a total of 102 rock chip samples (results available for 86 samples) since commencing field in November 2024.

The Rock Chip sampling was undertaken by collection of ~1.5kg of outcropping rock.

Sahara has reviewed the available results, and the work has defined anomalous Lithium and indicator elements to LCT along with anomalous REE as shown in the following figures.

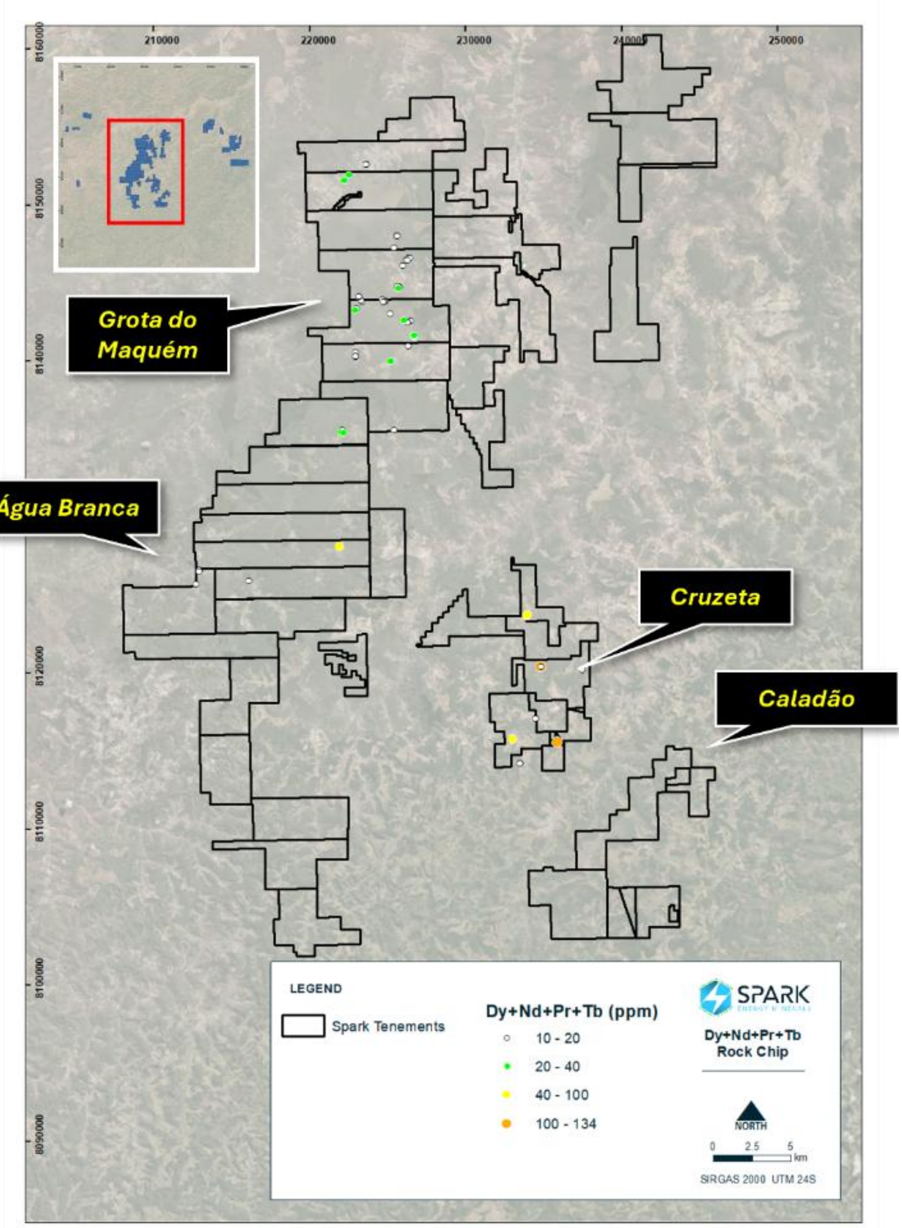
Figure 9.2_1
Rock Chip Results – Lithium (Source: SEM, March 2025)



The Rock Chip sampling have defined anomalies up to 1,397ppm Li which is significantly above the background. This is early-stage work but demonstrates good correlation with surficial mapping and pegmatites defined on surface.

The rock chip samples have also highlighted anomalous REE as shown in the figure below which highlights the Magnet Rare earth elements

Figure 9.2_2
Rock Chip Results – MagREE (Source: SEM, March 2025)



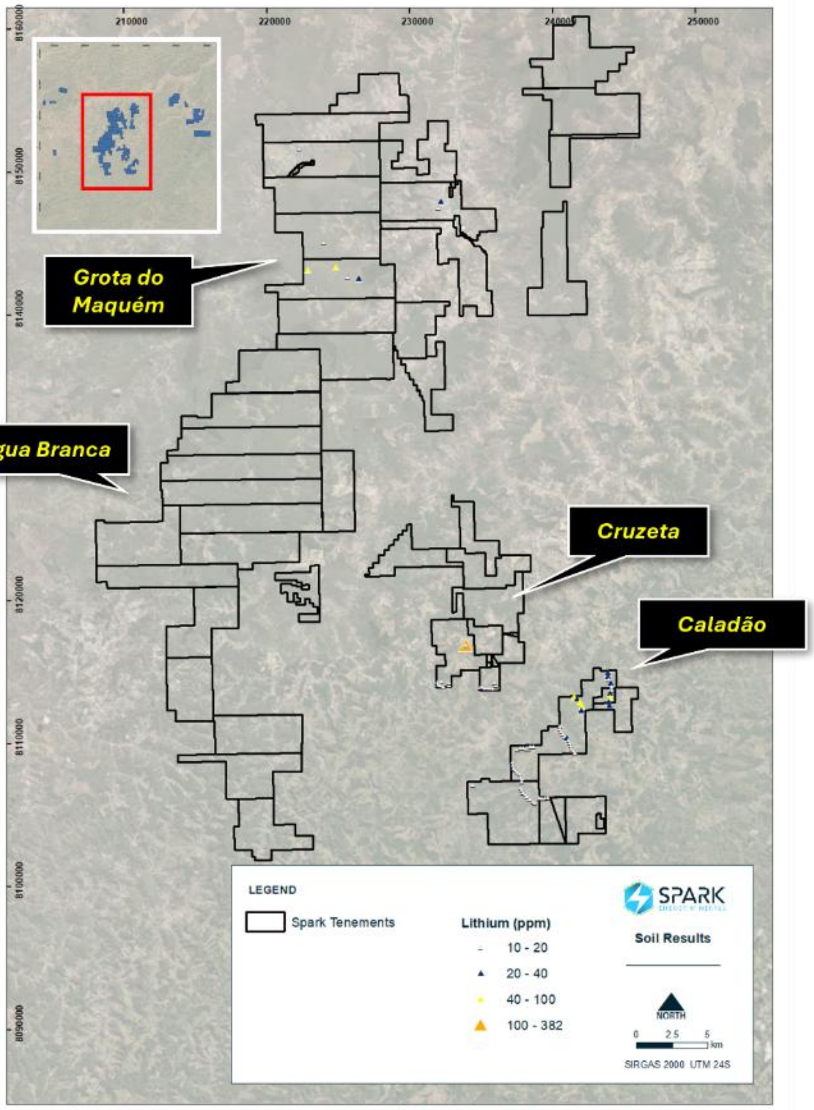
9.3 Soil Sampling

SEM have completed a total of 104 soil samples (results available for 104 samples) since commencing field in November 2024.

The Soil sampling was undertaken by collection of ~1kg of soil from the A-horizon. Sampling was conducted on a discretionary basis rather than following a predefined grid, with sample locations selected based on the geologist's judgment.

Sahara has reviewed the available results, and the work has defined anomalous Lithium and indicator elements to LCT along with anomalous REE as shown in the following figures.

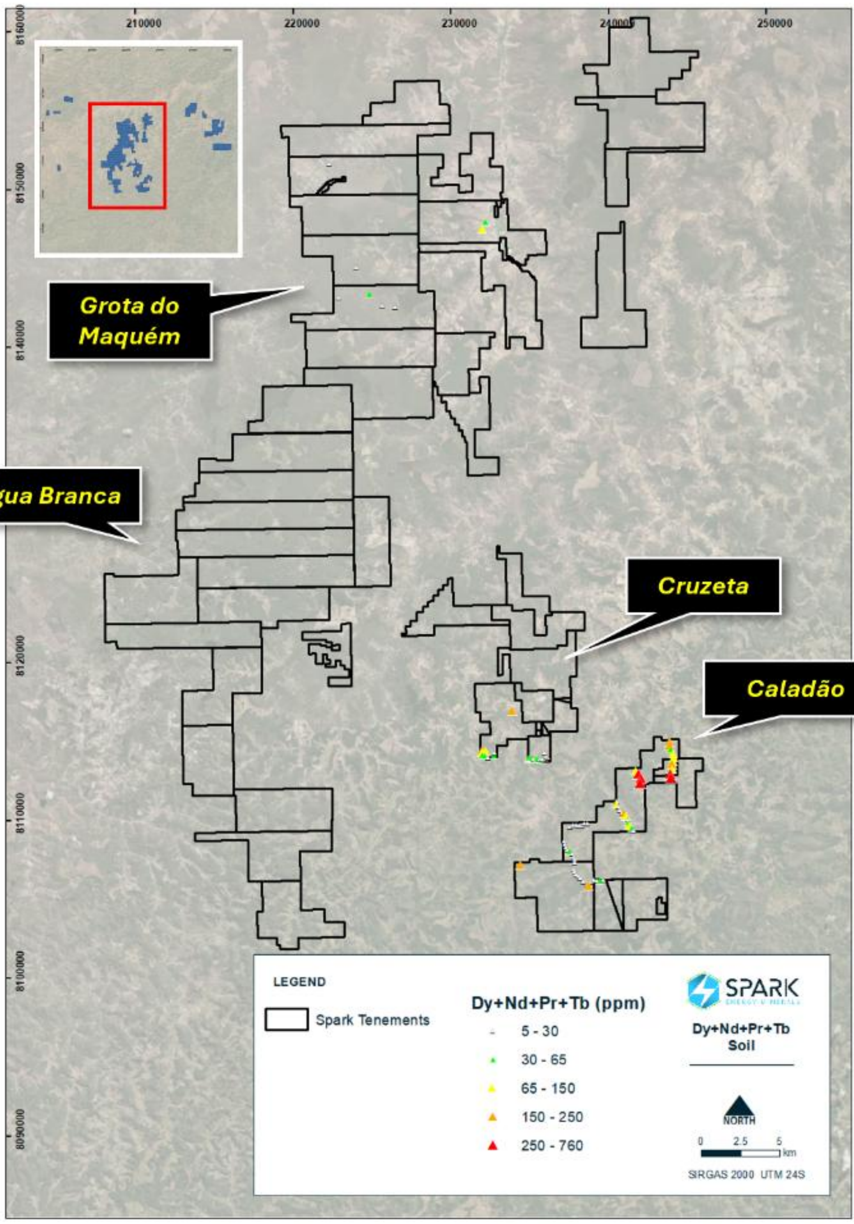
Figure 9.3_1
Soil Results – Lithium (Source: SEM, March 2025)



Soil sampling has identified anomalies of up to 382 ppm Li which are considered promising for this type of sampling. These results may indicate enriched zones and justify further follow-up.

The soil samples have also highlighted anomalous REE as shown in the figure below which highlights the Magnet Rare earth elements.

Figure 9.3_2
Soil Results – MagREE (Source: SEM, March 2025)



9.4 Potassium / Rubidium Ratio and Preliminary Geochemical Analysis of Rock-Chip, Stream Sediment and Soil Samples

The potassium-to-rubidium (K/Rb) ratio is an important geochemical indicator in lithium exploration, particularly in pegmatite-hosted lithium deposits. It provides insights into the degree of fractionation of pegmatites, which directly influences their potential to host lithium mineralization.

The Cruzeta target has produced anomalous assays including 739ppm, 1,217ppm and 1,397ppm Li respectively. The K/Rb ratios for these three samples report as low as 23.84 to 36.42 pointing to the potential proximity of highly evolved Lithium, Cesium, Tantalum (LCT) pegmatites which are characterized by this ratio and the corresponding pathfinder elemental association.

While these are the lowest K/Rb ratios identified on the property to date, the Agua Branca and Grota do Maquem have both produced ratios <100.

Key Significance in Lithium Exploration:

1. Indicator of Pegmatite Evolution

• Pegmatites form from highly evolved granitic melts, and their composition changes as the melt differentiates.

• During this process, rubidium (Rb) preferentially replaces potassium (K) in potassium feldspar and mica minerals.

• A low K/Rb ratio suggests a higher degree of fractionation, meaning the pegmatite has undergone extensive differentiation, increasing the likelihood of lithium (Li) enrichment.

2. Correlation with Lithium and Rare Metals

• Highly fractionated pegmatites often contain lithium-bearing minerals like spodumene, petalite, and lepidolite.

• Low K/Rb ratios (typically <150 in highly evolved pegmatites) are often associated with high concentrations of lithium (Li), cesium (Cs), tantalum (Ta), and other rare metals in lithium-cesium-tantalum (LCT) pegmatites.

3. Exploration Targeting Tool

• By mapping K/Rb ratios in rock and soil samples, geologists can identify highly fractionated pegmatites that are more likely to contain lithium mineralization.

