SAVANNAH

25th SEPTEMBER 2019

Significant Maiden Co-Product Mineral Resource Estimate

Grandao Lithium Deposit

Highlights:

- Co-product Mineral Resource estimates completed at Grandao with an initial resource of 14.4Mt containing 4.79Mt of quartz and 6.11Mt of feldspar
- Grandao forms part of Savannah's Mina do Barroso Lithium Project, located in northern Portugal, and the Company's flagship asset and Europe's most significant spodumene lithium deposit, with a Mineral Resource Estimate currently standing at 27Mt @ 1.06% Li_20
- Metallurgical test work demonstrates successful recovery of saleable products used in the local ceramic and glass industries
- Co-product Mineral Resources are wholly contained within existing lithium Mineral Resource model
- The Mineral Resource is expected to expand once calculations for the NOA, Reservatorio, Pinheiro and Aldeia deposits are also included
- By-products have the potential to provide a significant additional income stream to add to that generated from the sale of lithium spodumene concentrates
- Marketing studies concluded that prices for Mina do Barroso co-products could be significantly higher than reported in the 2018 Scoping Study, with feldspar at US$65-100/t vs. US$39/t, quartz at US$60-100/t vs. US$33/t and a bulk tail at US$40-45/t
- Glass and ceramics are two of the biggest global markets for feldspar and quartz and Mina do Barroso is geographically well positioned to supply markets in Portugal, Spain and other European countries

Savannah Resources plc (AIM: SAV, FWB: SAV and SWB: SAV) ('Savannah' or 'the Company'), the resource development company, is pleased to announce a Mineral Resource estimate for co-products (quartz and feldspar) from the spodumene bearing pegmatites at the Mina do Barroso Lithium Project ('Mina do Barroso' or the 'Project'). The co-product Mineral Resource estimate is based on the same geological models used in the recent resource estimate for lithium of 27.0Mt @ 1.06% Li_20 announced 31 May 2019. The resource estimate was completed by an independent consultant and is based on normative mineralogy assessments and is reported in accordance with the JORC code 2012 edition **(Figure 1 and Table 1).**

David Archer, Savannah's Chief Executive Officer said; *"**Savannah's CEO, David Archer, said:** "Today's Mineral Resource Estimate for co-products is another important milestone achievement for Savannah and further enhances the commercial appeal and robustness of the Mina do Barroso Lithium Project, which is leading the way as Europe's most immediate producer of high quality, lithium feedstocks and has the ability to anchor the fast growing battery and Electric Vehicle industries of the continent with a supply of this strategic battery metal.*

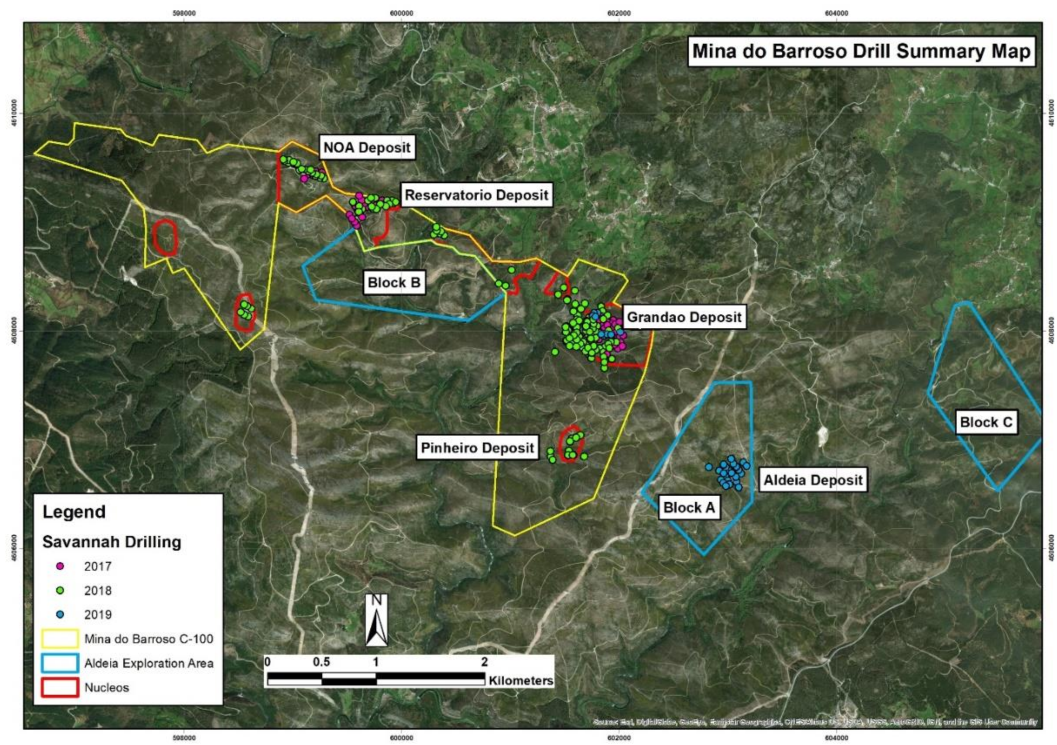
"The co-products will be produced in a region where quarrying of feldspar and quartz is a traditional industry supplying vibrant ceramic and glass industries locally, nationally and more widely in the EU. They will not only help our bottom line but will help to reduce the volumes of materials that will need to be emplaced as waste on site thereby reducing our environmental footprint and costs. Discussions are underway with potential offtake and JV partners to advance the co-product opportunity."

