12 June 2023

Barroso Lithium Project: New Scoping Study

New Scoping Study for the Barroso Lithium Project demonstrates Outstanding Economics: Post-tax NPV of US$953 million, IRR of 77% and 1.3 year Payback

Savannah Resources Plc, the European lithium development company, is pleased to announce, following the positive Environmental Impact Statement ('DIA') from the Portuguese regulator on the Project's revised and optimised design, the results of a new Scoping Study (the 'Study' or the 'Scoping Study') undertaken on the Company's 100% owned Barroso Lithium Project (the 'Project'), located in northern Portugal.

Scoping Study Highlights

- The new Scoping Study reconfirms the Project has the potential to be a major European producer of spodumene concentrate, the industry's standard lithium raw material. Located in close proximity to the emerging European battery supply chain, including a number of planned lithium chemical plants, the Project has the potential to be a domestic source of conventional, low cost, low carbon, lithium raw material for the region.
- Demonstrates excellent Project economics, with the potential to deliver substantial shareholder value:
    - Base Case post -tax NPV_8 of US$953 million, IRR of 77% and payback period of 1.3 years
    - Life of Mine ('LOM') revenue of US$4.2 billion
    - LOM EBITDA of US$2.8 billion
    - LOM post-tax free cash flow of US$1.7 billion
    - Based on average 5.5% grade spodumene concentrate LOM price of US$1,464/t vs. current 6% grade spot prices of US$3,500/t

- Project considered by independent consultants to be of low technical risk with open pit mining and conventional processing combining Dense Media Separation ('DMS') and a flotation

circuit utilising environmentally friendly reagents to produce a 5.5% Li_2O grade spodumene concentrate:
  - Resource of 28Mt at 1.05% Li_2O with a lithia content of 293,400 tonnes
  - Resource Utilised in Mine Plan, 20.5Mt at 1.05% Li_2O and average annual run-of-mine production of 1.5Mtpa, over 14 years
  - LOM production of 2.6Mt of 5.5% Li_2O grade spodumene concentrate at an average annual production rate of ~191,000tpa
  - Average LOM C1 Operating Cost of US$292/t of concentrate (including by-product credits)
  - Initial CAPEX of US$236 million (excluding contingencies) which includes US$40 million for community related measures
- Project is likely to have a significant cost advantage due to its close proximity to the local ceramics market where a large portion of the tailings could be sold as Ceramic By-products.
- Project scheduled to commence producing concentrate in mid-2026 subject to completion of DFS and project financing.

Dale Ferguson, CEO of Savannah said, "Following on from the recent positive Environmental Impact Statement ('DIA') from the Portuguese regulator, we are delighted to have been able to publish the findings of the new Scoping Study on the Project ahead of the H2 2023 deadline we had set ourselves. This study, alongside the receipt of the positive DIA decision represents a major milestone for Savannah, as well as a significant step-change as we look to accelerate the development of the Project.

"Having just received the environmental regulator's endorsement for the revised and optimised design of the Project, the new Scoping Study now highlights the outstanding investment case of the proposed development. Based on long term forecast prices, which are below current spodumene prices, the Project generates an exceptional IRR and significant cash generation. Hence, we hope that this Scoping Study makes clear the inherent value in this Project which Savannah seeks to unlock for shareholders, for customers, for Portugal, for Europe, and all stakeholders.

"Importantly, these robust economics are achievable alongside minimising the environmental impact of the Project. Our analysis shows that C1 operating costs are in the second quartile of the spodumene lithium cost curve and CAPEX remains achievable despite additional environmental impact mitigations incorporated in the revised and optimised Project design and the new bypass road which will benefit the regions' residents. With the Project's close proximity to the developing European lithium value chain, it will also enjoy low transport costs with all costs referred to in the Scoping Study being delivered to European customers.

"Capable of producing just under 200,000tpa of spodumene concentrate, or c.25ktpa LCE (Lithium Carbonate Equivalent), the Barroso Lithium Project is one of the most significant potential lithium raw material sources in the European Union. The European Commission's Critical Raw Material Act calls for at least 10% of European demand for materials such as lithium to be met from domestic supply by 2030. Having received its key environmental approval last month and now with the strong business case implied by the Scoping Study, the Barroso Lithium Project is well placed to fulfil its role as a major source of responsibly produced lithium in Europe. In this way, it can help to establish Portugal as a key player in Europe's own end-to-end lithium-ion battery value chain.

"With the DIA received and the Scoping Study now completed, Savannah is focused on reaching its next Project milestones, the completion of the environmental licencing process and the Definitive Feasibility Study. To complete both these tasks Savannah will be ensuring that the conditions associated with the DIA are incorporated in the Project's final engineering design. We expect to achieve both milestones in H2 2024.

"We will also be continuing with our stakeholder engagement programme. We are keen to ensure that all stakeholders are aware of and understand the activities we will be undertaking to prepare for the future development of the Project. We will also be seeking their input to optimise the delivery of the significant socio-economic benefits the Project can bring to the local villages, the Municipality and to Portugal

"The commercial arrangements for the Project will also receive greater focus as we look to close in on offtake and financing arrangements now that the licencing of the Project has taken a significant step forward, and the favourable economics are clearly demonstrated by the Scoping Study. From the foundation created by the DIA, now the Scoping Study and the fact that we still have not committed any of the Project's offtake the next 12 months are set to be a busy and defining period for the Project and Savannah."

Further Information

Summary of key Scoping Study input and Outcomes

Outcome:		
Parameter	**Unit**	**Base Case**
Post-Tax NPV_8	US$ M	953
Post-Tax IRR	%	77.3
Post-Tax Payback Period	Years	1.3
Initial CAPEX (excluding contingencies)	US$ M	236
LOM Operation Expenditure	US$ M	1,066
Average LOM C1 Operating Cost**	US$/t conc	292
LOM Revenue	US$ M	4,151
LOM EBITDA	US$ M	2,793
LOM Post-Tax Free Cash Flow	US$ M	1,694
Input:		
Parameter	**Unit**	**Base Case**
Start of Production	Date	Mid-2026
Potential Mine Life	Years	~14yrs
Target LOM Ore Mined	Mt	20.5
Measured Mineral Resources	%	32
Indicated Mineral Resources	%	48
Inferred Mineral Resources	%	18
Exploration Target*	%	2
Annual Ore Throughput	Mtpa	1.5
Average LOM Strip ratio (waste to plant feed)	w:o	5.9:1
Average Resource Grade	% Li_2O	1.05
Plant Li_2O Recovery	%	73
Potential Annual 5.5% Spodumene Production	tpa	~191,000
Average Government Royalty rate on revenues	%	4
Average 6% Spodumene Concentrate Price Equivalent	US$/t	1,597
Average 5.5% Spodumene Concentrate Price	US$/t	1,464

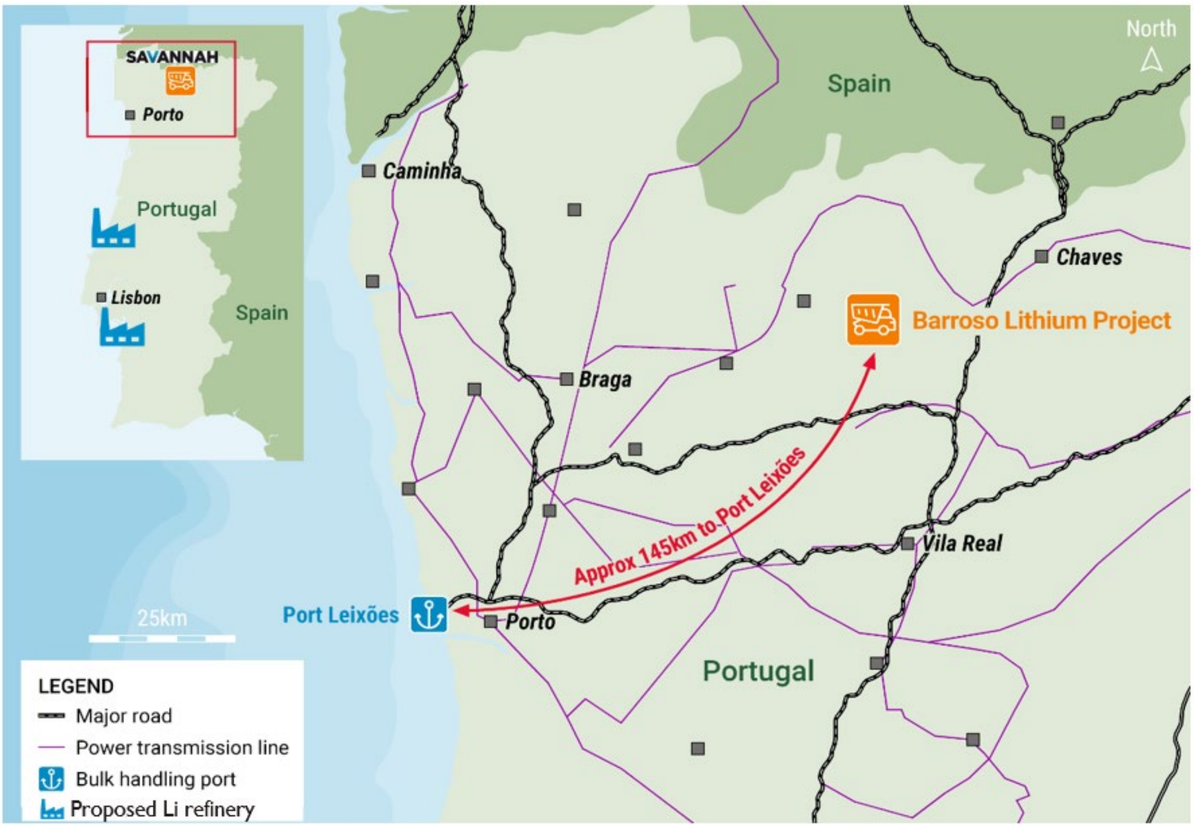
*Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration work to estimate a mineral resource and it is uncertain if further exploration will result in defining a mineral resource. As such, potential investors should not rely upon this Exploration Target as indicative of a mineral resource and should not base their investment decision, in whole or in part, on such Exploration Target.

** C1 Operating Costs include all mining, processing, transport, G&A, and community costs, and are net of Ceramic By-Products credits.

Study Background

The Barroso Lithium Project is located in northern Portugal near the town of Boticas and around 145km by road from the deep-water port of Leixões near the city of Porto (Figure 1). The object of the Scoping Study was to produce a preliminary development base case centred on the defined JORC (2012) compliant Mineral Resource Estimate of 28Mt at 1.05% Li_2O, using conventional processes to produce a marketable Li_2O concentrate to demonstrate the potential economics of the Project.

Figure 1. Project Location Map



The Project's Scoping Study is based on a mine and concentrator only development for the production of spodumene concentrate. Additional revenue potential comes from the production of Ceramic By-Products (combined feldspar and quartz products ('Ceramic By-Products')) from the spodumene lithium concentrator circuit and the sale of low-grade pegmatite material. The Scoping Study is based on the Mine Plan and Environmental Report which were submitted to the Portuguese regulator in March 2023 and which received a positive Environmental Impact Statement (DIA) in May 2023, and also includes the Aldeia deposit which Savannah has the right to acquire once the related mining licence is issued.

The Project's flowsheet, which has been designed and tested to Feasibility Study requirements, combines DMS and a flotation circuit for the recovery of spodumene into a concentrate. The resulting tails are thickened and dry stacked which eliminates the need for a tailings dam and reduces the overall footprint of the operation. Low-grade pegmatite material that did not form part of the concentrator feed was quantified so that the opportunity of selling this material can be evaluated. The Scoping Study assumes sales of 100,000t/year at US$23.8/t. The opportunity of producing a Ceramic By-Products (feldspar /quartz) from the processing plant tailings for the local ceramics industry was also investigated, and the Scoping Study assumes annual sales of 400,000t of this material at a price of US$53.5/t. Lithium and feldspar are designated respectively as Strategic and Critical Raw Materials in the proposed EU Critical Raw Materials Act.

The Project's NPV was calculated by Savannah on an equity basis owning 100% of the Project, and has been estimated via cash flow modelling, discounted at 8%. The deterministic sensitivity analysis of the Base Case NPV estimates have been calculated on a range of -20% to +30%. These estimates accommodate fundamental uncertainties at the scoping level of this study and will be refined through feasibility level studies. It is important to note that many aspects of the work completed to date, like the metallurgy test work, has been completed to DFS level which will aid in shortening the time for the next phase of work. The sensitivity analysis was undertaken on all of the key inputs (spodumene concentrate price, initial CAPEX, operating expenditure ('OPEX'), discount rate, Li_2O recovery rates and feed grade) to arrive at a range of Project NPVs and IRRs for any given sensitivity.

Geology

The Barroso - Alvão Region is characterised by the presence of a large field of outcropping pegmatites and aplite-pegmatite dykes of granitic composition. Pegmatite dykes are mainly intruded in the granitic rocks of the region whilst aplite-pegmatite dykes are hosted by low to medium grade metasedimentary rocks of Silurian age that are strongly deformed (B. CAROY et al., 1992). The thickness of these dykes ranges from less than 1m up to 50m.

The Barroso Lithium Project is centred on a series of spodumene rich aplite-pegmatite dykes and sills, which have formed the basis of this study.

Tenure

The Barroso Lithium Project comprises the C100 Mining Lease (Figure 2) which is 100% owned by Savannah Resources Plc and is currently undergoing a 250m expansion along its northern boundary. Savannah has received written confirmation from the Portuguese mining bureau, DGEG, that on the basis of article 24 of Decree-Law no. 88/90 of 16 March (1990) and based on the resources allocated, exploited and intended, the article can be utilised to request the DGEG for an expansion up to 250m of the C100 Mining Lease in specific areas where a resource has been defined and the requirement for the expansion can be justified. The DGEG have confirmed in writing that the licence for the extension would be granted upon a positive approval of the DIA which occurred on 30 May 2023. Discussions with the DGEG on the process for the expansion and re-definition of the boundary is currently underway in the Reservatorio area and, as a result, potential mineralisation in the area has been included into the Scoping Study.

Savannah has a fully signed and executed agreement for the purchase of the Aldeia licences (Figure 2) which are subject to the final condition precedent around the granting of the mining concessions for the area. Based on current discussions it is anticipated that concessions could be granted later this year or early next year. Based on this information, the Aldeia resource has been included in the Scoping Study.