• A decreasing K/Rb ratio in a pegmatite field can signal proximity to the most evolved, lithium-rich zones.

4. Discrimination Between Fertile and Barren Pegmatites

• Pegmatites with high K/Rb ratios (>300) are generally less fractionated and unlikely to contain significant lithium mineralization.

• Pegmatites with low K/Rb ratios (<150) are more evolved and considered fertile for lithium exploration.

Exploration teams often use portable X-ray fluorescence (pXRF) analyzers or laboratory geochemical analysis to determine K/Rb ratios in rock samples. This helps prioritize drilling targets by focusing on pegmatites with the most favorable geochemical signatures.

The K/Rb ratio is a powerful geochemical tool in lithium exploration, helping to identify and prioritize highly fractionated pegmatites with higher lithium potential. A low K/Rb ratio is a strong indicator of pegmatites enriched in lithium and other rare metals, making it a key metric in LCT pegmatite exploration.

Discussion SEM Areas:

SEM has, to date has sampled less than 50% of the total area of their extensive tenement package via rock-chip, stream sediment and soil samples. Despite the small number of samples collected to date in terms of overall exploration ground covered it has been possible to undertake preliminary evaluation of K/Rb ratios for each sample type. Results from this work clearly confirm K/Rb ratios of 150 or less coincident with a large percentage of identified Pegmatite occurrences along with anomalous samples for Lithium itself and the main pathfinder elements. The figure below show the K/Rb ratio plotted from rock-chip, stream and soil samples collected to date respectively.

Figure 9.4_1
Potassium - Rubidium Ratio (K/Rb) Rock Chip, Stream Sediment and Soil Sample
(Source: SEM, March 2025)

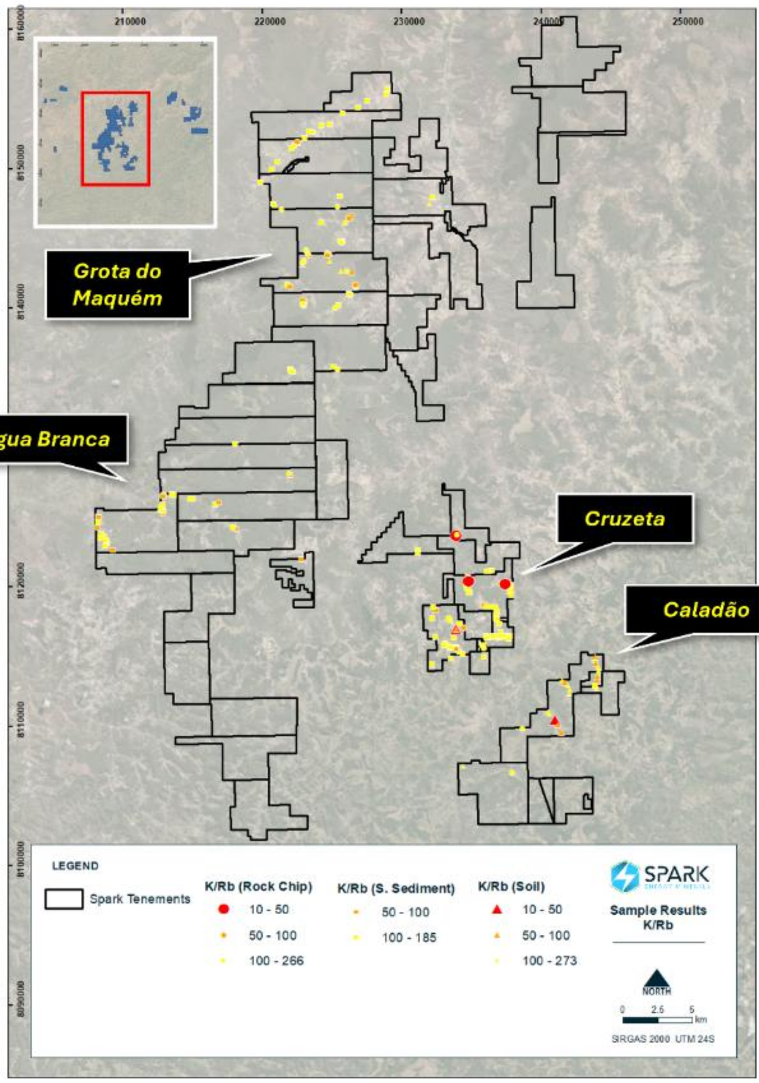


Table 9.4_1
Twenty Lowest K/Rb Ratios from Samples Collected to Date

Sample ID	Sample Type	Be_ppm	Cs_ppm	Li_ppm	Nb_ppm	Rb_ppm	Sc_ppm	Sn_ppm	Sr_ppm	Ta_ppm	K/Rb
ARA-SL-053	Soil	<5	7.2	47	37	205	6	8	115	<10	23.06
ARA-CR-114b	Rock Chip	7	106.8	1397	413	2973	11	55	<15	31	23.84
ARA-SL-046	Soil	<5	12.1	104	46	271	6	11	52	<10	30.01
ARA-SL-114	Soil	<5	1.4	35	61	62	<5	<5	<15	<10	34.02
ARA-CR-112	Rock Chip	<5	23.2	1217	274	1660	17	20	<15	<10	36.36
ARA-CR-114c	Rock Chip	12	16.9	739	246	2057	13	91	<15	14	36.42
ARA-CR-107	Rock Chip	7	24.1	42	28	334	15	5	<15	<10	39.42
ARA-SL-047	Soil	<5	3.3	39	10	86	<5	7	40	<10	40.02
ARA-SL-052	Soil	7	25.5	382	213	1245	20	58	15	<10	41.16
ARA-SL-048	Soil	<5	19.9	140	78	537	8	14	58	<10	41.35
ARA-SL-054	Soil	<5	1.1	19	13	25	6	<5	183	<10	52.72
ARA-SL-050	Soil	<5	13.2	123	111	440	8	18	31	<10	55.25
ARA-SL-045	Soil	<5	1.1	17	31	21	7	5	26	<10	56.38
ARA-CR-013	Rock Chip	14	81.3	582	285	1359	18	146	<15	38	57.21
ARA-SL-009	Soil	<5	5.8	55	46	83	7	20	<15	<10	58.98
ARA-CR-059	Rock Chip	10	2.9	38	<10	43	<5	<5	23	<10	60.05
ARA-SS-051	Stream Sediment	<5	3.2	19	26	23	<5	11	<15	<10	60.30
ARA-CR-004	Rock Chip	22	97.3	284	325	1189	31	143	<15	60	62.26
ARA-SL-049	Soil	<5	11	115	63	394	7	15	48	<10	62.35
ARA-SS-110	Stream Sediment	<5	30.3	191	32	437	9	17	70	<10	64.63
ARA-CR-101	Rock Chip	8	28.6	163	80	569	7	58	16	12	68.44

9.5 Geophysics

SEM contracted Avant Geofísica (Avant) to undertake reprocessing and interpretation of available public data

Avant completed the following review

Satellite imagery processing;

Magnetic and Radiometric processing based on public data available on Brazilian Geological Survey (CPRM/SGB);

Multispectral Analysis for pegmatite targets identification.

9.6 Magnetic deliverables

The following maps were generated by Avant

01_Flight Lines;

02_CMA_TMI_NEshade_NL;

03_RTP_NEshade_NL;

04_CMA_TMI_PE;

05_RTP_NEshade_NL;

06_RTP_NEshade_L;

07_RTP_PE;

08_RTP_GHT_THDR_NEshade_NL;

09_RTP_DV1_NEshade_NL;

10_RTP_DV1_NEshade_L;

11_RTP_DV2_NEshade_GRAY_SCALE_NL;

12_RTP_DV2_NEshade_GRAY_SCALE_L;

13_CMA_TMI_ASA_AS_NEshade_NL;

14_CMA_TMI_ASA_AS_NEshade_L;

15_CMA_TMI_ASA_AS_PE;

16_CMA_TMI_ASVI_NEshade_NL;

17_CMA_TMI_ASVI_NEshade_L;

18_RTP_ISA_TILT_NEshade_NL;

19_RTP_ISA_GHT_TAHD_NEshade_NL;

20_RTP_GHT_ISA_TDR_THDR_NEshade_NL;

21_RTP_THETA_MAP_NEshade_NL;

22_CMA_GHT_THDR_NEshade_NL;

23_CMA_DV1_NEshade_NL;

24_CMA_DV1_NEshade_L;

25_CMA_DV2_NEshade_GRAY_SCALE_NL;

26_CMA_DV2_NEshade_GRAY_SCALE_L;

27_CMA_ISA_TILT_NEshade_NL;

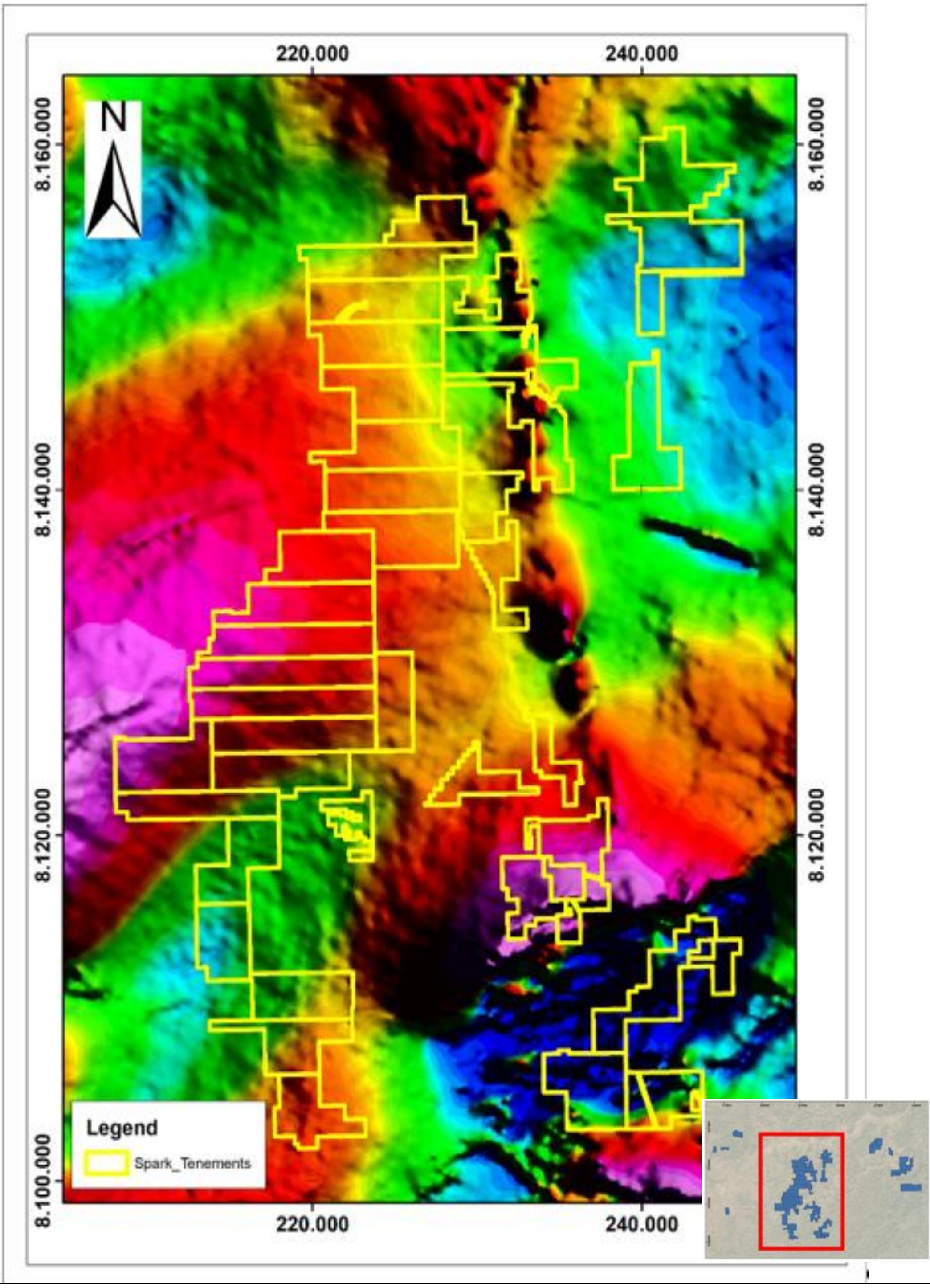
28_CMA_ISA_GHT_TAHD_NEshade_NL;