Mineral Resource Summary

Table 1. Co-product Mineral Resource Estimation Summary

Deposit	Resource Classification	Tonnes	Quartz		Feldspar	
		Mt	Grade %	Mt	Grade %	Mt
Grandao	Measured	7.1	32.6	2.32	42.8	3.05
	Indicated	6.3	34.6	2.17	42.6	2.67
	Inferred	1.0	30.9	0.30	40.3	0.39
	Total	**14.4**	**33.4**	**4.79**	**42.6**	**6.11**

Figure 1. Mina do Barroso Project Summary Map showing key deposits and drilling completed to date



SAVANNAH

Co-product Opportunity

As part of the planned production of the spodumene concentrate from pegmatite rock at Mina do Barroso, there will be a number of potential industrial mineral co-products that can be produced and marketed to supply the glass and ceramic producers in Portugal and Spain. Mina do Barroso is geographically well positioned to supply these markets with suitable pegmatite material available for the duration of the project (currently expected to be in the range of 10-15yrs).

It is envisaged that the majority of co-products will be recovered from the tailings stream of the proposed lithium production. However, it is also likely that bulk pegmatite products can also be marketed from material that is not processed for lithium production. This is currently occurring on a small scale at the Aldeia and NOA deposits.

A flow sheet for tailings processing developed by Nagrom Laboratory in Perth WA, has been able to demonstrate that by using conventional flotation techniques, Savannah's pegmatite material can produce four feldspar and quartz products which are suitable for use in a range of both glass and ceramic applications. The product specifications that can be produced are:

- **Fine Grade Feldspar:** Bulk tailings product from the process of concentrating spodumene bearing pegmatites and for use in ceramics; glass; paints; polymers and welding rods
- **High Grade Feldspar**: Superior quality sodium, potassium feldspar refined from pegmatite tailings for use in ceramics; glass; paints; polymers and welding rods
- **Coarse Grade Feldspar**: Feldspathic pegmatite produced by traditional blasting and crushing techniques sold as bulk rock for use in Flux for ceramics (tiles, earthenware, sanitaryware, glaze)
- **Fine Quartz**: High quality quartz refined from Portuguese pegmatite tailings for use in ceramics; glass; paints and polymers

Methodology

There are a number of methods which can be used to establish the mineral composition of the pegmatites. Savannah has used a combination of methods to produce a cost-effective procedure to determine the quantity and grade of material that would be available for co-product marketing. Geological logging and quantitative x-ray diffraction ("XRD") analysis has demonstrated that the pegmatite bodies at Mina do Barroso are comprised largely of silicate minerals with an overall average composition of albite (38%), quartz (27%), spodumene (12%), muscovite (12%) and microcline (10%). Undetermined minerals accounted for 1.5% of the rock mass.

While XRD analysis is the most accurate method for mineral determination, it is cost prohibitive to complete XRD analysis on the required number of samples needed for resource estimation. In certain circumstances it is possible to calculate mineral content in a sample from the elemental or oxide analyses ("normative mineralogy") using oxide multipliers to calculate the mineral content, if that element is present only in that particular mineral. In the case of the Mina do Barroso spodumene pegmatites, Sodium (Na) occurs only in albite and Li occurs only in spodumene, so these elemental assays can be used to calculate the content of those minerals. Muscovite and microcline have similar chemical composition but are the only minerals that contain potassium (K) in the composition so the K assay can provide a limit to the total muscovite and microcline assemblage but is only of limited use in defining the proportion of each of those minerals. All minerals in the pegmatite contain silica (Si), so the SiO_2 assay cannot be used to define quartz content.