Mineral Resource and Exploration Target

Savannah commenced drilling at the Barroso Lithium Project in 2017 and has completed over 31,000m of drilling using a combination of RC (21,889m) and diamond drilling (9,515.5m) to define a JORC (2012) compliant resource of 28Mt at 1.05% Li_2O. The resource is comprised of five main deposits, Grandao, Reservatorio, Pinheiro, NOA and Aldeia.

Grandao Deposit: Is the primary deposit of the Project with a mineralised zone of 650m long and 500m wide, and a thickness of up to 50m. The deposit exhibited consistency of mineralisation within the pegmatite body and has produced the most significant results to date.

Reservatorio: Is a moderately dipping outcropping pegmatite with over 450m of strike exposure that can be traced for at least 170m down dip. The pegmatite thickness is up to 40m and has exhibited consistent lithium mineralisation throughout the body.

Pinheiro: is made up of two converging steeply dipping pegmatite bodies that have been traced for 200m on the surface and by drilling and down dip for 150m, with thickness up to 25m. Lithium mineralisation occurs throughout both pegmatites and remains open along both strike and down dip.

NOA: is a semi contiguous, moderately dipping pegmatite body that has been traced for 350m along strike and down dip for 140m. The lithium mineralisation is consistent both down dip and along strike.

Aldeia: is a northwest dipping tabular pegmatite with several minor subsidiary bodies that can be traced for 200m along strike and 250m down dip. The lithium mineralisation is consistent throughout the pegmatite and is of a higher grade compared to the other deposits.

The previous JORC (2012) compliant Measured, Indicated, and Inferred Mineral Resource for the Barroso Lithium Project, calculated by PayneGeo, May 2019 of 27Mt at 1.06% Li_2O with a lithia content of 285,900 tonnes was updated in June 2023 to 28Mt at 1.05% Li_2O with a lithia content of 293,400 tonnes as shown in Table 1 with full details in Appendix 1. To further show the potential of the Project an Exploration Target* has been refined based on results of the drilling for the Grandao, Reservatorio and Aldeia deposits. The Exploration Target* projects a potential of 11Mt to 19Mt at 1.0% - 1.2% Li_2O and is also shown in Table 1. This gives an overall combined Project Resource and Exploration Target* of 39Mt to 47Mt at 1.0% - 1.2% Li_2O.

Table 1. Combined Resource Estimate and Exploration Target for the Project

Mineral Resource Estimate and Exploration Target* for the Project			
Deposit	**Tonnes (Mt)**	**Li_2O%**	**Li_2O Tonnes**
Grandao	17.7	1.1	181,800
Reservatorio	4.2	0.94	39,500
Pinheiro	2.0	1.0	20,000
Noa	0.6	1.1	7,100
Aldeia	3.5	1.3	45,000
Total Mineral Resources	**28.0**	**1.05**	**293,400**
Exploration Target *	11-19	1.0-1.2	
Total Current Project Target	**39-47**	**1.0-1.2**	

*Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration work to estimate a mineral resource and it is uncertain if further exploration will result in defining a mineral resource. As such, potential investors should not rely upon this Exploration Target as indicative of a mineral resource and should not base their investment decision, in whole or in part, on such Exploration Target.

Mine Plan

The planning for the Barroso Lithium Project was based on an annual run of mine rate of 1.5Mt of ore per annum with an estimated life of mine average head grade of 0.96% Li_2O (diluted), an overall strip ratio of 5.9:1 (waste:ore ratio) and a 14-year mine life (LOM). It is important to note that this is a scoping study, and the resulting 20.5Mt mine plan cannot be classified as an Ore Reserve under JORC (2012) guidelines.

In general, the mineralisation grades are fairly consistent throughout the deposits so to improve the Project economics basic pit stages were identified with the intention of deferring stripping requirements over the LOM. The concept plan incorporates seven pit stages from the five deposits modelled to date (see conceptual site layout in Figure 2)

- Pinheiro (single stage)
- Grandao (2 stages), see Figure 3
- Reservatorio (2 stages)
- NOA (single stage)
- Aldeia (single stage)

The total optimised pit shell inventories are listed in Table 2. Five geological block models (one for each respective deposit) were provided, and conceptual pit shells were generated using optimisation software founded on the Lurchs Grossman algorithm.

Figure 2. Conceptual Site Layout

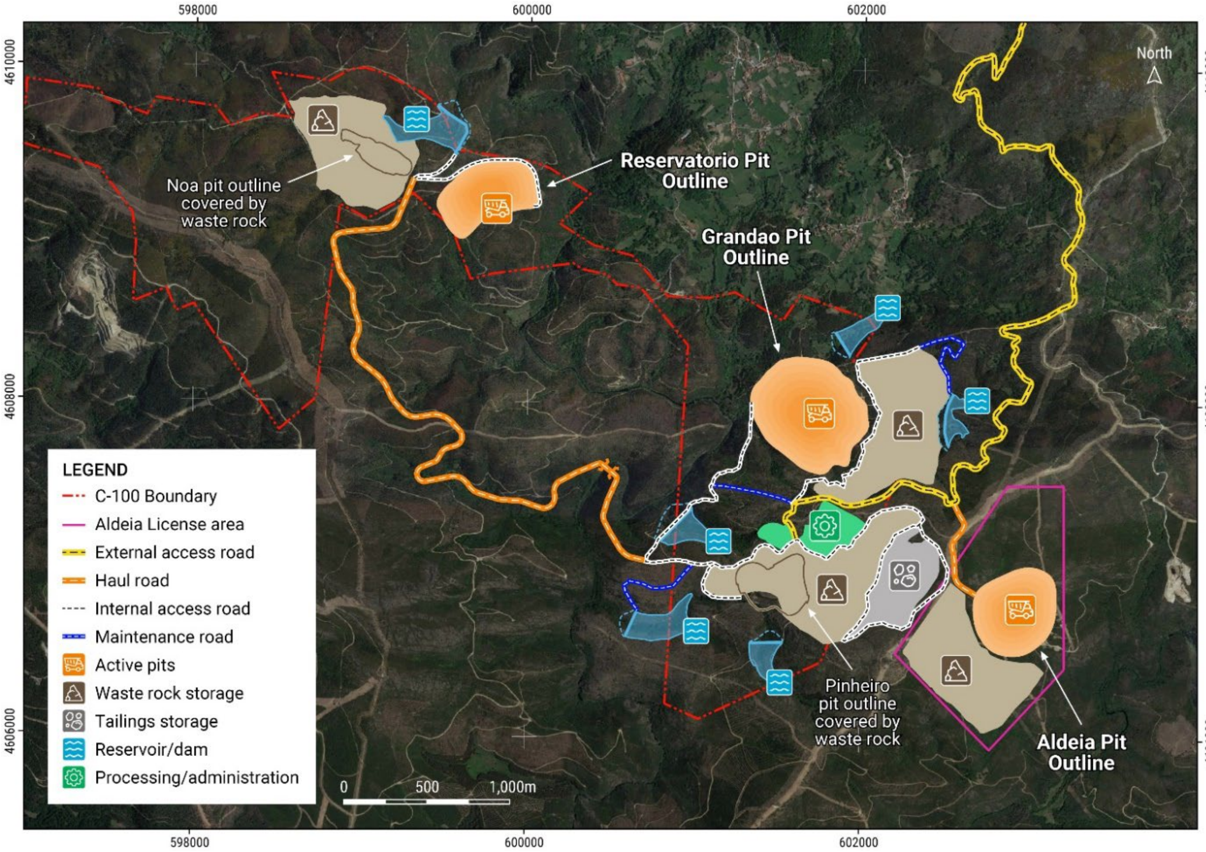


Figure 3. Cross section through Grandao Deposit showing the conceptual stage 1 and 2 pits

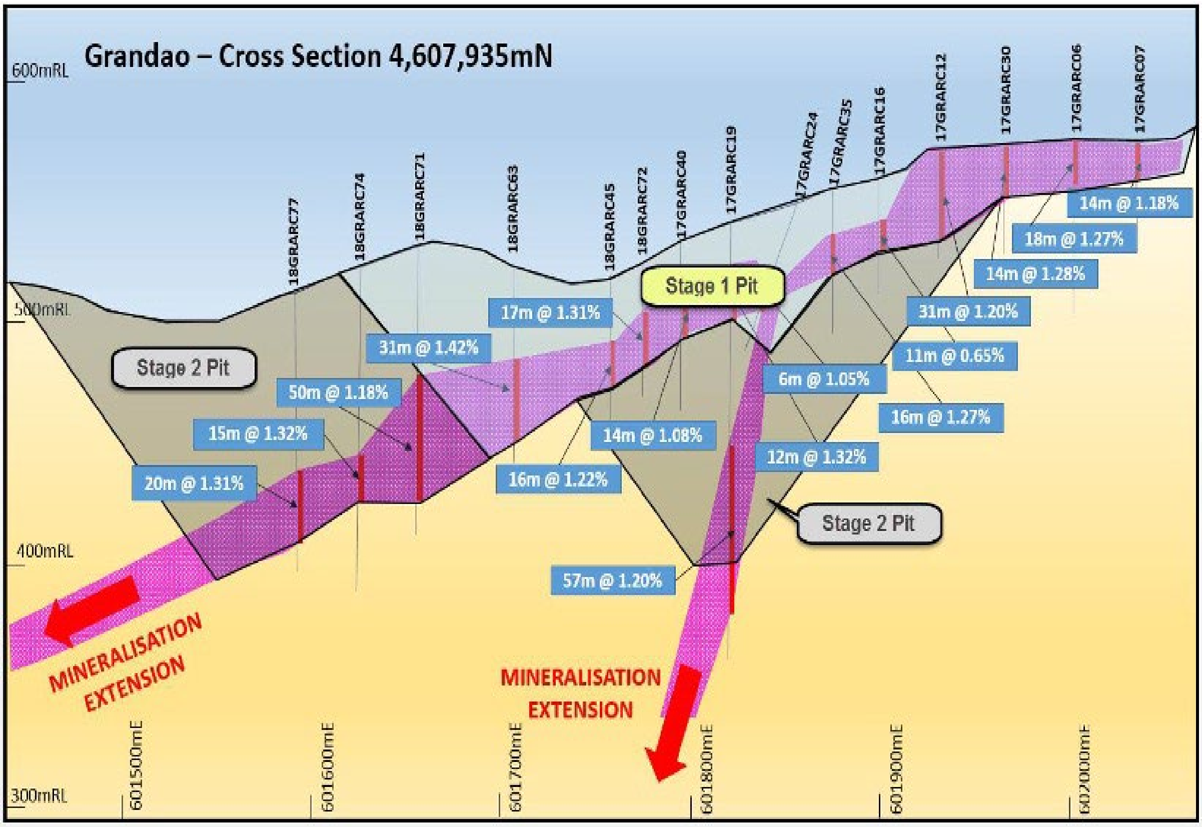


Table 2. Conceptual Optimised Shell and Mine Plan

Deposit	Stage	Feed *(Mt)*	Diluted Li_2O *(%)*	Stripping *(Mt)*	Strip Ratio *(w:o)*
Pinheiro	1	1.3	0.99	11.2	8.8
Grandao	1	5.2	1.05	34.4	6.7
Grandao	2	5.8	0.78	13.3	2.3
Reservatorio	1	2.7	0.93	11.8	4.4
Reservatorio	2	1.8	0.96	10.4	5.6
NOA	1	0.5	0.90	2.8	5.4
Aldeia	1	3.1	1.19	36.6	11.7
Total		**20.5**	**0.96**	**120.6**	**5.9**

Minor rounding discrepancies may occur in the table.

The optimised shells used in this evaluation are based on Measured, Indicated, and Inferred Mineral Resource Estimates together with a minor amount of the Exploration Target. All materials had appropriate dilution and mining recovery factors applied. The quantities for each type of material are reported in Table 3.

Table 3. Plant Feed Inventories by Pit and Material Type

	Measured Resource		Indicated Resource		Inferred Resource		Exploration Target*				
Deposit	Tonnes (M)	Li_2O%	Tonnes (M)	Li_2O%	Tonnes (M)	Li_2O%	Tonnes (M)	Li_2O%	Total (Mt)	Li_2O%	Percentage
Pinheiro	-	-	-	-	1.3	1.0	-	-	1.3	0.99	6%
Grandao	6.6	1.05	4.4	0.7	-	-	-	-	11	0.91	54%
Reservatorio	-	-	3.5	0.95	0.7	0.93	0.3	0.9	4.5	0.94	23%
NOA	-	-	0.3	0.94	0.2	0.84	-	-	0.5	0.9	2%
Aldeia	-	-	1.6	1.23	1.5	1.15	-	-	3.1	1.19	15%
Total (Mt)	**6.6**	**1.05**	**9.8**	**0.88**	**3.7**	**1.04**	**0.3**	**0.9**	**20.5**	**0.96**	**100%**
Percentage	**32%**		**48%**		**18%**		**2%**		**100%**		

Minor rounding discrepancies may occur in the table.
*Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration work to estimate a mineral resource and it is uncertain if further exploration will result in defining a mineral resource. As such, potential investors should not rely upon this Exploration Target as indicative of a mineral resource and should not base their investment decision, in whole or in part, on such Exploration Target.

Infrastructure

The Project's total site conceptual infrastructure stretches 6.5km by 2.5km over relatively steep and undulating terrain as shown in Figure 2. All conceptual mine infrastructure and excavations developed in this study were restricted to:

- within tenement boundaries where space allowed;
- minimised sterilisation of prospective target exploration zones;
- respected offset boundaries for major watercourses; and
- legacy travel routes (where available).