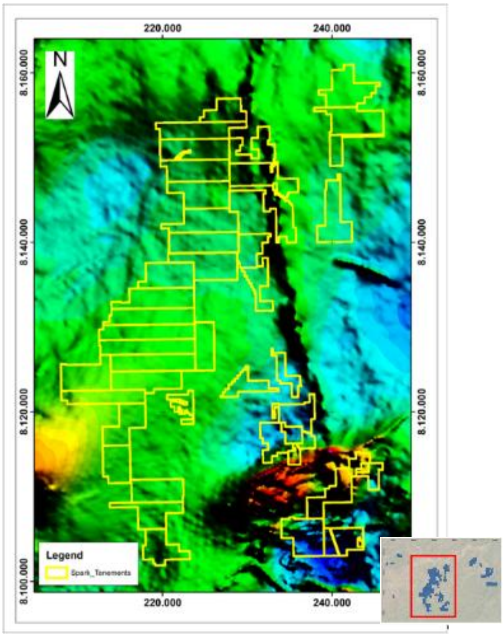
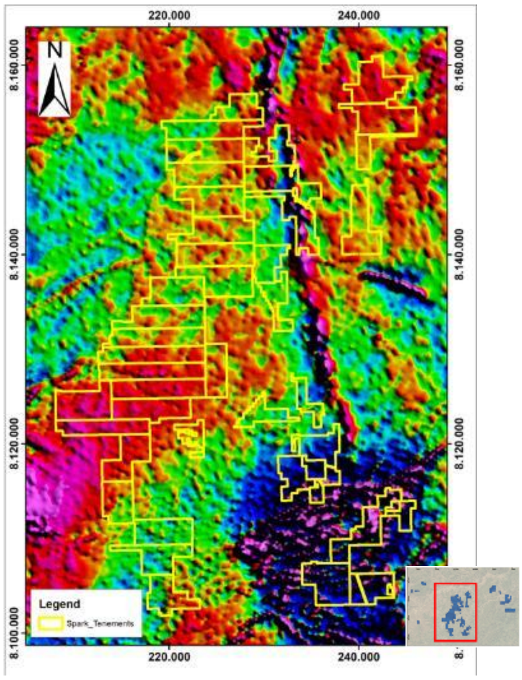
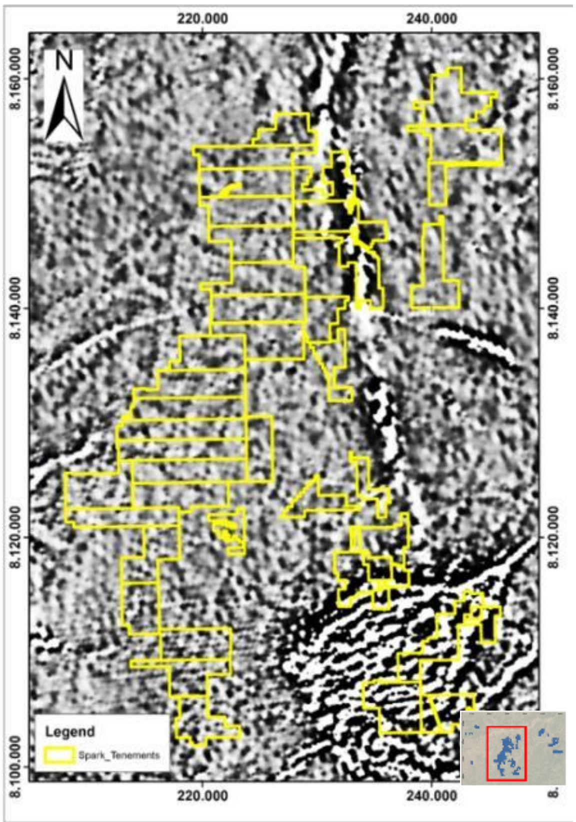
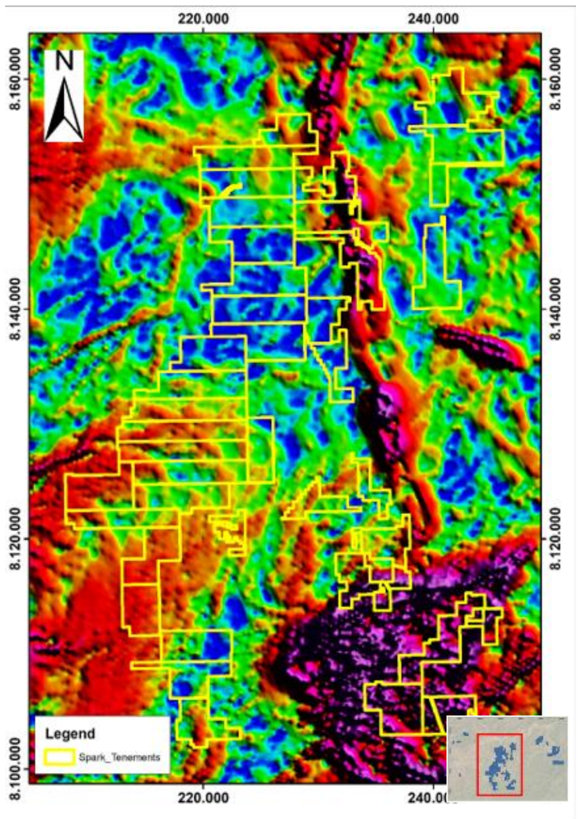
29_CMA_GHT_ISA_TDR_THDR_NEshade_NL;

30_CMA_THETA_MAP_NEshade_NL.

The following maps of interest are shown below

Figure 9.6_1
Total Magnetic Intensity - Non-Linear Scale (Source: Avant 2024)



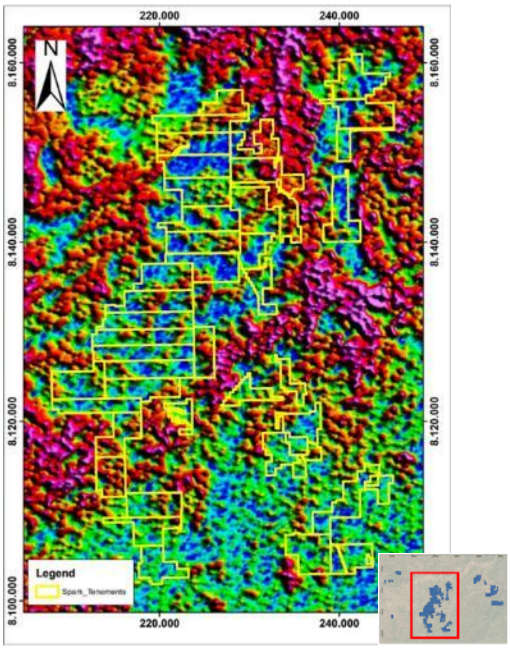
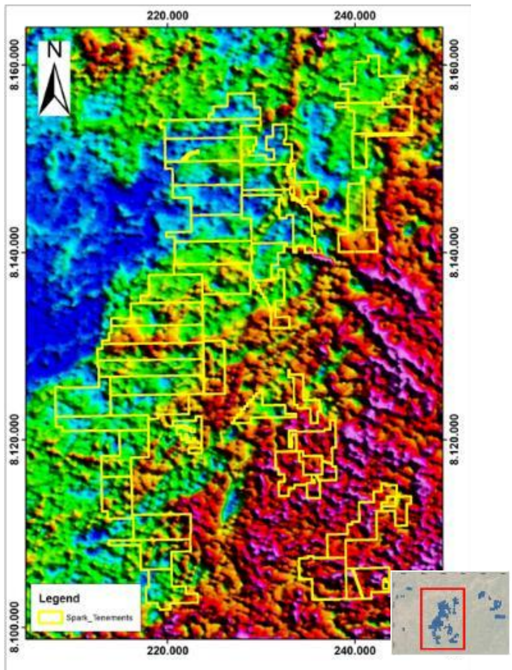
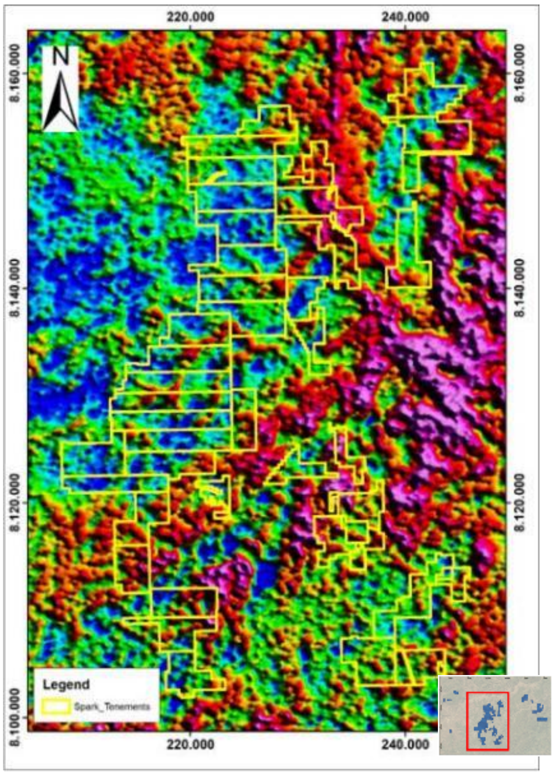
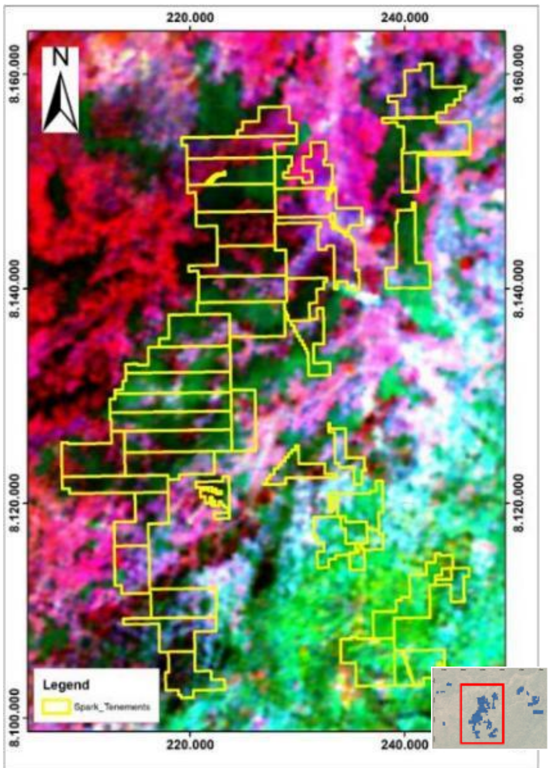
<table>
<tr><th colspan="2">Figure 9.6_2
Avant Reprocessed Geophysics - Magnetics (Source: Avant 2024)</th></tr>
<tr><th>TMI</th><th>1st Vertical Derivative (1VD)</th></tr>
<tr><td>
</td><td>
</td></tr>
<tr><th>2nd Vertical Derivative (2VD)</th><th>Total Horizontal Derivative (TDH)</th></tr>
<tr><td>
</td><td>
</td></tr>
</table>

9.7 Radiometrics deliverables

The following maps were generated by Avant.

1) Dose Rate Map;
2) Anomalous K map (Kperc - %);
3) Th equivalent map (eTh - ppm);
4) U equivalent map (eU - ppm);
5) Th/K ratio map;
6) U/K ratio map;
7) Th/U ratio map;
8) Ternary composition map (Kperc, eU and eTh), in RGB;
9) Ternary composition map (Kperc, eU and eTh), in CMY;
10) F Parameter Map;

A selection of images created are shown below

<table>
<tr><th colspan="2">Figure 9.7_1
Avant Reprocessed Geophysics - Radiometrics (Source : Avant 2024)</th></tr>
<tr><th>Potassium</th><th>Thorium</th></tr>
<tr><td>
</td><td>
</td></tr>
<tr><th>Uranium</th><th>Ternary RBG</th></tr>
<tr><td>
</td><td>
</td></tr>
</table>

9.8 Multispectral Analysis Deliverables

Avant produced the following images:

01 images with truecolor RGB composition with 2m/pixel (CBERS4A);

01 Sentinel 2 image set (9 bands) with falsecolor composite with shortwave infrared bands;

01 composite images with PCA results – 20m/pixel;