SAV has conducted two programmes of multi-element analysis of drilling samples using x-ray florescence ("XRF") analysis to quantify oxide concentrations within the Grandao pegmatite. A total of 127 individual drilling samples were re-assayed using XRF. In addition, 141 sample composites (representing 2,020m of drilling) were prepared and analysed to provide multi-element data throughout the pegmatite. The results of these various samples have been used to prepare normative mineralogy calculations to determine the mineral composition of the samples.

To calibrate the results from the normative mineralogy, the results from the quantitative XRD analysis were used to apply regression formulas and correction factors. The methodology for deriving mineral compositions from assay data for the main pegmatite minerals is summarised as follows and shown in Table 2:

- Spodumene – excellent correlation of spodumene with assayed Li_2O allows the proportion of spodumene to be accurately determined by normative mineralogy based on Li_2O analysis;
- Albite – good correlation of albite with assayed Na_2O although the normative calculation underestimates albite content (likely due to presence of Ca or Mg in feldspar lattice) so a positive correction factor (+17%) has been derived from XRD comparisons;
- Microcline – Regression of XRD results shows good correlation of microcline with K_2O assay. Regression formula can be applied to K_2O analyses to determine microcline content;
- Muscovite – reasonable correlation between muscovite and microcline in XRD has allowed a ratio of microcline to muscovite to be determined;
- Muscovite and microcline – factor applied to limit total microcline+muscovite content to match available K_2O in assays so a small negative correction factor (-4%) has been applied;
- Other minerals – XRD shows 1.5% of rock mass to be other undetermined minerals;
- Quartz – the proportion of the rock mass calculated by subtracting the other elements from the total mass.

Table 2: Normative Mineralogy for Grandao

Mineral	Deposit Composition
Spodumene	11.5%
Albite (Feldspar)	34.3%
Microcline (Feldspar)	8.3%
Muscovite (mica)	10.8%
Quartz	33.6%

The results of QEMSCAN analysis were available for five samples. These were used as a further check on the normative mineralogy and were found to support the calculated data.

Mineral Resource Estimate

The Mineral Resource Estimate of Co-products for the Grandao Lithium Deposit has been completed by Payne Geological Services Pty Ltd, an external and independent mining consultancy - http://www.paynegeo.com.au. The Grandao deposit forms part of Savannah's Mina do Barroso Lithium Project, located in northern Portugal.

The Mineral Resource Estimate has been classified as Measured, Indicated and Inferred Mineral Resource in accordance with the JORC Code, 2012 Edition and is summarised in **Appendix 1.**

Table 3. Co-product Mineral Resource Summary (rounding discrepancies may occur)