Mining Schedule

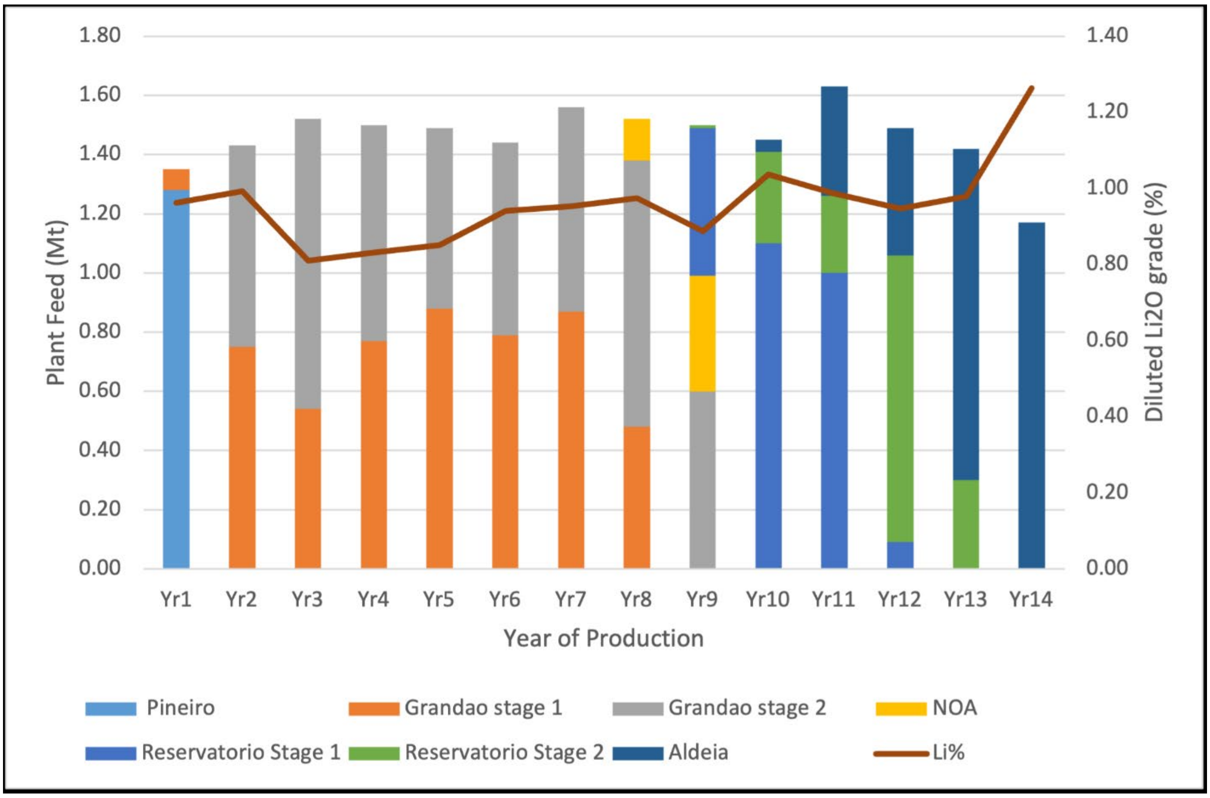
The conceptual mine production plan is summarised in Table 4 and Figure 4. As the Project progresses further refinements to haul routing plans, waste rock storage management and pit staging should be targeted to take advantage of opportunities for reduced haulage capital and operating costs.

Table 4. Conceptual Barroso Lithium Project Mine Production Plan (pre-strip incl. in year 1)

Conceptual Mine Production		Total	Year of Production													
			1	2	3	4	5	6	7	8	9	10	11	12	13	14
Days	(Days)	4,953	360	360	360	360	360	360	360	360	360	360	360	360	360	273
Plant Feed	*(Mt)*	20.5	1.3	1.4	1.5	1.5	1.5	1.4	1.6	1.5	1.5	1.5	1.6	1.5	1.4	1.2
Li_2O (diluted)	*(%)*	0.96	0.99	0.81	0.83	0.85	0.94	0.95	0.97	0.89	1.04	0.99	0.95	0.98	1.09	1.26
Mining (waste + peg + plant feed)	*(Mt)*	141	20.8	16	8.8	6.4	5	4.8	4.7	4.5	14.2	18.6	15.5	9.6	8.7	3.5
Strip Ratio	*(w:o)*	5.9	14.4	10.2	4.8	3.3	2.3	2.4	2.0	2.0	8.5	11.8	8.5	5.4	5.1	2.0
Li_2O	*(kt)*	196.6	13.4	11.6	12.7	12.8	14.0	13.7	15.1	13.5	15.5	14.3	15.4	14.7	15.6	14.8

Minor rounding discrepancies may occur in the table.

Figure 4. Conceptual Barroso Lithium Project Mine Plan by Deposit



Mining Costs

A contract mining model was developed for the potential development by Minesure using the schedules shown in Table 4 and Figure 4.

Annual operating costs for each major item of plant were estimated from first principles using data supplied by major mining fleet suppliers. Labour costs were provided by Savannah.

The cost components were combined to derive an annual operating cost for each machine which were then applied to the mining schedule to generate an overall cost per tonne for mining.

The mining activities will utilise excavators matched with dump trucks. Due to the relatively high production rates, it is estimated that it will be required to operate three dozers whilst only mining at Pinheiro and Grandao, increasing to four dozers when Reservatorio comes on stream. Initially only one water cart should be required as the haul distances are quite short however an additional cart will be required when mining Reservatorio and NOA. A front-end loader is costed to operate throughout the Project life as a back-up dozer and for doing general clean up works. Allowance has been made for the operation of a service truck, light vehicles, and other ancillary equipment.

Capital expenditure is initially incurred in mobilising the mining fleet to site and setting up maintenance facilities. Pre-stripping activities costs are included in CAPEX. Prior to mining commencing, areas to be disturbed would be cleared, grubbed, and have the topsoil recovered and stored. This is undertaken by a dozer and loader as the pushing distances are relatively short. Further clearance works need to be undertaken when new deposits are brought online, or existing ones cut back.

Processing

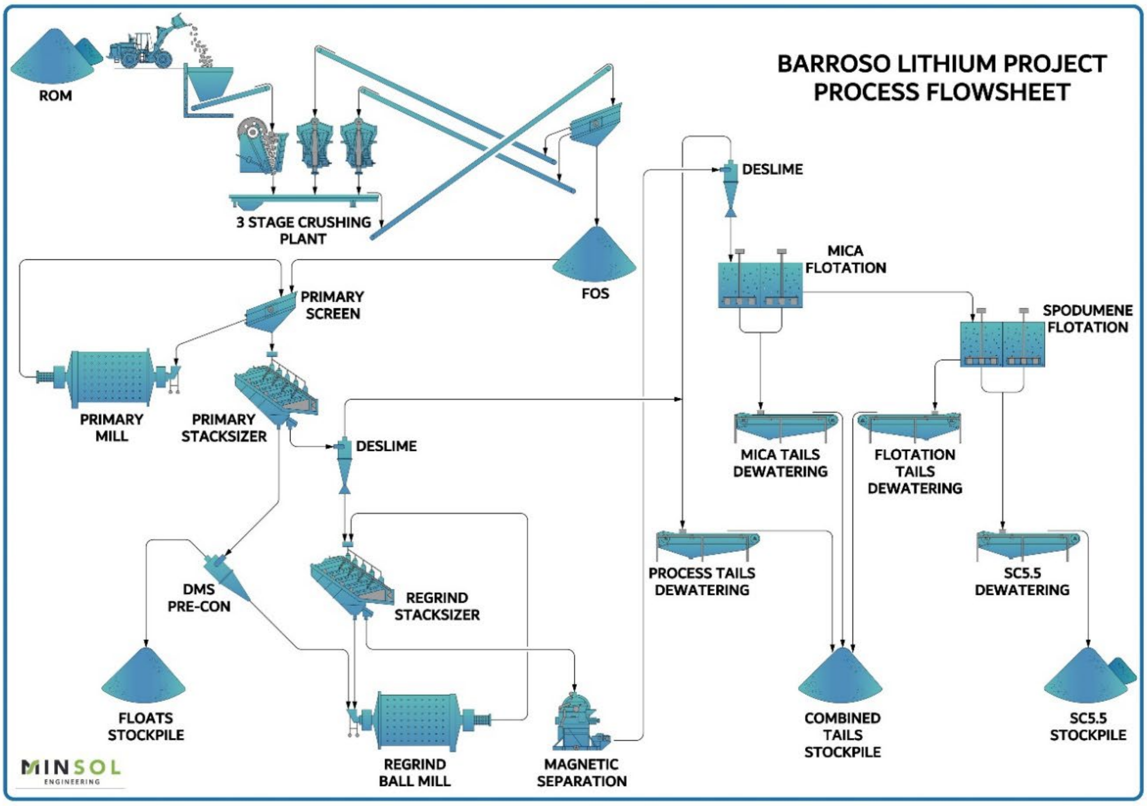
A series of metallurgical tests were conducted at Nagrom in Perth, Western Australia on representative samples from the Pinheiro, Aldeia, Reservatorio and Grandao deposits under the supervision of Minsol Engineering Pty Ltd. This information was used to develop the Scoping Study flow sheet for a combined 1.5 Mtpa DMS and flotation circuit (Figure 5) with an overall plant availability of 85% for the recovery of spodumene into a concentrate product that contains a 5.5% Li_2O. Tails from the process would be thickened and dry stacked in a lined tailings storage facility.

The processing of ore to produce concentrates will comprise several stages:

- **Crushing and reclaim** – a multiple stage crushing and screening circuit crushes the ore to -14mm then discharges the ore onto the fine ore stockpile. The stockpile is reclaimed via belt feeders which feed the primary screen.
- **Primary Comminution and Classification** - the reclaimed material is split into oversize (+3.35mm), which is fed to the primary mill, and undersize, which is further split into the DMS pre-treatment stage (+0.85mm). The 0.85mm fraction will then be treated through classification to produce an underflow (+0.18mm) which reports to the secondary mill and an overflow (-0.18mm) to bypass the secondary mill and be recomposited prior to undergoing magnetic separation.
- **DMS** – The DMS will operate as a conventional pump-fed DMS circuit, utilising a low SG (Specific Gravity) media to act as a pre-concentration stage. The floats produced will be disposed of to the floats stockpile, whilst the upgraded sinks will report to the regrind mill.

- **Flotation Preparation Circuit** – A secondary mill will operate in closed circuit with the secondary mill stacksizers to produce a product P80 of 0.150mm. The mill discharge will then undergo magnetic separation and desliming prior to mica flotation to remove all highly magnetic material and ultra fines.
- **Mica Flotation Circuit** – The mica flotation feed will undergo conditioning in tanks prior to being fed to the mica rougher flotation cells. The rougher concentrate then reports to the mica cleaner flotation cells to minimise Li_2O losses in the mica concentrate. The mica cleaner concentrate is collected and reports to the mica thickener, whilst the mica cleaner tails is combined with the mica rougher tails and then undergoes two stages of cyclones to remove the mica reagents prior to entering the spodumene flotation circuit.
- **Spodumene Flotation Circuit** –Spodumene flotation will include a rougher, cleaner and recleaner stage, with the tails from each stage reporting to the prior stage to improve the Li_2O recovery. The spodumene flotation area utilises flotation water recovered from the spodumene tails and concentrate thickeners to minimise the impact of flotation chemical on other equipment.
- **Concentrate and Tailings Dewatering and Storage** – the spodumene concentrate, Ceramic By-Products and tailings streams are dewatered by a combination of cyclones, thickeners, belt filters and filter presses before being dry stacked in a purpose-built storage area immediately adjacent to the processing plant. The spodumene concentrate and Ceramic By-Products will then be transported off-site.
- **Water Circuits** – Three unique process water circuits will be used during processing to minimise the impact of flotation reagents on equipment, allow dry stacked tailings, reduce the overall amount of fresh water required to operate the process plant and ensure an optimal environmental outcome.
- **Reagents** – The proposed reagents are all environmentally friendly and meet European Reach requirements. These include sodium silicate, soda ash, flocculant, Armeen T, and an oleic acid based collector will be the main reagents used within the process plant. Storage and delivery of minor reagents including soda ash, mica collector, coagulant, and frother have been included.
- **Services** – provision of raw water and compressed air are required to support the processing plant.

Figure 5. A Summary Diagram of the Environmentally Friendly Process Plant Flowsheet



A summary of parameters for the concentrator flowsheet is shown in Table 5.

Table 5. Concentrator Production

Parameter	Units	Value
Plant Annual Treatment Rate	tpa	1,500,000
Crushing Plant Utilisation	%	65
Crushing Plant Throughput	tph	263.4
Process Plant Utilisation	%	85
Process Plant Throughput	tph	202
Ore Feed Grade	% Li_2O	0.96
Concentrate Grade	% Li_2O	5.5
Li_2O Recovery	%	73
SC 5.5 Production	tpa	190,525
Ceramic By-Products Sold	tpa	400,000
Total Tails Disposed	tpa	909,475*

* This is including tails that could be sold as Ceramic By-Products after further study of the ceramic market

Spodumene Conversion

Based on the mineral and chemical composition and MinSol's previous project experience, the Barroso Lithium Project concentrate is considered high quality, and suitable for conversion via the conventional sulfate route. To support this, conversion testing has been undertaken with multiple laboratories in Europe and Australia to determine the following:

- Conduct sighter decrepitation tests on a range of spodumene concentrates and under a range of conditions (temperature and time).
- Conduct sighter sulfation bake / water leach tests to determine the extraction of lithium.
- Identify optimal decrepitation conditions for each spodumene mineral concentrate and differences in reactivity between those mineral concentrates.

The most recent conversions test work undertaken at the Australian Government's Science and Technology Organisation 'ANSTO' proves good conversion and leach recoveries without requiring detailed investigations or optimisation to improve. Key results are summarised in Table 6 below:

Table 6. Summary of Lithium, Aluminium, and Iron Extractions

Sample ID	Li_2O (wt%)	Li Extraction (%)				Al Extraction (%)				Fe Extraction (%)			
		Decrepitation Conditions				Decrepitation Conditions				Decrepitation Conditions			
		1050 °C		1100°C	1150°C	1050 °C		1100°C	1150°C	1050 °C		1100°C	1150°C
		60 min	90 min	90 min	90 min	60 min	90 min	90 min	90 min	60 min	90 min	90 min	90 min
4	6.4	98.2	98.4	98.7	99.1	3.7	4	4.1	3.8	19.6	21.2	19.6	18.6
5	5.8	96.8	96.7	96.5	97.4	3.8	3.6	3.5	3.6	12.8	13.2	11.6	10.9
6	5.5	96.3	79.7^	95.5	96.7	4.2	2.4	3.5	3.6	13.6	6.6	10.6	12.2
7	5.4	97.1	96.9	97.7	96.9	3.7	3.7	2.8	3	13.9	14.9	11.6	14
8	5.6	95.7	95.6	95.1	96.1	2.9	3.1	2.7	3.5	10.4	12	9.1	11.2

^ Determined to be due to incorrect acid addition.

Project infrastructure

Infrastructure requirements for the mine and concentrator include:

- **Site Access Road**: for the mine/concentrator, upgrade of a 6.6km length of road is required to provide access to the site for the delivery of supplies and reagents and for the export of the spodumene concentrate. Roads will be required both for heavy vehicles associated with the mine production and tailings management, as well as light vehicles used to support the operation of the concentrator.
- **Bypass Road**: A new 17km public road to bypass the local villages and connect to the A24 highway is required to minimise interaction between heavy and light vehicles and reduce the impact on the local villages.
- **Power**: required for both the mine and concentrator. The largest individual consumers of power will be the key comminution equipment (e.g., crushers, ball mill, etc.). Electricity will be supplied by the high-voltage power lines near the site to a power transformer that Savannah will need to licence and build. The licencing is undertaken through DGEG services (Direção Geral de Energia e Geologia).