01 DTM based on ALOS/PALSAR – 12,5m/pixel;

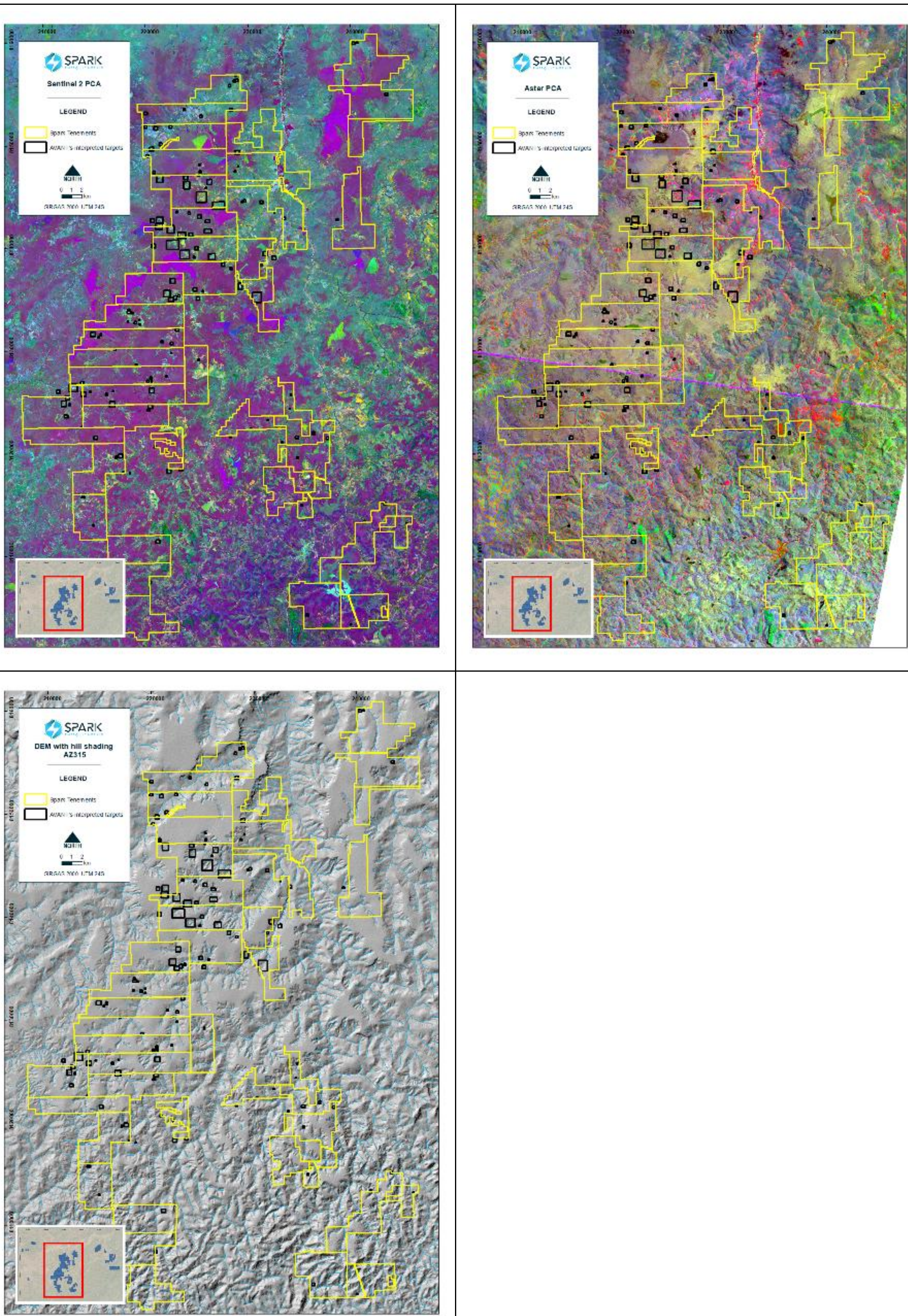
01 Hydrological Map based on DTM;

Shapefile with indicated targets;

Report with the technical data of the work.

A selection of images produced are shown below

Figure 9.8_1
Avant Reprocessed - Multispectral Images with Avant pegmatite targets
(Source: Avant 2024)



The geophysics and remote sensing data reprocessed by Avant has assisted in regional geology and structural setting but has been ineffective in directly defining outcropping pegmatites. This has been more effectively defined by SEM field mapping.

Sahara recommends a structural interpretation of the region as given the pegmatites identified in the field are all internal to the granite hosts, then faults and zones of weakness will be important to map as they will provide the pegmatite path of least resistance.

10 DRILLING

There has been no drilling completed within the Arapaima Lithium and REE projects

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

The following procedures were used for stream sediments and grab samples completed by SEM.

SEMS were responsible for the planning and execution of the sample preparation and delivery to the commercial laboratory.

11.1 Stream Sediment Sampling

The following procedures were undertaken.

The fine fraction was taken from the in-situ as sitting within the streams (See figure below)

Approximately 1.5kg collected and sent for analysis

Figure 11.1_1
Example of Stream Sediment location – ARA-SS-058 (Source: SEM 2024)

11.2 Grab Samples

The following sampling procedure was undertaken by SEM for grab sampling

Outcropping samples are collected using a geologists pick.

Samples around 1.5kg are placed in a calico bag and sent for analysis.

Geological descriptions and site photographs are taken

11.3 SGS Laboratory

11.3.1 Sample Preparation

All of the sample preparation was carried out at the SGS Laboratory (SGS) in Belo Horizonte by preparation method PRP70J_A2.

Dried for a minimum of 8 hrs in a drying oven.

Crushed using JAW CRUSHER to a 2mm size

Pulverised up to 250g is pulverised with 95% of the sample passing through the 75μm mesh.

11.3.2 Sample Analysis

SEM undertook two analysis methods: the ICM90A code, which involves determining by fusion with sodium peroxide (ICP OES/ICP MS) and analysing 56 chemical elements at the parts per million level, and the IMS95R method, which involves determining by fusion with lithium metaborate (ICP/MS) and is specific for rare earth elements.

Subsequent batches discontinued this method because the ICM90A method covers the analysis of rare earth elements, lithium, and other elements.

12 DATA VERIFICATION

12.1 Quality Assurance Quality Control

SEM have not implemented any external QAQC procedures for the early-stage geochemistry. They have relied on SGS internal QAQC procedures which include:

Standards / Certified Reference Materials (CRM)

Blanks and

Duplicates

Sahara has not reviewed the SGS QAQC externally as all assay certificates state that batches have met their internal QAQC standards

Sahara does recommend that SEM utilise their own QAQC samples and include 5% CRM, 5% Field Duplicates and apply blanks at ~ 2%.

12.2 Survey Control

Sample positions have been recorded with Handheld GPS units. Typical accuracy is +/-5m in the X and Y. This is sufficient for early-stage exploration.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

At the early exploration stage of this project, this section is currently not applicable.

14 MINERAL RESOURCE ESTIMATES

At the early exploration stage of this project, this section is currently not applicable.

15 MINERAL RESERVE ESTIMATES

At the early exploration stage of this project, this section is currently not applicable.

16 MINING METHODS

At the early exploration stage of this project, this section is currently not applicable.

17 RECOVERY METHODS

At the early exploration stage of this project, this section is currently not applicable.

18 PROJECT INFRASTRUCTURE

At the early exploration stage of this project, this section is currently not applicable.

19 MARKET STUDIES AND CONTRACTS

At the early exploration stage of this project, this section is currently not applicable.

20 ENVIRONMENTAL STUDIES, PERMITTING'S AND SOCIAL OR COMMUNITY IMPACT

At the early exploration stage of this project, this section is currently not applicable.

21 CAPITAL AND OPERATING COSTS

At the early exploration stage of this project, this section is currently not applicable.

22 ECONOMIC ANALYSIS

At the early exploration stage of this project, this section is currently not applicable.

23 ADJACENT PROPERTIES

The are several significant Lithium developments in the region, within the Sigma Lithium mine located 15km west of the Arapaima Lithium and REE project significant projects include

Sigma Lithium (TSX.SGML)

Pilbara Minerals (ASX: PLS)

Lithium Ionic (TSXv: LTH)

Atlas Lithium (NASDAQ: ATLX) and

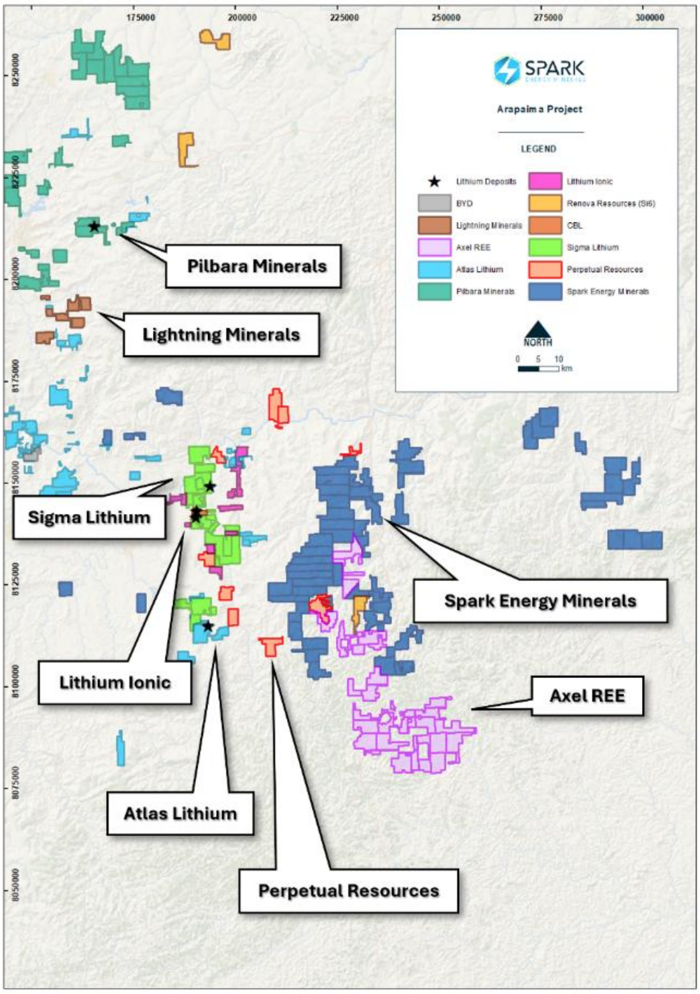
Perpetual Resources (ASX: PEC)

Axel REE (ASX: AXL)

Si6 Metals Ltd (ASX: VRL)

Their summary locations relative to the Arapaima Lithium and REE project are shown below in Figure 23_1.

Figure 23_1
Summary Location of Adjacent projects



Brazil's "Lithium Valley," has become a focal point for lithium and rare earth element (REE) exploration and development. Below is a summary of activities by the main operators, developers and explorers in this region:

Sigma Lithium (TSX: SGML)

Sigma Lithium operates the Grota do Cirilo project, which reached full capacity in December 2024, producing 270,000 tons per annum (tpa) of lithium concentrate, equivalent to approximately 37,000 tpa of lithium carbonate equivalent (LCE). The company plans to expand production to 920,000 tpa (125,000 tpa LCE) by the end of 2026. Sigma has also secured environmental licenses for its Barreiro mine, the second within the Grota do Cirilo property, to ensure continuous operations and spodumene ore supply.

Pilbara Minerals (ASX: PLS)

In August 2024, Pilbara Minerals announced a US$370 million all-share transaction to acquire Latin Resources Limited, including its Salinas lithium project. The Salinas project is under construction, with ramp-up expected in the second quarter of 2026. A preliminary economic assessment suggests potential annual production of approximately 499,000 tpa of spodumene concentrate, developed in two stages.

Lithium Ionic (TSXV: LTH)

Lithium Ionic is developing the Itinga project, encompassing the Bandeira and Outro Lado deposits. A feasibility study for the Bandeira deposit projects a 14-year mine life with an annual production of 178,000 tpa of spodumene concentrate. Construction is anticipated to commence in the third quarter of 2025, with operations starting in the third quarter of 2026. The company has also received a non-binding letter of interest from the Export-Import Bank of the United States for full debt financing of the project.

Atlas Lithium (NASDAQ: ATLX)

Atlas Lithium is advancing its Minas Gerais lithium project, with production expected to begin in the fourth quarter of 2024. The company has secured significant partnerships, including a US$10 million investment from Chengxin Lithium Group in December 2023, with an additional US$40 million contingent upon achieving certain milestones. In March 2024, Mitsui invested US$30 million. Atlas plans to utilize Dense Media Separation (DMS) technology for extraction, aiming for minimal water usage and a low carbon footprint.

Si6 Metals Ltd (ASX: VRL)

Si6 Metals has identified a 3 km by 800 m pegmatite corridor at its Padre Paraiso project in Minas Gerais. Initial mapping and auger drilling have returned anomalous lithium values, with rock chip samples assaying up to 247 parts per million (ppm) lithium and auger samples up to 401 ppm lithium oxide. The company is conducting a soil-sampling program to delineate priority drill targets within this corridor.

Perpetual Resources (ASX: PEC)

Perpetual Resources is actively engaged in lithium and rare earth element (REE) exploration across several projects in Brazil:

- Itinga Lithium Project: Located in the Araçuaí Pegmatite District of the Eastern Brazilian Pegmatite Province (EBPP), this area is renowned for its lithium-rich pegmatites. Perpetual's initial exploration represents the first systematic grassroots sampling campaign for lithium in the region. The company has identified significant potential for lithium-cesium-tantalum (LCT) type mineralization and is conducting extensive geochemical exploration to pinpoint high-priority drilling targets. Key milestones include the identification of widespread fertile pegmatites, significant tin and lithium anomalies over approximately 2,000 hectares, expansive pegmatite corridors up to 750 meters wide, and evidence of active artisanal mining.

- Isabella Lithium Project: Situated within the same district, the Isabella Project has yielded high-grade lithium rock chip samples, with assays up to 5.62% Li_2O. The area has a history of artisanal mining targeting fractionated, high-potential LCT and spodumene-rich pegmatites. Perpetual plans further reconnaissance sampling, detailed mapping, and drilling scheduled for early 2025 to expand the mineralized footprint.

- Padre Paraiso Lithium Project: Located within the EBPP and associated with the Neoproterozoic Araçuaí orogeny, this project area is characterized by granite and sedimentary rocks favorable for pegmatite formation. The region is underexplored but has a rich history of artisanal mining. Perpetual has confirmed widespread pegmatites and plans a stream sediment campaign in Q2/Q3 to further assess the area's potential.

Axel REE (ASX: AXL)

Axel REE Limited is focusing on rare earth element (REE) exploration in Brazil, particularly at its flagship Caladão Project which borders on SEM's tenements. The Caladão Project has demonstrated high-grade REE and gallium mineralization after completing a first phase drill program. Results include 49.92 m @ 5,909ppm TREO with 1m @ 22,115ppm TREO. This set of assays also extended the gallium mineralization up to 5km beyond the Caladão granite into the leucogranite with 17 m @ 85g/t Ga_2O_3. These results suggest the potential for Caladão to become a district-scale high-grade discovery. The project covers approximately 30 km² of drilled area to date, representing less than 10% of the total target area.