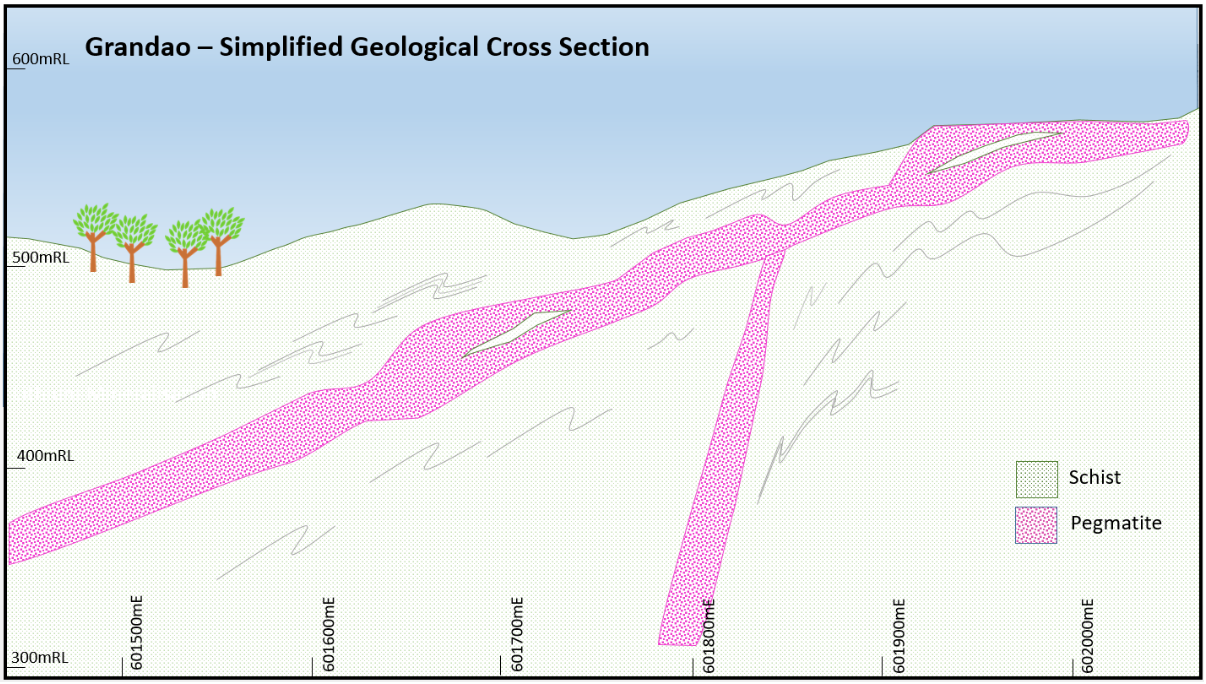
Deposit	Resource Classification	Tonnes	Quartz		Feldspar	
		Mt	Grade %	Mt	Grade %	Mt
Grandao	Measured	7.1	32.6	2.32	42.8	3.05
	Indicated	6.3	34.6	2.17	42.6	2.67
	Inferred	1.0	30.9	0.30	40.3	0.39
	Total	**14.4**	**33.4**	**4.79**	**42.6**	**6.11**

The Grandao deposit comprises two main pegmatite intrusions. The upper part of the deposit occurs within a broad, shallow dipping pegmatite body with a typical thickness of 20m-40m. The lower portion is a steep dipping dyke, which is 15m-20m in true width striking north south. In addition, minor parallel lenses of pegmatite are also included in the Mineral Resource Estimate. Both main pegmatite zones remain open either along strike or down plunge.

Geology

At Mina do Barroso, 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 main Grandao pegmatite is a flat-lying, tabular zone defined over an area of 600m north-south and 980m east-west and varies in thickness from 10m-60m. It is very close to surface and is visible in outcrop over a significant area. A lower zone of mineralisation is also present at Grandao, hosted in a north-south trending steep-dipping, tabular pegmatite dyke 15m-20m in true width **(Figure 2).**

Figure 2. Simplified Geological Cross section through the Grandao deposit



At the Project, lithium is present in most pegmatite compositions and laboratory test work confirms that the lithium is almost exclusively within spodumene. Distinct lithium grade zonation occurs within the pegmatites, with weakly mineralised zones often evident at the margins of the dykes. Minor xenoliths and inliers of schist are observed within the main pegmatite. Where these have sufficient continuity, they have been separately modelled and excluded from the estimate.

The weathering profile at Grandao comprises a shallow, surficial zone of weak to moderate oxidation, particularly of the schistose country rock. A zone of deeper weathering exists on the western side of the Grandao Deposit with moderate oxidation to a depth of up to 50m.

Drilling

A total of 92 RC drill holes, 31 diamond holes and 25 RC holes with diamond tails define the Mineral Resource. All holes were completed by Savannah between 2017 and 2019. The holes were drilled on an approximate grid spacing of 20m-60m with a number of closer spaced holes in the shallow part of the deposit. Of the 148 holes that intersect the Mineral Resource, 79 holes had oxide analyses for estimating the co-products.

Drill collar locations are recorded in Universal Traverse Mercator ("UTM") coordinates using differential GPS. All Savannah drilling has been down-hole surveyed using a gyroscopic tool.

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 with composite sampling of typically 4m in the surrounding schists in early drilling. In recent drilling the schist 5m either side of the pegmatite was sampled at 1m intervals with the rest of schist remaining unsampled.

The 1m samples were collected through a rig-mounted riffle splitter and were 4kg-6kg in weight. The 4m composites were collected by spear sampling of the 1m intervals. Samples were weighed to assess the sample recovery which was determined to be satisfactory.