- **Water**: required to support the concentrator operations, almost all material from the mine will be subjected to some form of wet processing. Most of the water is recycled within the concentrator although a freshwater make-up is required to account for the water lost primarily as moisture content within the tailings and concentrate streams. Water will be obtained from the dewatering of the proposed pits and from water reservoirs that will be constructed.

Transport and Logistics

Given the likelihood that there will by downstream processing facilities in Portugal coming online around the same time Savannah commences spodumene concentrate production it has been assumed that the product is sold locally and therefore the only cost is the transport from the mine to Leixoes (Matosinhos) (no storage nor ocean freight costs) where there is capacity to build a lithium refinery. The cost assumed for the transport of the concentrate was US$12.3/t which is significantly different to most other lithium projects which contain a significant inter-continental ocean freight cost.

Project Licencing

Savannah's revised design and optimisation for the Barroso Lithium Project, which captured feedback from stakeholders to further minimise the environmental and social impact of the Project received a positive DIA from APA on 30 May 2023. This represents a major milestone for the Project and is the first positive DIA for a lithium raw material supply project in Portugal. As expected, in line with international practice, the DIA has been issued with a set of conditions, measures and compensations (the 'Conditions') which Savannah has agreed to, and which should provide further assurance that the Project will be developed and operated in a responsible way and that socio-economic benefits will be shared with stakeholders.

Savannah expects the remainder of the environmental licencing process to take 9-12 months to complete:

- Savannah must now complete the Environmental Compliance Report of the Execution Project ('RECAPE'). During this phase of the licencing process the Company will again engage with APA to ensure that all the conditions set in the DIA are captured in the final design of the Project. Savannah will then submit the final designs for the Project along with the measures and environmental monitoring plans to be implemented during the construction and operating phases to meet the criteria established by the DIA. If these designs and plans are approved by APA the environmental conformity of the detailed design can be declared ("DCAPE").
- Running in parallel with the RECAPE process is the licencing award process. Once the DCAPE declaration has been made the Project can be awarded its final Environmental Licence, 'Título Único Ambiental'. APA is expected to take around 60 working days to review the submission.

Environmental Considerations

The optimised site layout from the recently approved DIA which the new Scoping Study is based on considers the following key environmental points.

Water

- Supply: The Project will source all its own water onsite. Water will be predominantly collected in the mining areas as well as from other surface sources. Water will not need to be abstracted from the Covas River.
- Water quality: The Project will have a 'closed' water system, meaning process water will be stored, treated, and recycled onsite and not be discharged from the Project.

Infrastructure

- A new road layout avoids all Project-related traffic passing through local villages and towns, connects directly to A24, and requires just one new bridge (onsite) to reduce impact on local rivers and riverbank ecosystems; offsite Project-related traffic will be restricted to weekdays only.
- The revised site layout reduces environmental and visual impact as well as noise and light emissions by moving site infrastructure, such as the processing plant, further from watercourses and local communities and keeping development heights below the relevant ridge lines.

Ecology

- The water management plan and level of water consumption means the impact on rivers and the aquatic ecosystem is minimised.
- Iberian wolf: Independent studies show wolf packs are not living on the Project area and mitigation measures have been put in place to protect wildlife.
- Impact on oak groves and meadows is further reduced in the latest Project layout.
- Revegetation to utilise native species and other suitable plants with good pollination characteristics.

Noise and ground vibrations

- Savannah is committed to operating well below legal limits for noise and ground vibrations. Onsite truck movements will be prohibited overnight.

Air quality

- Dust is identified as the highest risk impact to air quality which will be mitigated by treating unpaved roads with water and using fog cannons used when haul trucks tip loads at the processing plant.

Processing plant waste ('tailings') storage facility ('TSF')

- The plant will produce inert tailings that will be stored separately to waste rock in a highly stable 'dry stack' structure. The Project will not use a traditional 'wet' tailings dam.
- For additional environmental protection, the TSF will be built on a waterproof lining and located at a safe distance from the Covas River. The TSF will be revegetated progressively over the life of the Project.

Waste rock storage facilities

- The waste rock from the mining areas (also inert material) will be stored in 1 temporary structure and 3 permanent structures, separate to the plant tailings and away from water courses; rock from the temporary facilities will be used in rehabilitation and landscaping while permanent waste rock formations will be contoured into the existing landscape and revegetated.

Landscape & Rehabilitation

- Rehabilitation of the Project is guaranteed. It will be a requirement of the Project's environmental licence and Savannah is required to lodge a rehabilitation bond (cash) with the government before any work can commence.
- Due to the phased nature of the Project, rehabilitation can commence during the operating phase including on 3 out of 4 mining areas.
- Backfilling or partially backfilling and relandscaping the mining areas once ore extraction has ceased.
- The impacted areas including all mining areas, tailings and permanent waste rock storage facilities, and infrastructure such as the processing plant and water storage facilities will be comprehensively rehabilitated, landscaped and revegetated with native species. Impacted water courses will be reinstated, as far as practically possible, to their original locations. On closure the land will be made available for alternative use such as agriculture or tourism.
- The landscape recovery of the affected area aims to recover the levels of biodiversity in the area and integrate it into the surrounding landscape.

CAPITAL COST

The capital cost estimate ("CAPEX") for the concentrator shown in the following Table 7 was based on preliminary major equipment sizing, with budget estimates provided for major mechanical equipment and recent pricing for similar equipment used for minor equipment. The total installed plant cost was then built-up using accepted industry factors (based on the major equipment cost) for installation, minor equipment, trades, bulks, and indirect costs. Installation labour costs and productivity were adjusted for the plant location.

Costs for non-process infrastructure have been estimated separately based on estimated quantities and budget pricing on unit rates from contractors.

The mining costs associated with the mining contractor (contractor establishment, mobilisation and pre-production costs incurred constructing access roads, clearing sites and pre-stripping for ore mining) are included in the capital cost.

The contingency was estimated for each item within the estimate based on the level of definition, and the overall contingency is 19%. The estimate accuracy is -20% to +30%.

Table 7. Summary of Project CAPEX

Description	Cost (US$ M)
Mining	13.6
Processing Facilities	107.8
Process Infrastructure	17.4
Non-Process Infrastructure	35.5
Land Acquisition	5.8
Freight	9.4
Project Indirects	40.1
General	6.3
Initial CAPEX (excl. contingency)	**235.9**
Contingency (average 19%)	44.4
Total Initial CAPEX	**280.3**

Sustaining CAPEX over the LOM amounts to US$49 million and includes costs related to the process plant (US$25 million), site roads (US$9 million) and tailing facilities (US$9 million).

Closure and rehabilitation programs will start during the second year of mining. These costs amount to US$102 million and include the restoration of water lines and land rehabilitation in accordance with the DIA.

OPERATING COST

The concentrator operating cost estimate were calculated at a scoping level of accuracy (-20% / +35%). Table 8 shows a summary of the operating cost ("OPEX") estimate and Table 9 shows a summary of the OPEX, C1 Operating Costs and All-in Sustaining Costs.

Table 8. Summary of Operation Expenditure (OPEX)

Description	Total US$ M LOM	Total US$ M/Year	US$/t of concentrate
Mining			
Equipment Operating Costs	364.5	26.7	140.1
Labour	49.4	3.6	19.0
Drill and Blast	88.9	6.5	34.2
Indirect Costs	30.6	2.3	11.7
Subtotal Mining	**533.4**	**39.1**	**205.0**
Concentrator			
Power	67.0	4.9	25.7
Processing Supplies and Consumables	91.3	6.7	35.1
Reagents	106.9	7.8	41.1
Water and Tails Disposal	56.3	4.1	21.6
Maintenance Supplies	34.5	2.5	13.3
Labour	81.6	6.0	31.4
Operating Contractors and Services	6.4	0.5	2.5
Subtotal Concentrator	**444.0**	**32.5**	**170.7**
General and Admin	**69.1**	**5.1**	**26.6**
Community Benefits	**19.7**	**1.4**	**7.6**
Total OPEX	**1,066.2**	**78.1**	**409.9**

Table 9. Summary of OPEX, C1 Operating Costs and All-in Sustaining Costs

Description	US$/t of concentrate
Mining	205.0
Concentrator	170.7
General and Admin	26.6
Community Benefits	7.6
OPEX	**409.9**
Freight	13.9
Credit By-Products	(132.1)
C1 Operating Costs	**291.7**
Royalties	58.7
Sustaining Capex	19.0
Closure and Rehabilitation	39.3
All-in Sustaining Costs	**408.7**

Tax and Government Royalties

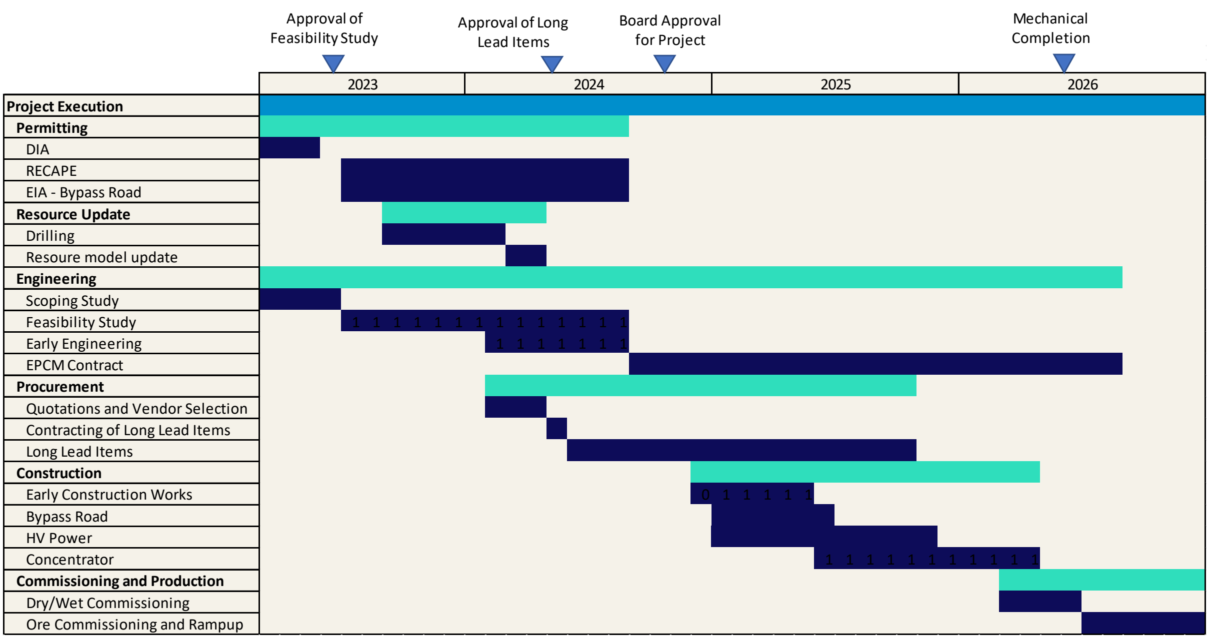
It is expected that over its life the Project will generate direct income for the local and national governments of Portugal of US$924 million, comprised of US$771 million from corporation tax and royalties of US$153 million. This does not include the significant payroll taxes related to the people to be employed at the Project.

For reference, in their updated Economic & Social Impact study on the Project (March 2023), Professors Carballo-Cruz and João Cerejeira from NIPE - Research Center in Economic and Business Policies of the School of Economics and Management of the University of Minho, estimated that the Project will increase Portugal's gross value of national production by €420 million during the investment (construction) phase and by €210 million per year during the operating phase. They also estimated that the Project's contribution to GDP is €173 million in the investment phase and €95 million per year in the operating phase (€1.37 billion in total), and that the Project will generate over 5,000 indirect and induced jobs in the investment phase and over 2,500 in the operating phase.

Timetable and Project Implementation

The current target for the commencement of spodumene concentrate production is mid 2026, with detail of the proposed timeline provided in Figure 6.

Figure 6. Estimated Project Timeline



The execution schedule is based on a number of key assumptions:

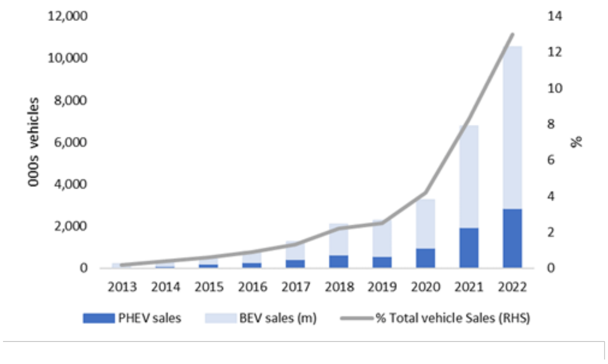
- The execution strategy considers the concentrator and TSF (Tails Storage Facility) will be operated by Savannah, with mining operations performed by a mining contractor.
- The execution schedule assumes the remainder of the environmental licencing process will be completed in a timely manner.
- The schedule assumed that the Feasibility would take 14 months to complete due to the time taken to complete the resource update which be around mid-2025. An early engineering program is scheduled to commence prior to the end of the Feasibility Study to facilitate the procurement of long lead items and complete engineering required to support the planned early works.
- Procurement activities for the concentrator will start early during the engineering cost study to enable early contract of long lead items. A period of 15 months (including manufacture and transport to site) was allowed for long lead items for the concentrator.

- Early works comprising construction of access roads and bulk earthworks has been assumed to take 6 months.
- Following the early works period, Concentrator construction is scheduled to take 12 months and finishing 6 months following long lead equipment arrival on site.
- TSF (dry stack) will be conducted in several stages to minimise upfront capital costs. Approximately 2 years of storage capacity will be constructed initially. Construction is assumed to take 6 months (TSF land has been identified and construction materials from bulk earthworks excavation to be used).
- Ramp up for the concentrator is expected to take 4-6 months to ramp up to full capacity.