24 OTHER RELEVANT DATA AND INFORMATION

Sahara is not aware of any other relevant data and information,

25 INTERPRETATION AND CONCLUSIONS

The SEM project covers an extensive area of ~919km^2 and is approximately 30km wide by 50km long. This is an exceptionally large contiguous package located in the highly prospective "Lithium Valley" of Minas Gerais State, Brazil.

Sahara consider the project an early-stage exploration project with high potential to define LCT Pegmatites along with REO clay and potentially REO Ionic clay type deposits. The project is extensive and requires systematic and staged exploration which is currently underway.

Surface mapping in the last 3 months has defined over 30km of surficial pegmatites with potential > 100m widths and is extremely encouraging given the early stage of the project. The geochemistry has defined anomalous lithium in stream sediment and grab sampling.

26 RECOMMENDATIONS

Sahara has the following recommendations for the SEM project with the clear focus to continue staged exploration to expand on defined targets. The project has excellent exploration potential. Sahara provides the following specific recommendations

Undertake a detailed structural interpretation of the project as the pegmatites will follow zones of least resistance, which is typically faults and shear zones.

Continue regional geological mapping

Undertake detailed stream Sediment Sampling across all permits and follow up with targeted Auger geochemical sampling.

Consider a project wide road-based Auger drilling campaign utilising existing road access. The potential for extensive REE mineralization has been defined by ongoing stream and grab sampling along with publicly available ASX listed junior explorers.

Once Geochemical targets have been defined then drilling can be assessed to test the mineralization. Often in high rainfall environments, Spodumene Lithium mineralization can be leached and depleted in the top 40 + meters, and deeper drilling is required.

Implement QAQC program including insertion of certified standards for ongoing samples send for analysis.

27 REFERENCES

Avant Geofisica 2024 - “Multispectral survey based on satellite imagery and Principal Component Analysis for pegmatite identification, in the region of Jequitinhonha Valley, Minas Gerais, Brazil.”

Spark Energy Minerals 2024 to Feb 2025 – Various internal reports

“Lithium Potential Assessment Project in Brasil” in the Eastern Pegmatite Province of Brasil: the Geological Survey of Brazil promoting mineral research. Technical Report 19 – August 2023 DOI: 10.29396/ITCPRM.2023.19

“Evaluation of the Lithium Potential in Brasil” – Mid – Jequitinhonha River, North -East Minas Gerais ministry of Mines and Energy, Secretary of Geology, Mines and Development, the Geological Survey of Brazil promoting mineral research. Technical Report – 2016

28 CERTIFICATE OF QUALIFIED PERSON(S)

Certificate of the Author of 'National Instrument 43-101 Independent Technical Report" on the SEM Lithium & REE Project

1. I, **Beau Nicholls**, do hereby certify that I am a Senior Principal Consultant for Sahara Natural Resources;
2. I am a graduate in Mineral Exploration and Mining Geology and a Bachelor of Science from Western Australian School of Mines (Curtin) 1994;
3. I am a Fellow of the Australian Institute of Geoscientists, (#3034)
4. I have practiced my profession continuously since graduation;
5. I have visited the Projects between 7 and 10 January 2025;
6. I have read the definition of 'Qualified Person' as set out in NI43-101 and certify that by reason of my education and affiliation with a professional association (as defined in NI43-101), I fulfil the requirements to be a 'Qualified Person' for the purposes of NI43-101;
7. I have had no prior involvement with the properties that are the subject of the Technical Report;
8. I have read NI43-101, Form 43-101F1 and CIMVAL Standards and Guidelines, and the Technical Report and Valuation Report have been prepared in compliance with these instruments and form;
9. I am responsible for all Sections of the Technical Report entitled 'National Instrument 43-101 Independent Technical Report on the SEM Lithium & REE Project;
10. At the date hereof, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading;
11. I am independent of the issuer applying all of the tests in Section 1.5 of NI43-101; and
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 31st March 2025, Perth, Australia

SIGNED BY

Beau Nicholls
Principal Consultant

Appendix A – Sample Results

Table A1 Rock chip Sample Results (All results)												
Sample ID	**Easting SIRGAS 2000 24**	**Northing SIRGAS 2000 24**	**Description**	**Cs ppm**	**Ga ppm**	**Li ppm**	**Nb ppm**	**Rb ppm**	**Sn ppm**	**Ta ppm**	**TREO**
ARA-CR-002	222194	8151655	Diamictite-like rock	3.9	21	16	16	95	5	<10	223.18
ARA-CR-003	222496	8151987	Two-mica pegmatite	7.3	18	52	27	371	10	<10	69.55
ARA-CR-003a	222496	8151987	Whitish, clayish material (weathering product of spodumene?)	14.1	29	45	32	160	16	<10	150.61
ARA-CR-004	226286	8140983	White-mica concentrate	97.3	197	284	325	1189	143	60	-
ARA-CR-005	226286	8140983	Pegmatite	5.2	25	34	19	363	<5	<10	34.96
ARA-CR-006	223308	8143809	White-mica concentrate	64.1	128	489	237	847	167	32	-
ARA-CR-007	223285	8143907	Pegmatite	14.2	28	108	59	425	16	<10	-
ARA-CR-008	223121	8144113	Fragments of weathered feldspar or Li aluminosilicate (?)	4.9	20	24	<10	492	10	<10	-
ARA-CR-009	223106	8144184	Pegmatite	53.1	41	102	92	451	55	34	-
ARA-CR-010	224822	8143897	Laterite	1.6	17	28	17	14	7	<10	55.43
ARA-CR-011	224789	8143902	Termite mound, Mn-oxide material	6.7	20	33	16	124	7	<10	62.93
ARA-CR-012	224789	8143902	Termite mound, beige argillaceous material	14.3	35	70	32	276	14	<10	109.82
ARA-CR-013	224691	8143880	Concentrate of fresh mica, brownish tint	81.3	169	582	285	1359	146	38	-
ARA-CR-016	226428	8142593	Laterite	2.4	22	18	17	9	6	<10	53.18
ARA-CR-017	226235	8142537	Pinkish quartz	7.9	<1	34	<10	9	<5	<10	-
ARA-CR-018	226235	8142537	Tournaline-quartz aggregates	1.1	5	22	150	4	<5	55	-
ARA-CR-019	226235	8142537	Tournaline-quartz aggregate (tourmaline > quartz)	1.4	72	38	<10	3	8	<10	-
ARA-CR-020	226040	8142657	Kaolinite-like mineral after spodumene (?), partially coated with Mn-oxide mineral (lithiophorite?)	2	6	22	<10	122	<5	<10	-
ARA-CR-021	226065	8142674	Coating of Mn-oxide mineral (lithiophorite?) on saprolitised pegmatitic material	10.8	29	50	18	331	7	<10	179.23
ARA-CR-022	225158	8143088	Angular cobble of quartz with white mica; additional coarse-grained crystals of white mica; all for LIBS analysis	2.1	3	30	<10	21	<5	<10	-
ARA-CR-024	226697	8141616	Quartz with booklets of white mica hosted in friable, argillaceous rock, the surface of which is characteristically coated with Mn oxide (lithiophorite?)	10.2	64	73	36	314	25	<10	133.73
ARA-CR-025	226668	8141706	Friable two-mica granite	10.9	32	31	17	317	7	<10	144.36
ARA-CR-026	222970	8143404	Clay pseudomorphs after spodumene crystals	11.4	23	45	11	349	12	<10	-
ARA-CR-027	222891	8143276	Clay pseudomorphs after spodumene crystals, some of which are coated with Mn oxide (lihiophorite?)	14.6	33	88	19	451	16	<10	-
ARA-CR-028	238652	8109824	Porphyritic, coarse-grained granite containing amphibole; 0.42 microSv/h	0.6	28	17	59	188	<5	<10	726.05

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-CR-051	225740	8144767	Pegmatitic pocket with white mica, biotite and tourmaline	18.9	39	81	27	432	27	<10	-
ARA-CR-052	225650	8144827	Pegmatitic pocket with quartz, FK and potentially pseudomorph of spodumene	8.9	22	26	<10	583	11	<10	-
ARA-CR-053	225578	8144830	Pegmatitic pocket with quartz and potentially spodumene, covered by a weathering crust of Mn oxide (lithiophorite?)	6.8	21	26	<10	466	9	<10	-
ARA-CR-054	225667	8144754	Friable pegmatitic vein containing quartz, white-mica, biotite and spodumene	14.3	26	49	15	539	11	<10	-
ARA-CR-055	225383	8147291	Pegmatite composed of qz-bt-mus-ab-sp(?); exhibits weathering crust of Mn oxide (lithiophorite?)	17	21	26	12	578	19	<10	-
ARA-CR-056	225964	8146164	Pegmatite composed of qz-fk-bt-mus-tour-sp(?)	8.1	22	32	<10	478	11	<10	-
ARA-CR-057	226159	8146496	Friable qz-sp-mus pegmatite	10	23	27	<10	598	14	<10	-
ARA-CR-058	226308	8146673	Friable qz-sp pegmatite	2	51	21	<10	27	<5	<10	-
ARA-CR-059	226377	8146657	Aggregates of qz-sp(?)	2.9	46	38	<10	43	<5	<10	-
ARA-CR-060	226263	8146499	Float of quartz, course white mica, tourmaline and likely spodumene	20	14	55	29	198	29	12	-
ARA-CR-061	225546	8148039	Likely spodumene with quartz and white mica; exhibits weathering crust of Mn oxide (lithiophorite?)	9.2	19	14	<10	698	12	<10	-
ARA-CR-062	225583	8148087	Aggregates of qz-mus-sp(?)	3.9	19	17	<10	543	13	<10	-
ARA-CR-063	224664	8143833	Pegmatite with quartz and very coarse muscovite	72.7	27	88	37	401	40	11	-
ARA-CR-064	224614	8143983	Friable pegmatite with quartz, fk, muscovite and tourmaline	17.7	32	67	20	324	16	<10	61.64
ARA-CR-067	222912	8140595	Pegmatite with qz, fk, mus and tour	35.3	37	65	39	188	30	<10	69.84
ARA-CR-068	222924	8140289	Pegmatite with likely sp, qz, black mica and fk	12.6	16	26	18	337	9	<10	-
ARA-CR-069	222911	8140324	Pegmatite with likely sp, qz, bt, black mica and tour	8	16	17	<10	450	6	<10	-
ARA-CR-070	225166	8140023	Pegmatite composed of likely sp, qz and black mica	9.1	31	12	<10	526	8	<10	119.78
ARA-CR-071	221989	8135516	Pegmatite with qz, tour and likely sp	5.4	33	28	<10	174	<5	<10	140.45
ARA-CR-072	222065	8135619	Pegmatite exhibiting lots of quartz and tourmaline with little muscovite	7.4	39	17	<10	153	7	<10	-
ARA-CR-073	221989	8135516	Pegmatite with qz, tour and likely sp	5.9	30	26	<10	258	5	<10	119.55
ARA-CR-074	222174	8135440	Pegmatite with qz, fk, tour and black mica	10.5	40	44	31	251	15	<10	136.70
ARA-CR-088	225400	8135608	Pegmatite with qz, fk, white and black mica, and tour	10.8	36	21	17	388	9	<10	-
ARA-CR-092	223617	8152654	Pegmatite with qz, fk, bt and tour	15.3	23	23	<10	455	14	<10	-
ARA-CR-093	223556	8152627	Potentially spodumene	12.8	21	22	<10	448	10	<10	-
ARA-CR-094	221376	8147084	Pegmatite with fk and tour	9.5	25	46	<10	374	11	<10	63.96
ARA-CR-095	220847	8147406	Pegmatite with fk and tour	11.7	26	48	16	296	10	<10	45.51
ARA-CR-096	808266	8161879	Two-mica granite	9.9	24	49	<10	360	9	<10	-
ARA-CR-097	808352	8161786	Pegmatite with qz, fk and tour	22.5	24	202	<10	356	11	<10	22.66