Product Pricing

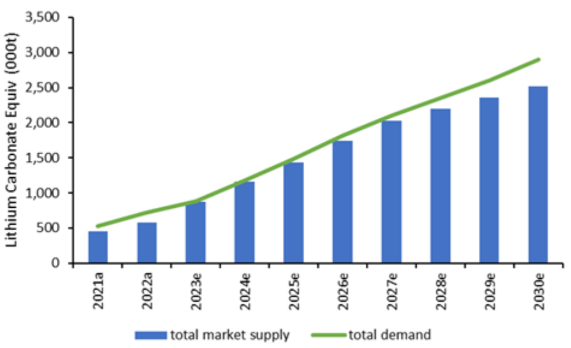
Since 2021 lithium supplies have failed to keep up with the demand created by year-on-year record sales of electric vehicles which are powered by lithium-ion batteries (Figure 7 and 8). Furthermore, the widely held expectation is for this market imbalance, in which supply consistently lags demand, to persist for the remainder of the decade.

Figure 7. Global Electric vehicles sales



Source: ev-volumes.com

Figure 8. Lithium market supply & demand



Source: Canaccord Genuity: Lithium H1'23 recharge

As a result, prices for lithium raw material including that of spodumene concentrate have risen substantially over the period.

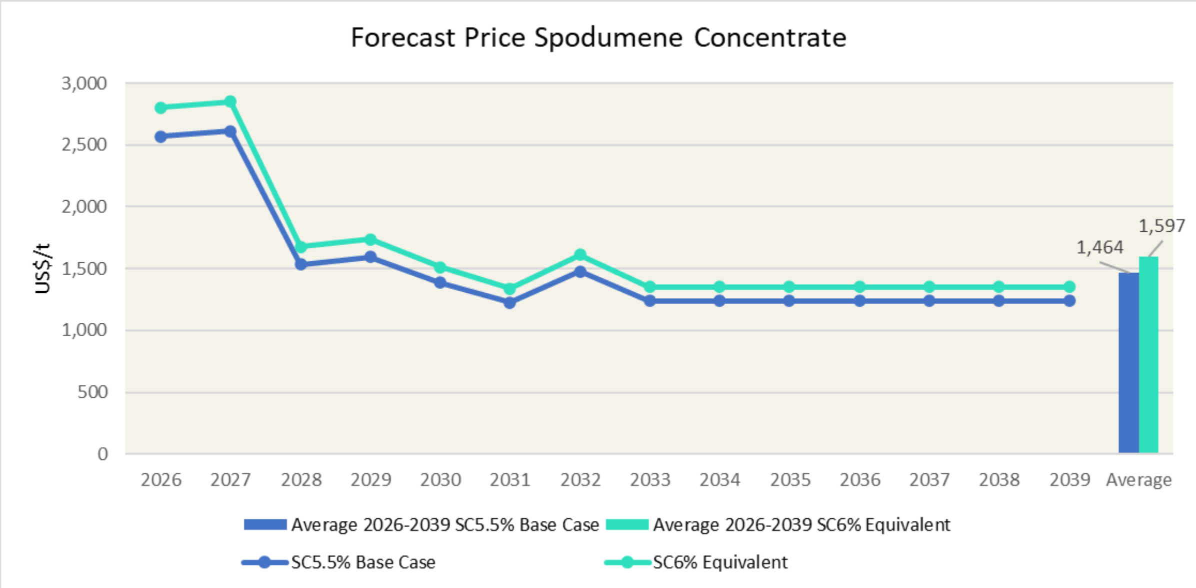
In the case of spodumene concentrate the price has risen by nearly 10 times since the sub US$400/t lows reported in the second half of 2020. While spodumene prices have retreated from the record highs of over US$7,000/t in late 2022, the current pricing environment for spodumene concentrate remains extremely strong compared to historical levels. For the period Q1 2023, Australian miner, Pilbara Minerals, reported average spodumene concentrate prices of US$4,840/t CIF China (relating to 144,312 tonnes shipped at an average grade of 5.3% Li_2O, equating to US$5,522/t on an 6.0% Li_2O equivalent basis) in its quarterly activities update.

Savannah plans to bring the Project into production at a time when lithium concentrate prices are expected to remain robust. Savannah has not established any contracts or committed any of its production pursuant to an off-take agreement at this time and will be producing a much sought after, locally produced, low-carbon product for a vibrant European market where there is effectively no local supply of battery grade lithium raw materials at present.

Forecasts for lithium prices are available from independent industry analysts, price reporting agencies, investment banks and brokers. For this study Savannah has used average annual forecast prices drawn from a pool of spodumene concentrate price forecasts published during H1 2023 by a group of leading market participants including the Company's Joint Broker, RBC.

Based on those forecasts, in the Base Case, the LOM average price is US$1,464/t for a 5.5% Li_2O concentrate (6.0% US$1,597/t equivalent), with annual prices ranging from US$2,569/t in 2026 to US$1,238/t from 2033 (Figure 9).

Figure 9. Forecast Pricing for Spodumene Concentrate at 5.5% Li_2O and 6% Li_2O



The pricing utilised for the Ceramic By-Products is US$53.5/t, which is based on the independent market analysis conducted on behalf of the Company in 2018 by First Test Minerals, adjusted for inflation. The Ceramic By-Products revenues over the LOM equate to approximately 8% of forecast revenue from spodumene.

Financial analysis

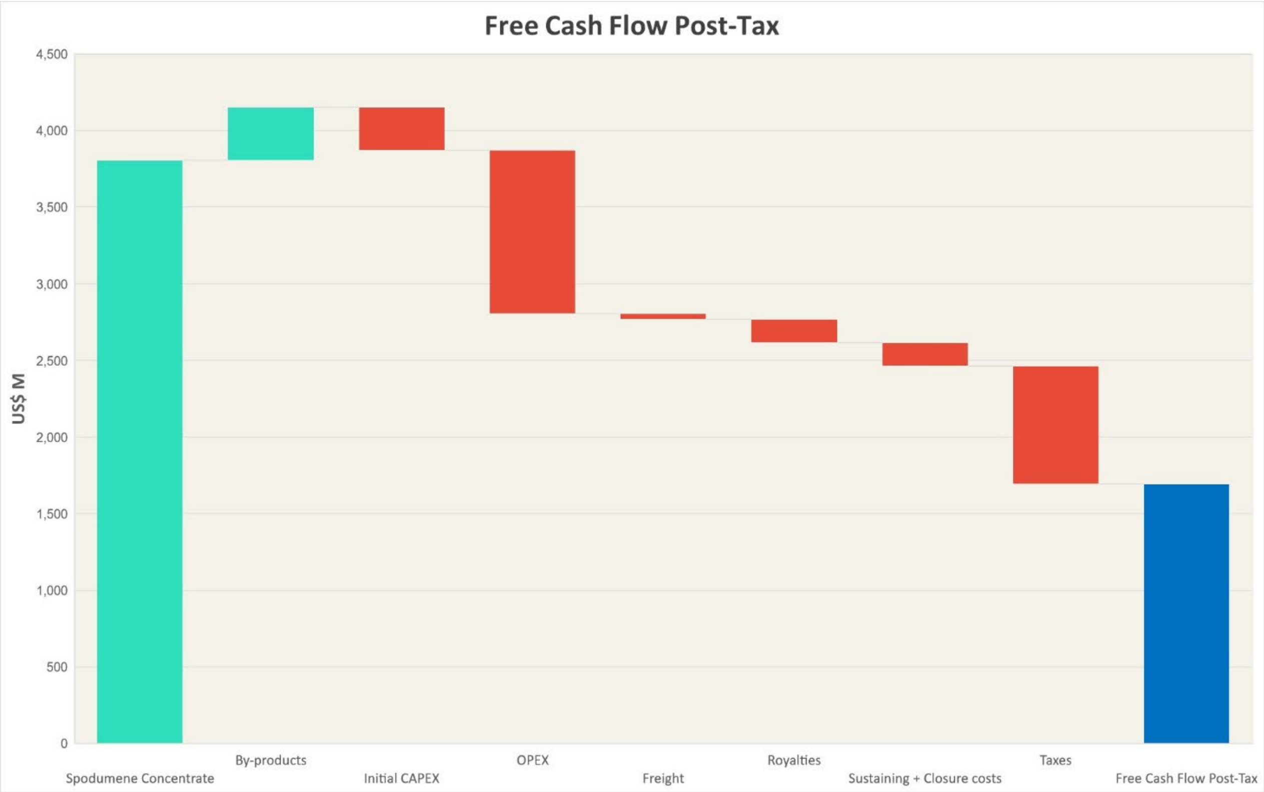
The technical and economic parameters that were developed for the Scoping Study were used in a real-US dollar MS-Excel based financial model to estimate future cash flows and evaluate the Project cases based on net present value (NPV), internal rate of return (IRR) and payback period. Savannah selected an 8% discount rate for the evaluation and sales of Ceramic By-Products were included in the model.

The results of the financial analysis for the mine and concentrator are provided in Table 1, Table 10, and Figure 10. Related sensitivity analyses are included in Figures 11, 12 and 13.

Table 10. Summary of Financial Information

Description	Unit	Base Case
Pre-Tax NPV_8	US$ M	1,419
Post-Tax NPV_8	US$ M	953
Pre-Tax IRR	%	101.8
Post-Tax IRR	%	77.3
Pre-Tax Payback Period	Years	1.1
Post-Tax Payback Period	Years	1.3
LOM EBITDA	US$ M	2,793
Annual EBITDA	US$ M	205
LOM Post-Tax Free Cash Flow	US$ M	1,694
Annual Post-Tax Free Cash Flow	US$ M	124
Initial CAPEX (excluding contingencies)	US$ M	236
LOM Operation Expenditure	US$ M	1,066
Average LOM C1 Operating Cost	US$/t conc	292
LOM Revenue	US$ M	4,151
Annual Revenue	US$ M	304
Exchange Rate EUR:USD	US$	1.054
Exchange Rate AUD:USD	US$	0.695

Figure 10. Post-Tax Free Cash Flow



Sensitivity analysis

Sensitivity analysis was undertaken showing the effect that changes in the key inputs have in the NPV and the IRR. The summary of this analysis is reflected in Figures 11, 12 and 13.

Figure 11. Sensitivity analysis of Post-Tax NPV_8

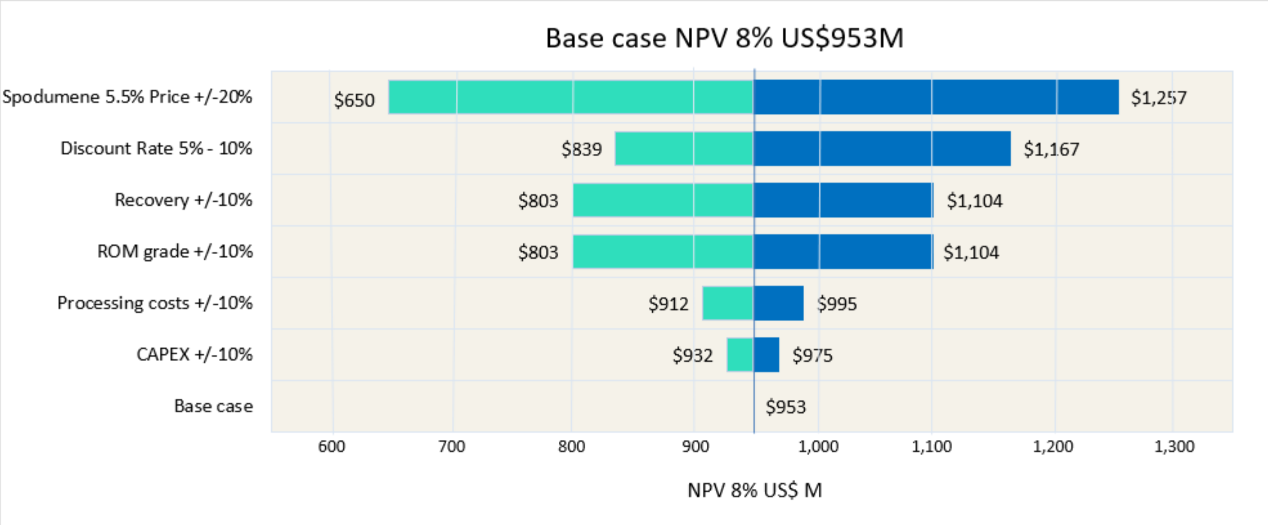


Figure 12. Sensitivity analysis of Post-Tax NPV_8

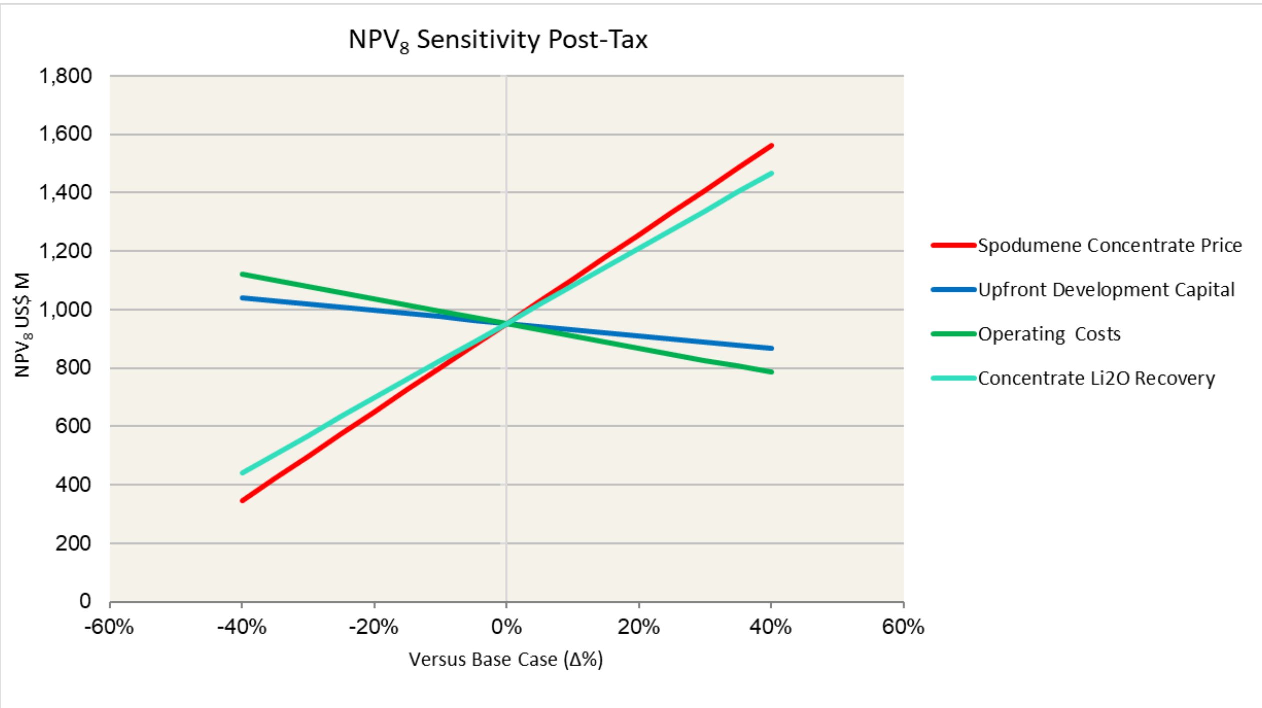
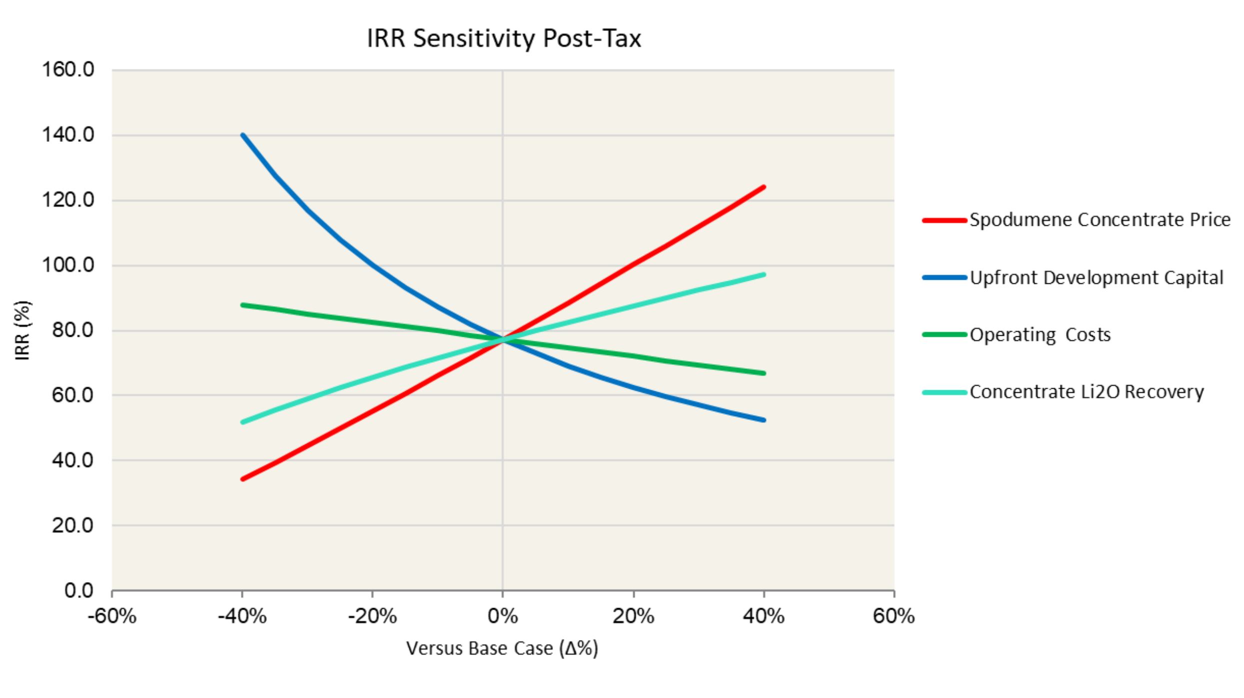


Figure 13. Sensitivity analysis of Post-Tax IRR



Project Optimisation and Enhancements

Being a Scoping Study, opportunities remain to optimise and enhance the Project to increase its economic return. Areas for optimisation and enhancement include:

- Resource to Reserve conversion through infill drilling
- Conversion of Exploration Targets into Resources and then Reserves.
- Pit design to maximise the head grade of the ore.
- By-product business development plan to capitalise on capturing the best value.
- The availability of development grants, subsidies, and tax concessions.
- Electrification of the mine fleet and further decarbonisation initiatives.
- Bring forward mining of the higher grade Aldeia resource, which is currently scheduled to be mined during the last four years of the Project.
- Evaluation of potential to increase annual mining rates and the capacity of the processing plant.

Conclusions and Next steps

This Scoping Study demonstrates that the Barroso Lithium Project has the operational and economic potential to be a major European producer of spodumene concentrate from 2026 onwards. The low cost, responsible, production of over 190,000tpa of spodumene concentrate (25ktpa LCE) from the Project would help to establish Portugal as a major contributor to Europe's new lithium-ion battery value chain and contribute towards meeting the European Commission's target of fulfilling at least 10% of the region's demand for this critical and strategic metal from domestic sources by 2030.

With a base case post-tax NPV_8 of US$953 million, IRR of 77% and payback period of 1.3 years the Project has shown its economic viability at this level of study and the financial contribution it could make to the local and nation economies through the generation of corporate and municipal taxes and royalties.

With the favourable DIA recently received and this Scoping Study completed, Savannah's next steps include completion of the remainder of the environmental licencing process and the Definitive Feasibility Study, tasks which the Company expect to complete in H2 2024.

Savannah's stakeholder engagement programme will also be maintained as the Company looks to optimise the delivery of the significant socio-economic benefits that the Project can bring through partnership with local communities.

Commercial arrangements for the Project will also be advanced as Savannah looks to conclude its offtake and financing arrangements ahead of the potential start of Project construction in 2025.

Key Consultants

MinSol Engineering Pty Ltd, ("MinSol")
Minsol was engaged to provide engineering design services in relation to Savannah's Scoping Study for the Barroso Lithium Project and co-ordinate the compilation of the Scoping Study report. The Scoping Study is based upon the proven flow sheet developed by Savannah and Minsol. In addition, Minsol's services were provided in combination and integrated with Savannah's own inputs, and other 3rd Parties engaged by Savannah.

MinSol and its engineering team has a successful track record over the past 15 years in metallurgical testwork, flow sheet development, detailed design, and implementation for major lithium projects for the likes of Talison Lithium (Greenbushes Lithium Plants), Tianqi Lithium (Kwinana Lithium Hydroxide Plant) and Global Lithium (Manna Lithium Project Studies). Additionally, the engineering team at Minsol have significant experience in international multi commodity processing and design.

PayneGeo Pty Ltd., ("PayneGeo")
PayneGeo developed the geological model and completed the resource estimations utilised in the Scoping Study.

Minesure Pty Ltd., ("Minesure")
Minesure completed the analysis and definition of the scoping level mine plan and built up the contractor costs model which is the basis of the mining concept for the Scoping Study.

Competent Persons

The information in this announcement that relates to exploration results is based upon information compiled by Mr Dale Ferguson, Technical Director of Savannah Resources Limited. Mr Ferguson is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral

Resources and Ore Reserves” (JORC Code). Mr Ferguson consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Robert Simmons, MAusIMM, B. Eng. (Chemical Engineering). Mr Simmons is not an employee of the Company but is engaged as a contract consultant. Mr Simmons is a Member of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the “Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Simmons consents to the inclusion in this report of the contained technical information in the form and context as it appears.

The Information in this report that relates to Mineral Resources is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services. Mr Payne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The scoping level mining assessment of the Barroso Lithium Project has been completed by Mr Nigel Spicer who is a Member of the Australasian Institute of Mining and Metallurgy and Chartered Engineer (IOM3). Mr. Spicer has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Spicer is the principal of Minesure Pty Ltd and is a consultant to Savannah Resources Plc and consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

It should be noted that as the Mining assessment has been conducted at a scoping level no Ore Reserves are being reported for the Barroso Lithium Project Deposit.

Forward Looking Statement

The information contained within this announcement may contain references to forecasts, estimates, assumptions, and other forward-looking statements. The Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. These assumptions may be affected by a variety of variables and changes in the base assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to vary materially from those expressed herein. Potential investors should make and rely upon their own investigations before deciding on whether to acquire or deal in the Company’s securities.

Cautionary Statement

The Scoping Study referred to in this announcement is a preliminary technical and economic study of the potential viability of developing the Barroso Lithium Project via an open pit mining operation and constructing a beneficiation and processing facility on site. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves or to provide assurance of an economic development case at this stage or certainty that the conclusions of the Scoping Study will be realized. Further exploration and evaluation work and appropriate studies are required before Savannah will be able to estimate any ore reserves or to provide any assurance of an economic development case.

Approximately 80% of the life of mine production is in either Measured (32%) or Indicated (48%) Mineral Resource category and 18% in the Inferred Mineral Resource category with the remaining 2% from the Exploration Target. The company has concluded that it has reasonable grounds for disclosing the production target given that the viability of the Project does not rely on the Inferred Resource and Exploration Target.

There is a low level of geological confidence associated with Inferred Mineral Resources/Exploration Target and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realized. The stated production target is based on the entity's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

The Scoping Study is based on the material assumptions outlined throughout the document. These include assumptions about the availability of funding. While Savannah considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of US$236 million to US$280 million will likely be required to build the mine, process plant, and related infrastructure. Investors should note that there is no certainty that Savannah will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Savannah's existing shares.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

Regulatory Information

This Announcement contains inside information for the purposes of the UK version of the market abuse regulation (EU No. 596/2014) as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018 ("UK MAR").

Savannah – **Enabling Europe's energy transition.**

****ENDS****

Follow @SavannahRes on Twitter

Follow Savannah Resources on LinkedIn

For further information please visit www.savannahresources.com or contact:

Savannah Resources PLC	Tel: +44 20 7117 2489
Dale Ferguson, CEO	
SP Angel Corporate Finance LLP (Nominated Advisor & Joint Broker)	Tel: +44 20 3470 0470
David Hignell/ Charlie Bouverat (Corporate Finance)	
Grant Barker/Abigail Wayne (Sales & Broking)	
RBC Capital Markets (Joint Broker)	Tel: +44 20 7653 4000
Farid Dadashev/ Jamil Miah	
	Tel: +44 20 3757 4980
Camarco (Financial PR)	
Gordon Poole/ Emily Hall / Fergus Young	
LPM (Portugal Media Relations)	Tel: +351 218 508 110
Herminio Santos/ Jorge Coelho	

About Savannah

Savannah Resources is a mineral resource development company and sole owner of the Barroso Lithium Project in northern Portugal.

Savannah is focused on the responsible development and operation of the Barroso Lithium Project so that its impact on the environment is minimised and the socio-economic benefits that it can bring to all its stakeholders are maximised. Through the Barroso Lithium Project, Savannah can help Portugal to play an important role in providing a long-term, locally sourced, lithium raw material supply for Europe's rapidly developing lithium battery value chain. Production is targeted to begin in 2026, producing enough lithium for 0.5m vehicle battery packs per year.

The Company is listed and regulated on AIM and the Company's ordinary shares are also available on the Quotation Board of the Frankfurt Stock Exchange (FWB) under the symbol FWB: SAV, and the Börse Stuttgart (SWB) under the ticker "SAV".

APPENDIX 1 – JUNE 2023 MINERAL RESOURCE UPDATE

Mineral Resource Summary

Table 1. Updated Mineral Resource Estimation Summary

Deposit	Resource Class	Tonnes Mt	Li_2O %	Fe_2O_3 %	Li_2O Tonnes
All Deposits	Measured	6.6	1.1	0.7	71,600
	Indicated	11.8	1.0	0.7	119,800
	Inferred	9.6	1.1	0.9	102,000
	Total	**28.0**	**1.05**	**0.8**	**293,400**

*Rounding discrepancies may occur

Table 2. Exploration Target Summary

Deposit	Tonnage Range (Mt)		Li_2O
	Lower	Upper	%
Reservatorio	5.0	7.0	1.0-1.2%
Grandao	4.0	8.0	1.0-1.2%
Aldeia	**2.0**	**4.0**	**1.0-1.3%**
Total Barroso Lithium Project Exploration Target*	**11.0**	**19.0**	**1.0-1.2%**

*Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration work to estimate a mineral resource and it is uncertain if further exploration will result in defining a mineral resource.

Mineral Resource Estimate

A Mineral Resource Estimate for the Reservatorio Lithium Deposit has been prepared by Payne Geological Services Pty Ltd, an external and independent mining consultancy - http://www.paynegeo.com.au/paul-payne. The Deposit forms part of Savannah's Barroso Lithium Project, located in northern Portugal. The Mineral Resource Estimates for the Aldeia Deposit and other deposits at the Project have been classified as Measured, Indicated and Inferred Mineral Resource in accordance with the JORC Code, 2012 Edition and are summarised in **Table 3 and Attachment 1**. In addition, the required JORC compliance tables can be found in **Attachment 2.**

Table 3. June 2023 Mineral Resource Summary (0.5% Li_2O cut-off)

Deposit	Resource Classification	Tonnes Mt	Li_2O %	Fe_2O_3 %	Li_2O Tonnes
Grandao	Measured	6.6	1.1	0.7	71,600
	Indicated	6.4	1.0	0.8	61,300
	Inferred	4.8	1.0	0.7	48,900
	Total	**17.7**	**1.04**	**0.7**	**181,800**
Reservatorio	Measured				
	Indicated	3.5	0.95	0.8	33,000
	Inferred	0.7	0.9	0.9	6,500
	Total	**4.2**	**0.94**	**0.8**	**39,500**
Pinheiro	Measured				
	Indicated				
	Inferred	2.0	1.0	0.7	20,000
	Total	**2.0**	**1.0**	**0.7**	**20,000**
NOA	Measured				
	Indicated	0.4	1.2	0.8	4,200
	Inferred	0.3	1.0	0.9	2,900
	Total	**0.6**	**1.1**	**0.9**	**7,100**
Aldeia	Measured				
	Indicated	1.6	1.3	0.5	21,300
	Inferred	1.8	1.3	0.4	23,700
	Total	**3.5**	**1.3**	**0.4**	**45,000**
All Deposits	Measured	6.6	1.1	0.7	71,600
	Indicated	11.8	1.0	0.7	119,800
	Inferred	9.6	1.1	0.9	102,000
	Total	**28.0**	**1.05**	**0.8**	**293,400**

*Rounding discrepancies may occur

Reservatorio Mineral Resource Estimate

Geology

At the Barroso Lithium Project, lithium mineralisation occurs predominantly in the form of spodumene-bearing pegmatites, which are hosted in metapelitic and mica schists, and occasionally carbonate schists of upper Ordovician to lower Devonian age.

The Reservatorio deposit comprises one main pegmatite which showed relatively clear geometry, and was modelled into a continuous, tabular shape. It strikes broadly NE-SW and dips to the NW at 25° to 40° and varies in thickness from 20m to 50m. Two minor parallel pegmatites have also been interpreted. A weathering boundary representing the top of fresh rock was also interpreted (using drill hole logging codes) as a shallow zone of weak to moderate weathering was noted. The main pegmatite zone remains open along strike to the north and down dip **(Figures 1-3).**

At the Project, lithium is present in most pegmatite compositions and laboratory test work confirms that the lithium is almost exclusively within spodumene. Limited lithium grade zonation occurs within the Aldeia pegmatites. Minor xenoliths and inliers of schist are observed within the pegmatite.