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-CR-098	808352	8161786	Pegmatite with qz, fk and tour	3.2	7	16	<10	102	<5	<10	-
ARA-CR-099	809066	8160402	Pegmatite with qz, fk, white mica and tour	7	20	96	<10	326	<5	<10	66.35
ARA-CR-100	809140	8160112	Pegmatite with qz, fk, white mica and tour	3.9	20	43	<10	209	5	<10	-
ARA-CR-101	212896	8126608	Pegmatitic dike (small pit) with KF+QTZ+MUSC+TOUR (black) - channel chip (5 m)	28.6	59	163	80	569	58	12	32.21
ARA-CR-102	212890	8126611	Pegmatitic dike (small pit) with KF+QTZ+MUSC (white & black)+TOUR (black) - channel chip (5 m)	15.4	31	59	22	391	14	<10	34.54
ARA-CR-103	212899	8126543	Pegmatite pocket in road surface with KF+QTZ+MUSC (white & black)+TOUR (black)	32.3	34	218	85	573	30	<10	-
ARA-CR-104	216037	8125952	Float of quartz with MUSC+TOUR (black); possible brown petalite (?)	1.3	2	18	<10	16	<5	<10	-
ARA-CR-105	221927	8128138	White rock boulders with a predominance of rounded, hyaline quartz grains, in a very fine matrix, feldspathic (?), probable aplite	6.2	21	23	16	85	5	<10	307.24
ARA-CR-106	233911	8123724	Outcrop of saprolitized gneiss of granitic composition	7.9	25	39	16	256	<5	<10	168.35
ARA-CR-107	233911	8123724	Eluvial soil sample collected directly on the gneiss of granitic composition - 1.50 m long channel chip	24.1	39	42	28	334	5	<10	310.75
ARA-CR-108	233963	8123752	Pegmatite vein with qz-fk	6.7	23	28	16	90	<5	<10	309.36
ARA-CR-109	233004	8115770	Boulders of biotite granite with red garnet - whole rock geochemistry + minor & trace elements (ICP-MS/OES)	2.6	23	52	32	349	<5	<10	336.55
ARA-CR-110a	234482	8117100	Spd(?)	7.2	27	<10	<10	958	<5	<10	-
ARA-CR-110b	234482	8117100	FK(?)	5.9	35	<10	<10	1115	<5	<10	67.59
ARA-CR-112	237422	8120234	Black mica	23.2	101	1217	274	1660	20	<10	
ARA-CR-113	235862	8115585	FK(?)	2.4	53	20	59	610	<5	<10	
ARA-CR-114a	234832	8120420	FK(?)	2.6	28	<10	<10	805	5	<10	
ARA-CR-114b	234832	8120420	Black mica	106.8	120	1397	413	2973	55	31	
ARA-CR-114c	234832	8120420	White mica	16.9	165	739	246	2057	91	14	
ARA-CR-115	212701	8125701	FK(?)	6.2	24	55	<10	416	12	<10	
ARA-CR-151	237916	8106647	Pegmatite composed of qz, fk, white mica and tour	2.7	15	29	<10	111	<5	<10	-
ARA-CR-152	817779	8161043	Pegmatite	5.2	33	67	<10	145	<5	<10	143.39
ARA-CR-153	816261	8119690	Mica-schist with quartz veins	0.7	8	39	<10	11	<5	<10	177.44
ARA-CR-154	797925	8125737	Mica-schist with quartz veins	0.4	2	<10	<10	4	<5	<10	-
ARA-CR-155	797925	8125737	Mica-schist with quartz veins	<0.1	<1	<10	<10	<3	<5	<10	-
ARA-CR-156	237916	8106647	Porphyritic granitic rock containig amphibole; 0.34 microSv/h	0.3	25	16	50	205	<5	<10	1213.69
ARA-CN-001	226694	8141627	Argillaceous white rock, the surface of which is characteristically coated with Mn oxide (lithiophorite?)	11.9	36	45	16	283	6	<10	215.97
ARA-CN-002	226689	8141670	Friable two-mica granite	9.3	30	35	14	349	<5	<10	136.47

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-CN-003	226686	8141691	Friable two-mica granite	8.2	32	23	16	283	7	<10	144.94
ARA-CN-004	222898	8143314	Friable granitic rock, the surface of which is characteristically coated with Mn oxide (lithiophorite?)	14	29	75	27	299	14	<10	128.43
ARA-CN-005	225667	8144754	Friable pegmatitic vein containing quartz, white-mica, biotite and possible spodumene	17	30	71	19	429	13	<10	141.03
ARA-CN-006	224664	8143833	Pegmatite with quartz and very coarse muscovite	64.2	37	132	64	438	42	24	94.85

Sahara

Table A2 Stream Sediment Samples (All results)													
Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Sample Type	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SS-001	232182	8148004	Stream Sediment	Secondary; Medium sand	4.2	18	28	19	129	<5	<10	214.47
ARA-SS-002	222516	8151862	Stream Sediment	Secondary; Medium sand	3.3	10	20	12	99	<5	<10	113.92
ARA-SS-003	222270	8151673	Stream Sediment	Secondary; Medium sand	1.6	6	16	<10	43	<5	<10	-
ARA-SS-004	222081	8151513	Stream Sediment	Secondary; Clay	5.6	17	22	15	116	8	<10	111.08
ARA-SS-005	223036	8152254	Stream Sediment	Secondary; Medium sand	3.7	14	22	14	57	5	<10	85.92
ARA-SS-051	225740	8144767	Stream Sediment	Tertiary; Silt	3.2	32	19	26	23	11	<10	61.81
ARA-SS-052	225621	8144847	Stream Sediment	Primary; Medium sand	9	17	39	14	254	7	<10	58.50
ARA-SS-053	225591	8144848	Stream Sediment	Tertiary; Fine sand	4.7	16	24	12	113	6	<10	65.21
ARA-SS-054	224619	8145887	Stream Sediment	Tertiary; Medium sand	2.7	31	14	28	11	12	<10	69.43
ARA-SS-055	227053	8144674	Stream Sediment	Tertiary; Fine sand	3.2	21	19	18	15	8	<10	41.36
ARA-SS-056	226244	8146508	Stream Sediment	Tertiary; Fine sand	7.5	17	22	16	174	7	<10	167.40
ARA-SS-057	225564	8148084	Stream Sediment	Tertiary; Medium sand	5.9	20	35	17	263	9	<10	138.38
ARA-SS-060	221755	8141716	Stream Sediment	Tertiary; Medium sand	5	29	21	18	74	10	<10	137.23
ARA-SS-061	221955	8141556	Stream Sediment	Tertiary; Medium sand	4.1	29	17	19	39	8	<10	110.31
ARA-SS-062	222996	8140524	Stream Sediment	Tertiary; Medium sand	4.3	13	20	<10	191	<5	<10	87.13
ARA-SS-063	222959	8140222	Stream Sediment	Primary; Clay	7.4	28	24	18	299	7	<10	138.10
ARA-SS-064	222847	8140350	Stream Sediment	Tertiary; Medium sand	7	19	23	13	197	<5	<10	112.98
ARA-SS-065	226306	8140981	Stream Sediment	Tertiary; Medium sand	2.2	14	13	11	45	<5	<10	73.31
ARA-SS-066	226208	8141033	Stream Sediment	Primary; Fine sand	1.2	6	16	<10	59	<5	<10	-
ARA-SS-067	225437	8140231	Stream Sediment	Primary; Medium sand	1.9	11	12	<10	98	<5	<10	90.36
ARA-SS-068	221941	8135636	Stream Sediment	Tertiary; Fine sand	6.3	29	27	23	233	6	<10	351.78
ARA-SS-069	222023	8135577	Stream Sediment	Secondary; Clay	9.8	35	27	27	315	7	<10	496.85
ARA-SS-070	222175	8135440	Stream Sediment	Secondary; Fine sand	12.9	36	45	26	452	7	<10	559.12
ARA-SS-077	225106	8135815	Stream Sediment	Primary; Clay	13.2	42	46	32	357	7	<10	450.01
ARA-SS-078	228980	8155758	Stream Sediment	Primary; Very fine sand	8.5	20	45	24	231	8	<10	157.23
ARA-SS-079	228850	8155384	Stream Sediment	Secondary; Clay	15.6	45	40	34	209	11	<10	282.48
ARA-SS-080	227507	8154933	Stream Sediment	Secondary; Fine sand	9.5	28	35	28	227	9	<10	264.71
ARA-SS-081	226867	8154411	Stream Sediment	Secondary; Clay	9	28	23	21	205	7	<10	202.09
ARA-SS-082	225723	8153993	Stream Sediment	Secondary; Clay	5.9	21	24	13	216	6	<10	88.47
ARA-SS-083	224824	8153207	Stream Sediment	Secondary; Fine sand	7.2	32	<10	22	80	9	<10	128.97

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Sample Type	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SS-084	224250	8153166	Stream Sediment	Secondary; Fine sand	10.9	22	55	20	246	10	<10	141.72
ARA-SS-085	223343	8152677	Stream Sediment	Secondary; Clay	14.8	31	57	28	258	14	<10	193.96
ARA-SS-086	221074	8150550	Stream Sediment	Secondary; Clay	7.2	19	24	19	186	8	<10	147.06
ARA-SS-087	220656	8149993	Stream Sediment	Secondary; Clay	9.5	20	30	17	186	12	<10	123.80
ARA-SS-088	219863	8149090	Stream Sediment	Secondary; Clay	19.4	42	50	42	231	21	<10	151.67
ARA-SS-089	231115	8122646	Stream Sediment	Secondary; Clay	1.5	42	<10	28	44	5	<10	134.23
ARA-SS-090	231159	8122440	Stream Sediment	Secondary; Fine sand	2.2	27	26	23	259	<5	<10	211.33
ARA-SS-091	220748	8147504	Stream Sediment	Tertiary; Fine sand	7.9	17	39	12	173	8	<10	72.77
ARA-SS-092	224221	8146198	Stream Sediment	Secondary; Fine sand	3.4	19	15	17	93	<5	<10	79.89
ARA-SS-101	218039	8130263	Stream Sediment	Tertiary; Clay	14.8	31	96	28	337	14	<10	224.90
ARA-SS-102	218052	8124164	Stream Sediment	Tertiary; Clay	7.2	29	21	18	120	<5	<10	187.84
ARA-SS-103	217883	8124301	Stream Sediment	Tertiary; Clay	2.5	12	25	<10	76	<5	<10	86.10
ARA-SS-104	216614	8125938	Stream Sediment	Tertiary; Fine sand	3.3	12	20	<10	179	<5	<10	153.94
ARA-SS-105	215023	8126322	Stream Sediment	Tertiary; Fine sand	7.8	24	34	15	284	5	<10	259.28
ARA-SS-106	214798	8126310	Stream Sediment	Tertiary; Medium sand	3.9	8	21	<10	150	<5	<10	118.37
ARA-SS-107	222755	8122004	Stream Sediment	Tertiary; Silt	1.9	38	12	21	17	<5	<10	127.50
ARA-SS-108	218336	8123420	Stream Sediment	Tertiary; Clay	3.1	46	14	35	20	8	<10	193.44
ARA-SS-109	216864	8126093	Stream Sediment	Tertiary; Clay	2.9	21	17	20	45	6	<10	108.91
ARA-SS-110	208546	8123383	Stream Sediment	Tertiary; Clay	30.3	53	191	32	437	17	<10	236.60
ARA-SS-111	209242	8122650	Stream Sediment	Tertiary; Clay	17.9	46	83	27	182	13	<10	170.38
ARA-SS-112	208849	8123145	Stream Sediment	Tertiary; Medium sand	7.4	13	46	<10	153	6	<10	134.13
ARA-SS-113	208692	8122974	Stream Sediment	Tertiary; Clay	14.4	28	80	19	244	10	<10	325.22
ARA-SS-114	208782	8123361	Stream Sediment	Tertiary; Medium sand	7.7	13	62	<10	147	5	<10	157.86
ARA-SS-115	208669	8123625	Stream Sediment	Tertiary; Clay	11.6	18	80	14	186	7	<10	306.48
ARA-SS-116	208124	8124258	Stream Sediment	Tertiary; Clay	27.2	36	111	26	252	15	<10	287.77
ARA-SS-117	208339	8123533	Stream Sediment	Tertiary; Clay	10.9	17	83	19	199	7	<10	465.58
ARA-SS-118	208428	8123810	Stream Sediment	Tertiary; Clay	16	24	89	23	232	11	<10	351.15
ARA-SS-119	208177	8125069	Stream Sediment	Tertiary; Clay	15.1	23	68	18	157	11	<10	240.76
ARA-SS-120	208239	8125040	Stream Sediment	Tertiary; Clay	23.8	30	94	23	241	16	<10	221.85
ARA-SS-121	208182	8124649	Stream Sediment	Tertiary; Clay	22.9	31	142	24	271	15	<10	253.66
ARA-SS-122	212844	8125333	Stream Sediment	Tertiary; Clay	18.4	47	89	41	370	16	<10	185.02