The weathering profile comprises a shallow, surficial zone of weak to moderate oxidation, particularly of the schistose country rock with moderate oxidation to a depth of up to 20m.

Figure 1. Reservatorio pegmatite and drilling (looking east)

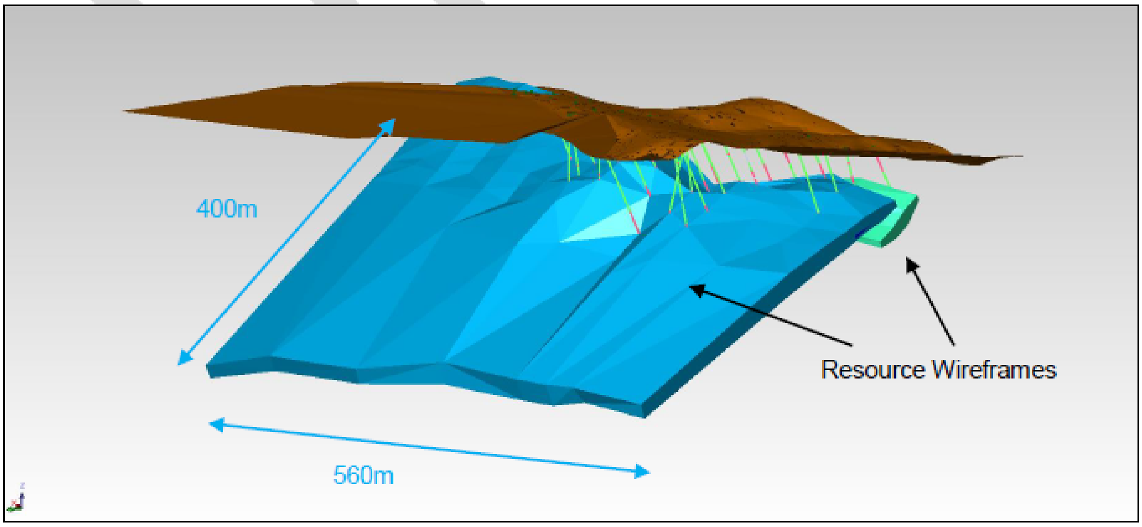
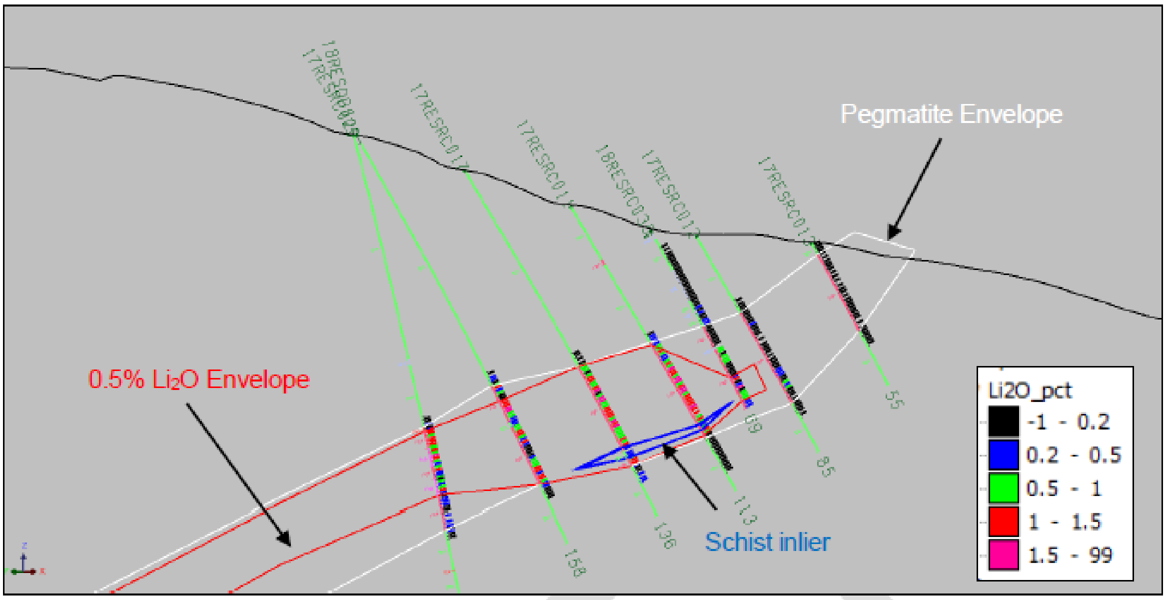
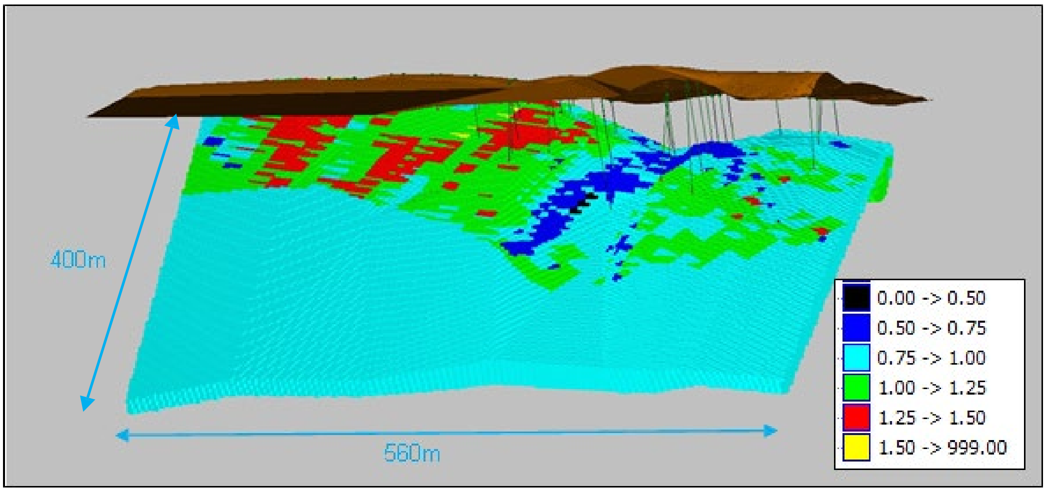


Figure 2. Reservatorio Cross Section (looking NE)



The Reservatorio deposit is defined by a total of 36 RC drill holes and 8 diamond holes. All holes were completed by Savannah in 2017 and 2018. The holes were drilled on approximate spacings of 20m to 40m on 40m spaced cross sections. The majority of holes are drilled at -60° to the southeast, however a small number of vertical holes and one NW dipping hole were completed.

Figure 3. A Resource Model coloured by Li_2O content (looking East)



Drilling

Drilling completed at the Reservatorio prospect is summarised in Table 4. The historic percussion holes were drilled by previous operators and excluded from the estimate. All drilling used in the Mineral Resource was completed by Savannah in 2017 and 2018.

Table 4: Summary of Reservatorio Prospect Drilling

Hole Type	Holes In Database		In Mineral Resource	
	Holes	Metres	Holes	Metres
Historic Percussion	26	691		
Savannah RC	36	3,282	36	3,282
Savannah DD	10	904	8	836
Total	**72**	**4,877**	**44**	**4,118**

All drilling data was contained in an Access database provided to PayneGeo. All data was supplied in national grid coordinates (UTM Zone 29N based on WGS84) and no data manipulation was carried out by PayneGeo. A series of holes were validated by PayneGeo during the site visit where original geological records and laboratory reports were compared to database entries. No errors were identified.

Sampling and Sub-Sampling Techniques

For the Savannah RC drilling, a face-sampling hammer was used with samples collected at 1m intervals from pegmatite zones and the surrounding 5m either side of the pegmatite. The rest of the schist remains unsampled. The 1m samples were collected through a rig-mounted splitter and were 4kg-6kg in weight. Samples were weighed to assess the sample recovery which was determined to be satisfactory.

Core was HQ in size and sampled to geological boundaries. Core was cut using a diamond saw, and half core was collected for assay.

Sample Analysis Method

For all Savannah drilling, whole samples were crushed then riffle split to produce a 250g split for pulverising and analysis.

The samples were analysed using ALS laboratories ME-MS89L Super Trace method which combines a sodium peroxide fusion with ICP-MS analysis and a multi-element suite was analysed.

QAQC protocols were in place for the drilling programmes and included the used of blanks, standards and field duplicates. The data has confirmed the quality of the sampling and assaying for use in Mineral Resource estimation.

Estimation Methodology

For the Reservatorio Mineral Resource Estimate, a Surpac block model was constructed with block sizes of 20m (EW) by 20m (NS) by 5m (elevation) with sub-celling to 5m by 5m by 1.25m.

Interpretation of the pegmatite dykes was completed using detailed geological logging and Fe geochemistry. Wireframes of the pegmatites were prepared and within those the sample data was extracted and analysed. A clear break in the grade distribution occurs at 0.5% Li_2O and this grade threshold was used to prepare the internal grade domains for estimation.

Sample data was composited into 1m intervals then block model grades estimated using inverse distance squared ("ID2") grade interpolation due to the small number of drill holes and limited extent of mineralisation. A first pass search range of 70m was used and oriented to match the dip and strike of the mineralisation. A minimum of 10 samples and a maximum of 24 samples were used to estimate each block. The majority of the Mineral Resource Estimate (91%) was completed in the first pass with expanded search radii of 140m used for the blocks not estimated in the first pass. No extreme high grades were present in the Li2O and Fe data, and the CV of less than 1 for all elements suggested that high grade cuts were not required. However, a small number of outliers of Ta were present at Aldeia and a high grade cut of 100ppm was applied to all Ta values.

Iron contamination via abrasion of RC drilling equipment and/or sample preparation equipment is a recognized problem when evaluating lithium deposits. To test the potential for iron contamination at the MBLP, SAV carried out a preliminary program of check assays and a series of comparisons were undertaken on samples from the Grandao deposit.

It was concluded from the Grandao study that a significant proportion of the iron being reported in the drilling assay data was introduced as contamination during the sample preparation process. It was determined that the amount of contamination was proportional to the lithium content of the samples. A regression formula was calculated using all samples, with the derived regression formula being:

$$Fe\_contamination = (0.1734 * Li_2O\ grade) + 0.2308.$$

The amount of Fe contamination was determined using the derived regression formula. A new field "Fe_factored" was inserted into the drill hole database, and the original Fe value minus the calculated contamination was stored in that field. This allowed a "Fe_factored" value to be extracted from the database and used for grade estimation in the Mineral Resource.

Bulk density determinations using the immersion method were carried out on 280 half core samples from the Aldeia pegmatite. Results from these tests were consistent with those from the extensive density data throughout the Project. Values applied to the Aldeia estimate were 2.5t/m^3 for oxide lithologies, 2.65t/m^3 for unoxidised pegmatite and 2.67t/m^3 for unoxidised schist.

Mineral Resource Classification

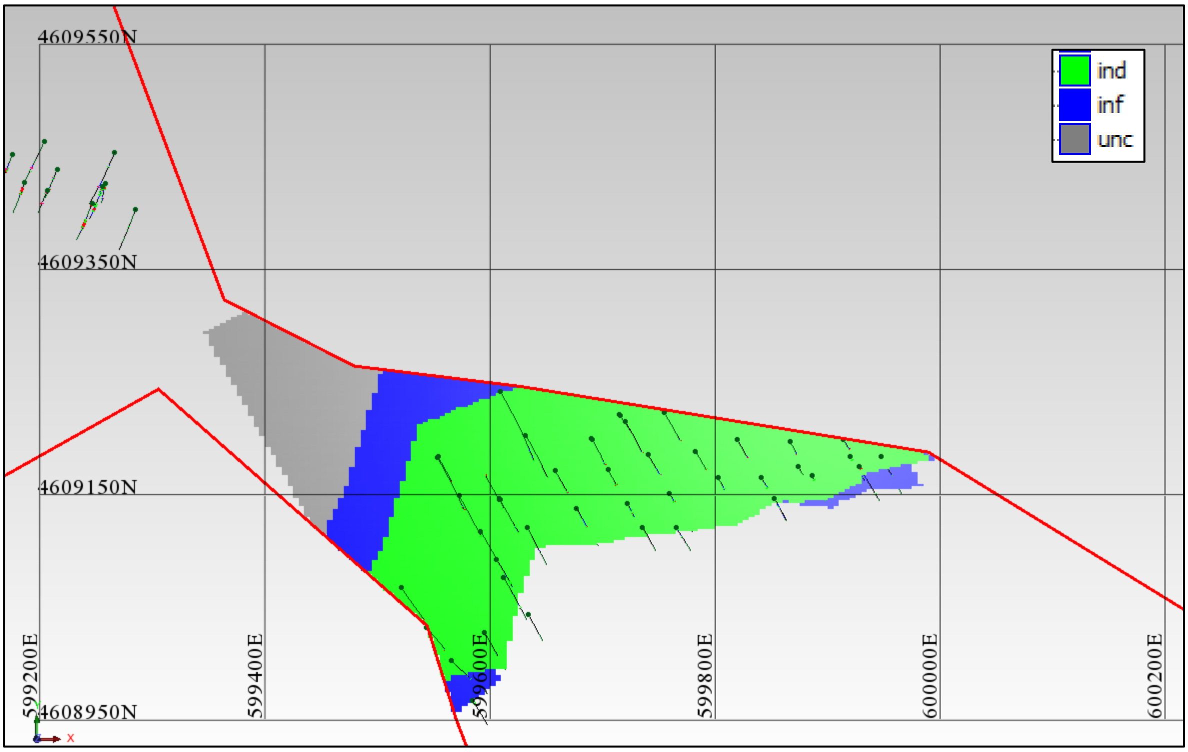
The Mineral Resource Estimate was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).

Mineral Resource classification was considered on the basis of drill hole spacing, continuity of mineralisation and data quality. Accurate drill hole collar and topographic surveys have been obtained for the deposit, so the spatial location of data and topography has a high level of confidence. The quality of the drilling and assaying has been confirmed through independent verification of procedures and through a satisfactory QAQC protocol.

The continuity of the Reservatorio pegmatite is well defined within the upper portion of the deposit. Drilling is typically at spacings of 20m to 40m on cross sections and the geometry of the zone is consistent. This portion of the deposit has been classified as Indicated Mineral Resource and includes extrapolation up to 60m past drill hole intersections.

The lower portion of the deposit remains undrilled. The pegmatite interpretations have been extended up to 300m past drill hole intersections. The portion which has been extrapolated up to 120m past drill holes has been classified as Inferred Mineral Resource. The deeper portion remains unclassified. The classification and extent of the reported model as well as unreported Mineral Potential is shown in Figure 4.

Figure 4. Resource Model coloured by Classification



Cut-off Grades

The shallow nature of the main Reservatorio pegmatite suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. As such, the Mineral Resource Estimate has been reported at a 0.5% Li_2O lower cut-off grade to reflect assumed exploitation by low-cost mining methods.

Metallurgy

Metallurgical test work has been conducted by Savannah on representative mineralisation at the Barroso Lithium Project. The work was completed by Nagrom Metallurgical in Australia and confirmed that high-grade lithium, low-grade iron concentrate can be generated from the mineralisation using conventional processing technology. Although no samples from the Aldeia deposit have been tested, initial assessments of the mineralogy and chemistry suggest mineralisation is broadly similar to other deposits at the Barroso Lithium Project. Samples have been collected from the Aldeia deposit are currently being tested to determine their exact processing requirement.

Modifying Factors

No modifying factors were applied to the reported Mineral Resource Estimate. Parameters reflecting mining dilution, ore loss and metallurgical recoveries will be considered during the any future mining evaluation of the Project.

ATTACHMENT 1: DETAILED MINERAL RESOURCE TABLES

RESERVATORIO JUNE 2023 – TOTAL MINERAL RESOURCE 0.5% Li_2O CUT-OFF

Bench	Transitional				Fresh				Total				
Top	Tonnes	Li_2O	Ta_2O_5	Fe_2O_3	Tonnes	Li_2O	Ta_2O_5	Fe_2O_3	Tonnes	Li_2O	Ta_2O_5	Fe_2O_3	Li_2O
RL	t	%	ppm	%	t	%	ppm	%	t	%	ppm	%	Tonnes
600	6,433	1.00	23	0.65	373	1.11	29	0.86	6,806	1.01	24	0.66	69
590	77,554	0.99	17	0.73	91,632	1.14	21	0.75	169,186	1.07	19	0.74	1,812
580	23,539	0.92	17	0.81	292,245	1.09	18	0.83	315,784	1.08	18	0.83	3,408
570	36	0.92	28	0.92	390,875	1.04	19	0.83	390,911	1.04	19	0.83	4,076
560					595,671	0.95	17	0.83	595,671	0.95	17	0.83	5,674
550					597,534	0.93	17	0.87	597,534	0.93	17	0.87	5,576
540					500,312	0.90	16	0.88	500,312	0.90	16	0.88	4,481
530					440,894	0.90	16	0.82	440,894	0.90	16	0.82	3,989
520					360,897	0.89	15	0.80	360,897	0.89	15	0.80	3,207
510					279,824	0.91	15	0.77	279,824	0.91	15	0.77	2,537
500					246,947	0.90	14	0.92	246,947	0.90	14	0.92	2,215
490					182,477	0.86	13	0.91	182,477	0.86	13	0.91	1,564
480					87,243	0.83	13	0.77	87,243	0.83	13	0.77	723
470					19,916	0.81	13	1.00	19,916	0.81	13	1.00	162
460					1,988	0.74	12	0.73	1,988	0.74	12	0.73	15
450													
Total	**107,562**	**0.97**	**18**	**0.74**	**4,088,828**	**0.94**	**16**	**0.84**	**4,196,390**	**0.94**	**16**	**0.84**	**39,508**

ATTACHMENT 2 – JORC 2012 Table 1 – Reservatorio

JORC Table 1 Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• The majority of holes were reverse circulation ("RC"), sampled at 1m intervals. RC samples were collected in large plastic bags from an onboard rig splitter and a 4-6kg representative sample taken for analysis. • A small number of diamond holes were also completed. Core was HQ size, sampled at 1m intervals in the pegmatite, or to geological boundaries. Half core samples were collected for analysis. • Drilling was on a regular grid with holes at 20- 40m spacing on 40m spaced cross sections. • Collar surveys are carried using differential GPS with an accuracy to within 0.2m. • A down hole survey for each hole was completed using gyro equipment. • The lithium mineralisation is predominantly in the form of Spodumene-bearing pegmatites, the pegmatites are unzoned and vary in thickness from 10m to 50m.
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• RC drilling used a 120mm bit diameter. • Core drilling was carried out using an HQ triple tube core barrel.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative*	• RC drilling sample weights were monitored to ensure samples were maximised. Samples were carefully loaded into a splitter and split in the same manner ensuring that the

	nature of the samples. • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	sample split to be sent to the assay laboratories were in the range of 4-6kg. • Core recovery was measured and was found to be generally excellent. • No obvious relationships between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC holes were logged in the field at the time of sampling. Core was logged in detail in a logging yard. • Each 1m sample interval was carefully homogenised and assessed for lithology, colour, grainsize, structure and mineralisation. • A representative chip sample produced from RC drilling was washed and taken for each 1m sample and stored in a chip tray which was photographed. • Core was photographed.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 1m RC samples were split by the riffle splitter on the drill rig and sampled dry. The 4m composites were collected using a spear with the spear inserted into the bag at a high angle and pushed across the sample to maximise representivity of the sample. • Core was cut in half using a diamond saw with 1m half core samples submitted for analysis. • The sampling was conducted using industry standard techniques and were considered appropriate. • Field duplicates were used to test repeatability of the sub-sampling and were found to be satisfactory. • Every effort was made to ensure that the samples were representative and not biased in any way.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the*	• Samples were received, sorted, labelled and dried. • Samples were crushed to 70% less than 2mm, riffle split off 250g, pulverise split to better than 85% passing 75 microns and 5g was split of for assaying. • The samples were analysed using ALS Laboratories ME-MS89L Super

	analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	Trace method which combines a sodium peroxide fusion with ICP-MS instrumentation utilising collision/reaction cell technologies to provide the lowest detection limits available. • A prepared sample (0.2g) is added to sodium peroxide flux, mixed well and then fused in at 670°C. The resulting melt is cooled and then dissolved in 30% hydrochloric acid. This solution is then analysed by ICP-MS and the results are corrected for spectral inter-element interferences. • The final solution is then analysed by ICP-MS, with results corrected for spectral inter- element interferences. • Standards/blanks and duplicates were inserted on a 1:20 ratio for both to samples taken. • A duplicate sample regime is used to monitor sampling methodology and homogeneity. • Routine QA/QC controls for the method ME- MS89L include blanks, certified reference standards of Lithium and duplicate samples. Samples are assayed within runs or batches up to 40 samples. At the fusion stage, quality control samples are included together with the samples so all samples follow the same procedure until the end. Fused and diluted samples are prepared for ICP-MS analysis. ICP instrument is calibrated through appropriate certified standards solutions and interference corrections to achieve strict calibration fitting parameters. Each 40 sample run is assayed with two blanks, two certified standards and one duplicate sample and results are evaluated accordingly. • A QA/QC review of all information indicated that all assays were satisfactory.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• All information was internally audited by company personnel. • Several historical holes were

	• *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	twinned for comparison purposes with the modern drilling. • Savannah's experienced project geologists supervised all processes. • All field data is entered into a custom log sheet and then into excel spreadsheets (supported by look-up tables) at site and subsequently validated as it is imported into the centralised Access database. • Hard copies of logs, survey and sampling data are stored in the local office and electronic data is stored on the main server. • Results were reported as Li (ppm) and were converted to a percentage by dividing by 10,000 and then to Li_2O% by multiplying by 2.153.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The coordinate of each drill hole was taken at the time of collecting using a handheld GPS with an accuracy of 5m. All collars were subsequently surveyed using DGPS with an accuracy of 0.2m. • The grid system used is WSG84. • Topographic control was based on a drone based aerial survey system. The accurate topographic data encompasses the full extent • of the deposit.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drilling was on a nominal 20-40m spacing on 40m spaced cross sections. • Drill data is at sufficient spacing to define Indicated and Inferred Mineral Resource. • Compositing to 1m has been applied prior to resource estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the*	• Drilling was generally angled to the SE and intersected the gently dipping deposit at close to orthogonal to the known dip of the main pegmatite. A small number of vertical and NW dipping holes were completed to minimise pad

	orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	requirements. • Intersections were close to true width for the main pegmatite. In the few vertical and NW dipping holes, the true thickness is approximately half of the down hole thickness. • No orientation-based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	• Samples were delivered to a courier and chain of custody is managed by Savannah.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Internal company auditing and a review by PayneGeo during the April 2018 site visit found that all data collection and QA/QC procedures were conducted to industry standards.

JORC Table 1 Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• All work was completed inside the Barroso Lithium Project C-100. • Savannah has received written confirmation from the DGEG that under article 24 of Decree-Law no. 88/90 of March 16 being relevant justification based on the resources allocated exploited and intended, Savannah has been approved an expansion up to 250m of C100 mining concession in specific areas where a resource has been defined and the requirement for the expansion can be justified
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Limited exploration work has been carried out by previous operators. • No historic information has been included in the Mineral Resource estimate.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The lithium mineralisation is predominantly in the form of Spodumene-bearing pegmatites which are hosted in meta-pelitic and mica schists, and occasionally carbonate schists of upper Ordovician to lower Devonian age. The pegmatites vary in thickness from 10m to 50m.

Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ◦ *easting and northing of the drill hole collar*
	  ◦ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ◦ *dip and azimuth of the hole*
	  ◦ *down hole length and interception depth*
	  ◦ *hole length*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the*
		• Drill hole intersections used in the resource have been previously reported.

	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Length weighted average grades have been reported. • No high-grade cuts have been applied to reported grades for lithium. A high grade cut of 100ppm was applied to the tantalum data. • Metal equivalent values are not being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known')*	• The majority of holes have been drilled at angles to intersect the mineralisation approximately perpendicular to the orientation of the mineralised trend.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• A relevant plan showing the drilling is included within this report.
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All relevant results available have been previously reported.
Other substantive	• *Other exploration data, if meaningful and material, should be reported*	• Geological mapping and rock chip sampling have been conducted over

exploration data	*including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or* • *contaminating substances.*	the Project area.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further RC and DD drilling to test for further extensions and to increase confidence. • Economic evaluation of the defined Mineral Resource.

JORC Table 1 Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The assay data was captured electronically to prevent transcription errors. • Validation included visual review of results.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Numerous site visits were undertaken by Dale Ferguson in 2017 which included an inspection of the drilling process, outcrop area and confirmation that no obvious impediments to future exploration or development were present. A site visit by Paul Payne was undertaken in April 2018 to confirm geological interpretations, drilling and sampling procedures and general site layout.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The pegmatite dykes hosting the Reservatorio mineralisation are defined in outcrop and in drilling and boundaries are generally very sharp and distinct. • The shape and extent of the >0.5% Li2O mineralisation is clearly controlled by the general geometry of the pegmatites. • Zonation of lithium within the pegmatite is evident, and typically the margins are weakly mineralised.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Reservatorio main pegmatite has a drilled extent of 490m along strike and 200m down dip. The thickness of the mineralisation ranges from 10m to 50m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen*	• Ordinary kriging (main pegmatites) and inverse distance squared (minor zones) was used to estimate block grades within the resource. • Surpac software was used for the estimation. • Samples were composited to 1m intervals to match the sample

	include a description of computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by- products.* • *Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	lengths. Due to the extremely low CV of the data no high grade cuts were applied to Li_2O in the estimate. A cut of 100ppm was applied to Ta values. • At Reservatorio the parent block dimensions were 20m EW by 10m NS by 5m vertical with sub-cells of 2.5m by 5m by 1.25m. • A previous estimate was completed in February 2018. • No assumptions have been made regarding recovery of by-products. • The grade of Fe_2O_3 was estimated for the deposit, using factored Fe data to eliminate Fe introduced in the sample preparation stage. The mean grade of Fe_2O_3 was determined to be 0.8% at Reservatorio. • An orientated ellipsoid search was used to select data and was based on drill hole spacing and the geometry of the pegmatite dyke. • A search of 60m was used with a minimum of 10 samples and a maximum of 24 samples which resulted in 61% of blocks being estimated at Reservatorio. A further 33% of blocks were estimated with a 120m search. The final 5% of blocks required a 240m search and minimum of 4 samples. • Selective mining units were not modelled in the Mineral Resource model. The block size used in the model was based on drill sample spacing and deposit geometry. • The deposit mineralisation was constrained by wireframes prepared using a 0.5% Li_2O grade envelope. • For validation, quantitative comparison of block grades to assay grades was carried out for each estimated body. • Global comparisons of drill hole and block model grades were also carried out.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The shallow, outcropping nature of the deposit suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. As such, the Mineral Resource has been reported at a 0.5% Li_2O lower cut-off grade to reflect assumed exploitation by open pit mining.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the* • *case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Based on comparison with other similar deposits, the Mineral Resource is considered to have sufficient grade and metallurgical characteristics for economic treatment if an operation is established at the Project. • No mining parameters or modifying factors have been applied to the Mineral Resource.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical test work has been conducted by Savannah on representative mineralisation at the Project. The work was completed by Nagrom Metallurgical in Australia and confirmed that high grade lithium, low grade iron concentrate can be generated from the mineralisation using conventional processing technology. Microscopy confirmed that the concentrate was almost entirely spodumene.

Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The area is not known to be environmentally sensitive and there is no reason to think that proposals for development including the dumping of waste would not be approved if planning and permitting guidelines are followed.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density determinations were carried out on 248 pegmatite core samples. • Bulk density values applied to the estimates were 2.3t/m^3 for transitional lithologies, 2.65t/m^3 for unoxidised pegmatite and 2.70t/m^3 for unoxidised schist.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). • The upper portion of the deposit showing consistent geometry and defined by 20m to 40m spaced holes on 40m spaced cross has been classified as Indicated Mineral Resource. • Indicated Mineral Resource was extrapolated up to 60m past drill

		hole intersections. • Inferred Mineral Resource was extrapolated up to 120m past drill hole intersections. • The remainder of the model remains unclassified. • The results reflect the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has been checked by an internal audit procedure.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The estimate utilised good estimation practices, high quality drilling, sampling and assay data. The extent and dimensions of the mineralisation are sufficiently defined by outcrop and the detailed drilling. The deposit is considered to have been estimated with a level of accuracy reflected in the resource classification. • The Mineral Resource statement relates to global estimates of tonnes and grade. • There is no historic production data to compare with the Mineral Resource.