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Sample Type	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SS-123	221935	8128070	Stream Sediment	Tertiary; Clay	14.9	48	34	41	184	10	<10	279.43
ARA-SS-124	237589	8116336	Stream Sediment	Tertiary; Medium sand	2.7	19	26	34	310	<5	<10	1961.28
ARA-SS-125	237022	8116339	Stream Sediment	Tertiary; Clay	3.2	65	17	16	146	<5	<10	793.05
ARA-SS-126	236714	8116404	Stream Sediment	Tertiary; Medium sand	4.5	36	24	66	210	<5	<10	2356.84
ARA-SS-127	236271	8116341	Stream Sediment	Tertiary; Clay	3.7	32	21	63	251	<5	<10	2458.09
ARA-SS-128	236103	8115876	Stream Sediment	Tertiary; Clay	2.3	17	14	27	175	<5	<10	1323.90
ARA-SS-129	213476	8126664	Stream Sediment	Tertiary; Clay	5.9	14	20	13	249	<5	<10	302.72
ARA-SS-130	213621	8126590	Stream Sediment	Tertiary; Clay	4.1	13	18	11	113	<5	<10	171.33
ARA-SS-131	236035	8116482	Stream Sediment	Tertiary; Clay	2.5	38	23	41	90	6	<10	482.01
ARA-SS-132	236097	8116340	Stream Sediment	Tertiary; Medium sand	2.1	44	18	68	74	<5	<10	1132.76
ARA-SS-133	237036	8116482	Stream Sediment	Tertiary; Medium sand	1.7	18	17	49	90	<5	<10	1978.65
ARA-SS-134	232996	8115770	Stream Sediment	Tertiary; Clay	1.7	35	18	40	84	<5	<10	645.60
ARA-SS-135	234375	8115193	Stream Sediment	Tertiary; Clay	2	41	18	54	89	<5	<10	1162.54
ARA-SS-136	212896	8126608	Stream Sediment	Tertiary; Clay	23.5	36	144	40	483	18	<10	154.14
ARA-SS-136a	212896	8126608	Stream Sediment	Tertiary; Clay	0.9	32	14	38	45	<5	<10	269.52
ARA-SS-137	233720	8116340	Stream Sediment	Tertiary; Clay	1.1	34	23	25	50	<5	<10	238.86
ARA-SS-138	233368	8115818	Stream Sediment	Tertiary; Clay	2.1	42	29	48	125	<5	<10	798.95
ARA-SS-139	233444	8117614	Stream Sediment	Tertiary; Clay	1.5	42	14	45	44	<5	<10	476.60
ARA-SS-140	233349	8117740	Stream Sediment	Tertiary; Medium sand	1	19	15	23	126	<5	<10	360.02
ARA-SS-141	234091	8117423	Stream Sediment	Tertiary; Clay	1.8	33	27	31	95	<5	<10	440.73
ARA-SS-143	234899	8118908	Stream Sediment	Tertiary; Clay	0.3	49	<10	40	4	5	<10	143.86
ARA-SS-144	243844	8112925	Stream Sediment	Tertiary; Clay	2	40	22	65	71	<5	<10	1052.20
ARA-SS-145	232119	8117774	Stream Sediment	Tertiary; Clay	0.5	44	<10	43	11	<5	<10	242.38
ARA-SS-146	232264	8117815	Stream Sediment	Tertiary; Clay	0.6	40	<10	35	6	<5	<10	234.44
ARA-SS-147	232423	8118338	Stream Sediment	Tertiary; Medium sand	1	35	17	31	57	<5	<10	312.58
ARA-SS-148	232379	8116397	Stream Sediment	Tertiary; Clay	1.5	38	20	30	56	<5	<10	248.48
ARA-SS-149	235778	8119212	Stream Sediment	Tertiary; Clay	0.3	39	12	36	6	<5	<10	172.45
ARA-SS-150	234107	8115318	Stream Sediment	Tertiary; Clay	2.6	45	26	59	109	<5	<10	932.68
ARA-SS-151	233902	8115717	Stream Sediment	Tertiary; Clay	1.6	37	25	50	58	<5	<10	1101.69
ARA-SS-152	233429	8115690	Stream Sediment	Tertiary; Coarse sand	1	30	14	41	46	<5	<10	844.34
ARA-SS-153	233453	8115650	Stream Sediment	Tertiary; Clay	3.2	25	29	37	154	<5	<10	1199.21

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Sample Type	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SS-154	233640	8115666	Stream Sediment	Tertiary; Clay	1.1	31	11	64	28	<5	<10	1776.38
ARA-SS-155	233497	8115693	Stream Sediment	Tertiary; Clay	2	37	25	48	120	<5	<10	804.28
ARA-SS-156	235948	8118696	Stream Sediment	Tertiary; Clay	0.5	64	<10	46	15	6	<10	650.03
ARA-SS-157	236053	8118554	Stream Sediment	Tertiary; Clay	2.6	36	30	33	122	<5	<10	531.34
ARA-SS-158	236472	8118566	Stream Sediment	Tertiary; Clay	0.9	35	18	35	42	<5	<10	335.93
ARA-SS-159	235868	8115005	Stream Sediment	Tertiary; Clay	2.8	47	22	61	92	<5	<10	1833.42
ARA-SS-160	233093	8115922	Stream Sediment	Tertiary; Clay	1	42	14	37	25	<5	<10	289.55
ARA-SS-163	233917	8115517	Stream Sediment	Tertiary; Medium sand	3.9	36	14	48	70	<5	<10	981.41
ARA-SS-164	233529	8114874	Stream Sediment	Tertiary; Clay	1.9	31	16	57	84	<5	<10	903.01
ARA-SS-165	232147	8114480	Stream Sediment	Tertiary; Clay	1.2	31	15	40	21	<5	<10	717.81
ARA-SS-166	236409	8116455	Stream Sediment	Tertiary; Medium sand	2.4	27	12	46	27	<5	<10	747.43
ARA-SS-167	236565	8116501	Stream Sediment	Tertiary; Medium sand	1.7	28	18	32	50	<5	<10	418.36
ARA-SS-168	237523	8116482	Stream Sediment	Tertiary; Clay	2.1	20	16	34	100	<5	<10	1071.41
ARA-SS-169	237722	8116488	Stream Sediment	Tertiary; Clay	2.3	31	23	32	119	<5	<10	542.70
ARA-SS-170	237399	8116483	Stream Sediment	Tertiary; Clay	1.3	15	16	20	177	<5	<10	807.86
ARA-SS-171	237683	8116290	Stream Sediment	Tertiary; Medium sand	1.5	14	21	13	157	<5	<10	330.97
ARA-SS-172	236506	8118049	Stream Sediment	Tertiary; Medium sand	0.2	33	<10	32	4	<5	<10	117.47
ARA-SS-173	236821	8118201	Stream Sediment	Tertiary; Clay	0.7	21	18	32	29	<5	<10	216.41
ARA-SS-174	236733	8118000	Stream Sediment	Tertiary; Clay	0.9	44	11	36	20	<5	<10	286.28
ARA-SS-175	236749	8117744	Stream Sediment	Tertiary; Clay	0.7	20	11	22	28	<5	<10	274.26
ARA-SS-176	236995	8117335	Stream Sediment	Tertiary; Clay	1.5	19	17	24	52	<5	<10	448.09
ARA-SS-177	237110	8116731	Stream Sediment	Tertiary; Clay	1.8	19	20	25	145	<5	<10	661.27
ARA-SS-178	237139	8120259	Stream Sediment	Tertiary; Clay	0.9	14	21	30	35	<5	<10	454.54
ARA-SS-179	237148	8120213	Stream Sediment	Tertiary; Clay	1.3	23	25	26	68	<5	<10	347.74
ARA-SS-180	232223	8118543	Stream Sediment	Tertiary; Clay	3.7	34	26	26	112	5	<10	390.84
ARA-SS-181	235782	8119011	Stream Sediment	Tertiary; Clay	0.4	53	<10	42	6	8	<10	317.97
ARA-SS-182	236406	8121202	Stream Sediment	Tertiary; Clay	4.5	41	51	54	230	6	<10	803.12
ARA-SS-183	236216	8121124	Stream Sediment	Tertiary; Clay	1.6	36	23	32	62	6	<10	350.08
ARA-SS-184	236088	8121113	Stream Sediment	Tertiary; Clay	2.6	43	28	43	90	7	<10	444.59
ARA-SS-185	234857	8119636	Stream Sediment	Tertiary; Clay	1.8	17	18	18	71	<5	<10	374.95
ARA-SS-186	234781	8119606	Stream Sediment	Tertiary; Clay	2.3	47	21	43	82	6	<10	527.07

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Sample Type	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SS-187	234659	8120001	Stream Sediment	Tertiary; Medium sand	1.6	13	17	18	163	<5	<10	487.96
ARA-SS-188	234764	8119906	Stream Sediment	Tertiary; Clay	2.5	23	20	27	97	<5	<10	567.37
ARA-SS-189	234604	8120204	Stream Sediment	Tertiary; Clay	2.3	24	23	24	103	<5	<10	457.62
ARA-SS-190	234766	8120629	Stream Sediment	Tertiary; Clay	1.7	18	20	24	116	<5	<10	433.89
ARA-SS-191	234733	8120759	Stream Sediment	Tertiary; Clay	1.2	15	16	13	57	<5	<10	526.31
ARA-SS-192	237827	8119795	Stream Sediment	Tertiary; Clay	1.7	42	20	41	42	7	<10	645.28
ARA-SS-193	237752	8119681	Stream Sediment	Tertiary; Clay	1.3	22	24	36	46	<5	<10	386.20
ARA-SS-194	237866	8119416	Stream Sediment	Tertiary; Medium sand	2.1	40	27	33	62	6	<10	397.20
ARA-SS-195	237436	8120279	Stream Sediment	Tertiary; Clay	2.4	33	34	31	104	6	<10	550.34
ARA-SS-196	237842	8120135	Stream Sediment	Tertiary; Medium sand	1.4	23	25	35	110	<5	<10	634.93
ARA-SS-197	237813	8120159	Stream Sediment	Tertiary; Clay	1.1	19	25	20	45	<5	<10	524.36
ARA-SS-198	235794	8115863	Stream Sediment	Tertiary; Medium sand	1.4	16	14	38	55	<5	<10	1085.53
ARA-SS-199	235863	8115819	Stream Sediment	Tertiary; Clay	1.6	43	17	61	63	<5	<10	739.98
ARA-SS-200	236849	8117718	Stream Sediment	Tertiary; Clay	1	17	22	19	90	<5	<10	350.08
ARA-SS-201	236707	8118549	Stream Sediment	Tertiary; Medium sand	0.9	38	24	39	42	5	<10	340.89
ARA-SS-202	234972	8118131	Stream Sediment	Tertiary; Clay	0.3	60	<10	42	7	8	<10	172.08
ARA-SS-203	212898	8125451	Stream Sediment	Tertiary; Medium sand	5.9	15	24	11	152	5	<10	134.51
ARA-SS-204	212699	8125516	Stream Sediment	Tertiary; Medium sand	10.3	18	39	12	246	8	<10	98.33
ARA-SS-205	212797	8125712	Stream Sediment	Tertiary; Medium sand	6.8	12	29	<10	202	5	<10	115.03
ARA-SS-206	212810	8125917	Stream Sediment	Tertiary; Medium sand	5.3	9	22	<10	176	<5	<10	92.10
ARA-SS-207	237036	8116482	Stream Sediment	Tertiary; Very-coarse sand; Pan concentrate	0.4	<1	14	231	63	<5	20	6417.48

Table A3 Soil Sample (All results)												
Sample ID	**Easting SIRGAS 2000 24**	**Northing SIRGAS 2000 24**	**Description**	**Cs ppm**	**Ga ppm**	**Li ppm**	**Nb ppm**	**Rb ppm**	**Sn ppm**	**Ta ppm**	**TREO**
ARA-SL-001	232182	8148004	Beige; Sandy-Clayey	7.6	33	25	26	183	8	<10	281.57
ARA-SL-002	232002	8147536	Beige; Sandy-Clayey; 0.49 µSv/h	8.8	42	19	34	137	9	<10	511.38
ARA-SL-003	223998	8145137	Beige; Sandy-Clayey; 0.23 µSv/h	2.4	49	<10	33	18	12	<10	120.52
ARA-SL-004	222270	8151673	Beige; Sandy-Clayey; 0.23 µSv/h	5.8	23	15	22	134	10	<10	163.00
ARA-SL-006	226428	8142593	Brown; Sandy-Clayey; 0.17 µSv/h	2.1	35	24	30	26	11	<10	140.32
ARA-SL-007	225651	8142699	Brown; Sandy-Clayey; 0.17 µSv/h	4.3	22	<10	19	122	8	<10	125.55
ARA-SL-008	224817	8143408	Brown; Sandy-Clayey; 0.36 µSv/h	9.8	24	47	20	264	9	<10	247.06
ARA-SL-009	222879	8143226	Pink; Sandy-Clayey; 0.20 µSv/h	5.8	47	55	46	83	20	<10	123.05
ARA-SL-010	234911	8113944	Red; Sandy-Clayey; 0.43 µSv/h	0.2	48	<10	84	<3	<5	<10	567.37
ARA-SL-011	234982	8113973	Red; Sandy-Clayey; 0.41 µSv/h	0.2	32	<10	58	<3	<5	<10	255.21
ARA-SL-012	235058	8114003	Red; Sandy-Clayey; 0.39 µSv/h	0.1	41	<10	60	<3	<5	<10	224.82
ARA-SL-013	235141	8114026	Red; Sandy-Clayey; 0.37 µSv/h	0.1	43	<10	62	<3	<5	<10	203.35
ARA-SL-014	235202	8113982	Brown; Sandy-Clayey; 0.39 µSv/h	<0.1	49	<10	68	<3	<5	<10	183.03
ARA-SL-015	235290	8113943	Brown; Clayey; 0.40 µSv/h	<0.1	50	<10	66	<3	5	<10	191.22
ARA-SL-016	235402	8113934	Brown; Clayey; 0.41 µSv/h	0.1	50	<10	76	<3	5	<10	222.17
ARA-SL-017	235502	8113925	Brown; Clayey; 0.42 µSv/h	0.2	56	<10	79	<3	6	<10	196.81
ARA-SL-018	235609	8113904	Brown; Clayey; 0.39 µSv/h	0.1	55	<10	76	<3	6	<10	185.63
ARA-SL-019	235702	8113855	Brown; Sandy-Clayey; 0.40 µSv/h	0.1	55	<10	78	<3	6	<10	223.45
ARA-SL-020	235789	8113916	Brown; Silty-Sandy; 0.41 µSv/h	0.1	53	<10	73	<3	6	<10	182.39
ARA-SL-021	235905	8113898	Brown; Clayey; 0.40 µSv/h	0.2	52	<10	70	<3	5	<10	161.68
ARA-SL-022	236009	8113934	Brown; Clayey; 0.35 µSv/h	0.2	52	<10	72	<3	6	<10	176.47
ARA-SL-023	236140	8114007	Brown; Clayey; 0.41 µSv/h	0.2	56	<10	80	<3	6	<10	179.45
ARA-SL-024	236050	8114144	Brown; Clayey; 0.36 µSv/h	0.2	52	<10	68	<3	6	<10	170.87
ARA-SL-025	235914	8114326	Brown; Clayey; 0.40 µSv/h	0.2	56	<10	74	<3	6	<10	183.82
ARA-SL-026	232013	8114437	Red; Clayey; 0.37 µSv/h	0.7	38	<10	50	5	<5	<10	1222.30
ARA-SL-027	232178	8114412	Red; Clayey; 0.42 µSv/h	1.3	27	<10	25	13	<5	<10	1053.76
ARA-SL-028	231994	8114338	Red; Clayey; 0.35 µSv/h	0.3	33	10	42	<3	<5	<10	1035.50
ARA-SL-029	232002	8114168	Red; Sandy-Clayey; 0.35 µSv/h	0.4	38	<10	47	<3	<5	<10	383.08
ARA-SL-030	232159	8114127	Red; Sandy-Clayey; 0.27 µSv/h	0.4	42	<10	48	<3	<5	<10	306.72
ARA-SL-031	232350	8114038	Red; Sandy-Clayey; 0.35 µSv/h	0.2	47	<10	56	<3	<5	<10	157.13
ARA-SL-032	232737	8114147	Red; Sandy-Clayey	<0.1	46	<10	55	<3	<5	<10	265.33
ARA-SL-033	232762	8114323	Red; Sandy-Clayey	0.1	53	<10	62	<3	5	<10	172.22
ARA-SL-034	237553	8109662	Orange; Sandy-Clayey; 0.44 µSv/h	0.1	62	<10	103	<3	<5	<10	126.38
ARA-SL-035	237731	8109760	Orange; Sandy-Clayey; 0.39 µSv/h	0.2	50	11	91	<3	<5	<10	210.06
ARA-SL-036	237924	8109718	Orange; Sandy-Clayey; 0.40 µSv/h	0.1	50	<10	98	<3	<5	<10	258.03
ARA-SL-037	238119	8109713	Orange; Sandy-Clayey; 0.47 µSv/h	0.2	51	<10	116	<3	<5	<10	492.39
ARA-SL-038	238316	8109698	Orange; Sandy-Clayey; 0.41 µSv/h	<0.1	51	<10	111	<3	8	<10	248.12
ARA-SL-039	238460	8109825	Orange; Sandy-Clayey; 0.45 µSv/h	0.6	52	13	120	5	<5	<10	390.72
ARA-SL-040	238643	8109820	Orange; 0.46 µSv/h	0.1	48	13	118	4	<5	<10	1225.35
ARA-SL-041	234393	8107167	Red; Sandy-Clayey; 0.27 µSv/h	1.5	35	20	48	44	<5	<10	997.30

Sample ID	Easting SIRGAS 2000 24	Northing SIRGAS 2000 24	Description	Cs ppm	Ga ppm	Li ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	TREO
ARA-SL-042	233888	8116970	Brown; Sandy-Clayey; Soil; 0.39 µSv/h; 0.8 m in length; verical sampling by Dan Hamer	0.6	39	17	34	12	78	<10	539.53
ARA-SL-043	233888	8116970	Red; Lateritic soil; 1.0 m in length; vertical sampling by Dan Hamer	0.6	40	14	35	10	35	<10	443.64
ARA-SL-044	233888	8116970	Red; Lateritic soil; 1.0 m in length; vertical sampling by Dan Hamer	0.5	39	14	34	12	<5	<10	488.27
ARA-SL-045	233888	8116970	Red; Lateritic soil; 1.4 m in length; subangular fragments of quartz; white mica of up to 4 cm in length in the last 5 cm (at the base of the interval); vertical sampling by Dan Hamer	1.1	42	17	31	21	5	<10	457.28
ARA-SL-046	233888	8116970	Red; Pegmatite saprolite; 1.0 m in length; white mica + highly weathered biotite (up to 10 cm in length); vertical sampling by Dan Hamer	12.1	38	104	46	271	11	<10	444.62
ARA-SL-047	233888	8116970	White; Pegmatite saprolite; 1.0 m in length; white mica + highly weathered biotite (up to 10 cm in length); vertical sampling by Dan Hamer	3.3	25	39	10	86	7	<10	-
ARA-SL-048	233888	8116970	White; Pegmatite saprolite; 1.0 m in length; white mica + biotite vertical sampling by Dan Hamer	19.9	51	140	78	537	14	<10	460.38
ARA-SL-049	233888	8116970	White; Pegmatite saprolite; 1.0 m in length; vertical sampling by Dan Hamer	11	47	115	63	394	15	<10	376.14
ARA-SL-050	233888	8116970	White; Pegmatite saprolite; 0.8 m in length; white mica > biotite; vertical sampling by Dan Hamer	13.2	51	123	111	440	18	<10	268.67
ARA-SL-051	233888	8116970	White; Pegmatite saprolite; 0.4 m in length; quartz + feldspar; vertical sampling by Dan Hamer	4.2	33	18	<10	542	6	<10	-
ARA-SL-052	233888	8116970	White; Pegmatite saprolite; 0.6 m in length; white mica only; vertical sampling by Dan Hamer	25.5	133	382	213	1245	58	<10	115.19
ARA-SL-053	233888	8116970	White; Pegmatite saprolite; 1.0 m in length; two-mica pegmatite with quartz and feldpar; minor tourmaline; vertical sampling by Dan Hamer	7.2	50	47	37	205	8	<10	848.93
ARA-SL-054	233888	8116970	White; Pegmatite saprolite; 1.0 m in length; last 10 cm of vein quarz (beryl was observed there a few days ago); vertical sampling by Dan Hamer	1.1	41	19	13	25	<5	<10	1216.37
ARA-SL-055	237808	8106991	Pink; Sandy-Clayey; 0.48 µSv/h; granules of quartz and clay pseudomorphs after feldspar	0.2	43	14	101	5	13	<10	462.73
ARA-SL-056	237852	8106802	Brown; Sandy-Clayey; 0.50 µSv/h; granules of quartz	0.1	50	11	99	3	<5	<10	132.21

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ARA-SL-057	237921	8106616	Brown; Sandy-Clayey; 0.58 µSv/h; granules of quartz	0.2	45	14	120	4	<5	<10	80.84
ARA-SL-058	238094	8106515	Red; Sandy-Clayey; 0.61 µSv/h	0.1	65	13	148	<3	<5	<10	371.50
ARA-SL-059	238219	8106360	Brown; Sandy-Clayey; 0.57 µSv/h	<0.1	57	13	139	<3	9	<10	434.04
ARA-SL-060	238398	8106175	Pink; 0.51 µSv/h; granitic saprolite	<0.1	50	<10	147	4	<5	<10	251.62
ARA-SL-061	238650	8106030	Pink; 0.46 µSv/h; granitic saprolite	<0.1	37	10	83	4	<5	<10	523.29
ARA-SL-062	238759	8106025	Red; Sandy-Clayey; 0.70 µSv/h; granitic saprolite	0.1	100	<10	178	<3	7	<10	333.78
ARA-SL-063	238739	8105844	Red; Sandy-Clayey; 0.46 µSv/h; transition from reddish	<0.1	46	<10	86	4	<5	<10	852.62
ARA-SL-064	237162	8108729	Brown; Sandy-Clayey; 0.49 µSv/h	0.3	59	<10	93	4	5	<10	136.96
ARA-SL-065	237215	8108540	Orange; Sandy-Clayey; 0.52 µSv/h	0.5	56	<10	97	5	6	<10	157.13
ARA-SL-066	237277	8108351	Brown; Sandy-Clayey; 0.51 µSv/h	0.3	56	<10	98	<3	5	<10	173.55
ARA-SL-067	237400	8108194	Brown; Sandy-Clayey; 0.53 µSv/h	0.2	63	<10	113	<3	6	<10	157.46
ARA-SL-068	237545	8108058	Orange; Sandy-Clayey; 0.54 µSv/h	0.2	60	<10	107	<3	19	<10	264.14
ARA-SL-069	237674	8107904	Orange; Sandy-Clayey; 0.51 µSv/h	0.2	61	<10	97	<3	6	<10	132.87
ARA-SL-070	243915	8114975	Orange; Sandy	1.6	46	26	60	35	<5	<10	1076.20
ARA-SL-071	243910	8114742	Orange; Sandy	1.7	48	27	59	49	7	<10	1156.76
ARA-SL-072	243958	8114513	Orange; Sandy	1.7	47	20	60	30	<5	<10	770.34
ARA-SL-073	244092	8114295	Orange; Sandy	2.2	51	32	58	89	<5	<10	981.22
ARA-SL-074	244130	8114050	Orange; Sandy	1.5	47	20	72	46	<5	<10	855.46
ARA-SL-075	244071	8113791	Brown; Sandy-Clayey	1	48	20	67	39	<5	<10	775.18
ARA-SL-076	244044	8113560	Orange; Sandy-Clayey	2.1	47	33	73	112	<5	<10	1269.75
ARA-SL-077	244055	8113269	Brown; Clayey	7	49	64	91	243	5	<10	479.21
ARA-SL-078	243935	8112983	Brown; Clayey	2.3	47	35	61	103	18	<10	1624.20
ARA-SL-079	243990	8112739	Orange; Sandy-Clayey	2.1	47	30	65	82	9	<10	1965.92
ARA-SL-080	241533	8113302	Pink; Clayey	2.5	36	50	42	289	6	<10	3041.56
ARA-SL-081	241743	8113149	Beige; Sandy-Clayey	2.3	29	30	39	99	<5	<10	1026.88
ARA-SL-082	241921	8112954	Brown; Clayey	3.6	32	51	31	234	<5	<10	1367.60
ARA-SL-083	242052	8112680	Brown; Clayey	3.7	33	41	34	351	11	<10	2382.80
ARA-SL-084	242043	8112390	Brown; Clayey	1.7	31	25	39	198	<5	<10	2123.04
ARA-SL-085	815748	8119739	Brown; Sandy-Clayey	8.7	22	27	14	82	<5	<10	349.58
ARA-SL-101	237795	8107746	Red; Sandy-Clayey; 0.50 µSv/h	0.2	64	<10	97	<3	5	<10	128.01
ARA-SL-102	237828	8107550	Red; Sandy-Clayey; 0.58 µSv/h	0.2	70	<10	97	<3	5	<10	119.21
ARA-SL-103	237835	8107353	Red; Sandy-Clayey; 0.58 µSv/h	0.1	57	<10	94	<3	<5	<10	101.08
ARA-SL-104	238914	8106154	Brown; Sandy-Clayey; 0.73 µSv/h	0.1	55	12	125	<3	<5	<10	422.37
ARA-SL-105	239070	8106276	Brown; Sandy-Clayey; 0.76 µSv/h	0.2	52	13	119	4	<5	<10	256.79
ARA-SL-106	239267	8106237	Brown; Sandy-Clayey; 0.67 µSv/h	0.2	38	15	81	5	<5	<10	346.06
ARA-SL-107	239468	8106216	Brown; Sandy-Clayey; 0.66 µSv/h	0.1	58	13	91	<3	5	<10	346.68
ARA-SL-108	239658	8106278	Brown; Sandy-Clayey; 0.89 µSv/h	0.2	57	13	119	<3	<5	<10	154.51
ARA-SL-109	240490	8111254	Pink; 0.48 µSv/h; pinkish soil immediately above saprolite of porphyritic granitic rock; angular granules of quartz are abundant	0.3	36	17	90	9	<5	<10	2462.94

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ARA-SL-110	240534	8111077	Orange; Sandy-Clayey; 0.48 µSv/h	0.7	36	11	72	21	<5	<10	1164.64
ARA-SL-111	240608	8110884	Orange; Sandy-Clayey; 0.50 µSv/h; angular granules of quartz are abundant	0.7	35	17	87	17	<5	<10	1334.04
ARA-SL-112	240718	8110725	Orange; Sandy-Clayey; 0.44 µSv/h	0.3	37	<10	78	4	<5	<10	553.09
ARA-SL-113	240857	8110573	Red; Sandy-Clayey; 0.46 µSv/h; angular granules of quartz are abundant	0.2	32	16	103	5	<5	<10	597.49
ARA-SL-114	241018	8110448	Brown; 0.82 µSv/h; quartz-rich saprolite	1.4	28	35	61	62	<5	<10	1052.83
ARA-SL-115	241102	8110280	Orange; Sandy-Clayey; 0.73 µSv/h	0.1	20	<10	23	<3	<5	<10	484.64
ARA-SL-116	241196	8110091	Red; 0.44 µSv/h; saprolite of granitic rock	0.5	34	11	67	26	<5	<10	1535.53
ARA-SL-117	241274	8109905	Red; Sandy-Clayey; 0.66 µSv/h; angular granules of quartz	0.1	41	14	67	<3	<5	<10	864.68
ARA-SL-118	241329	8109708	Orange; Sandy-Clayey; 0.65 µSv/h	0.4	42	17	62	3	<5	<10	605.66
ARA-SL-119	241471	8109557	Beige; 0.42 µSv/h; saprolite of granitic rock	1.2	28	20	50	20	<5	<10	377.35
ARA-SL-120	241569	8109392	Orange; Sandy-Clayey; 0.44 µSv/h	0.2	42	13	48	<3	<5	<10	678.28