Core was PQ and HQ in size and sampled to geological boundaries. Core was cut using a diamond saw, and for the majority of holes, half core was collected for assay. A number of diamond holes were sampled for metallurgical test work. For those holes, quarter core was submitted for assay.

Samples for XRF analysis were collected from the remaining pulp material stored at the ALS preparation facility in Seville. Samples for the 127 individual 1m intervals were collected direct from the pulp storage bags. The 141 composite samples were collected by combining the pulp material from the individual samples into a single "composite" for analysis. The composite samples were created by pouring 10g of pulp sample into the middle of a flat square plastic sheet. Each corner of the sheet is subsequently drawn past the centre to the opposite corner, and then returned to its original location. This process is repeated about 50 times to ensure complete homogenization.

The composite lengths varied from 4m to 28m with an average length of 14m and represented 79 holes and 2,080m of drilling. The composites were evenly spaced throughout the deposit at 40m to 60m hole spacings.

The composites were assayed for a multi-element suite using XRF. The composites were not analysed for Li_2O. Li_2O values were assigned to the composites by preparing length-weighted averages of Li_2O in the individual drilling samples that made up each composite.

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. Samples and composites analysed for oxides by x-ray florescence ('XRF') were completed by ALS laboratories using the MEXRF26 whole rock fusion method.

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

A methodology for the estimation of the co-product mineral composition in the Mineral Resource block models has been derived using normative mineralogy based on estimated oxide values. Where sufficient oxide assay data is available (currently only the Grandao deposit) this involves interpolation of oxide values using the oxide data followed by normative mineralogy calculations in the block model. This is considered to give a reliable estimate of the pegmatite mineralogy.

Interpretation of the pegmatite dykes was completed using detailed geological logging and Fe geochemistry as part of the lithium Mineral Resource estimate. Wireframes of the pegmatites were prepared and within those the sample data was extracted and analysed. In addition to the two main pegmatite bodies, several small pegmatites were also interpreted. Zones of unmineralised schist within the pegmatite body were selectively wireframed and excluded from the estimate.

Additional attributes of Quartz, Spodumene, Muscovite, Microcline and Albite were added to the block model used for the Grandao May 2019 estimate. XRF sample data was composited into 5m intervals then the composites used to estimate block model grades for Potassium (K_2O) and Sodium (Na_2O) using inverse distance squared ("ID2") grade interpolation for all pegmatite zones. A first pass search range of 300m was used and oriented to match the dip and strike of the mineralisation. A minimum of 1 sample and a maximum of 4 samples were used to estimate each block.

The normative mineralogy formulas define in Table 2 were then applied to the model oxide grades and the mineral contents estimated. As Li_2O had already been estimated from the detailed drilling data at Grandao, that value was used to determine the spodumene content. The Albite and Microcline concentrations have been summed to determine the total feldspar content.

Cut-off Grades

The economic extraction of co-product minerals is contingent on the economic extraction of the lithium mineral resources at the project. The co-product Mineral Resource has been limited to all pegmatite material located inside the pit design being developed as part of the ongoing feasibility study assessment. This pit is based on a Whittle Optimisation using a revenue factor of US$685/t for a 6% Li_2O spodumene concentrate. No lithium cutoff grade has been applied to co-product mineral resource as the marketability of the pegmatite materials is not dependent on an in situ grade.

Pegmatite material located outside the pit design has not been reported in the Mineral Resource estimate.

Mining Methods

The shallow nature of the pegmatites suggests good potential for open pit mining.

Classification Criteria

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).

The main pegmatite dyke at Grandao has generally been drilled at 40m to 60m hole spacings with a portion of the deposit drilled at closer spacings. The majority of holes in the main pegmatite at Grandao have consistently intersected pegmatite, with the majority intersecting resource grade Li_2O mineralisation and the continuity of lithium mineralisation is good.

Due to the consistent drill hole spacing defining excellent continuity of lithology and mineralisation, uniform distribution of co-product minerals and accurate location data, the well-drilled portion of the upper pegmatite has been classified as Measured Mineral Resource. This includes mineralisation drilled at 20m to 40m spacings where the pegmatite geometry is consistent and mineralisation is uniform.

The portion of the deposit defined by 40m to 60m spaced drill holes has been classified as Indicated Mineral Resource Estimate. Where the main pegmatite showed good potential for further extensions, the Indicated Mineral Resource Estimate was extrapolated up to 60m past drill hole intersections and the Inferred Mineral Resource Estimate was extrapolated a further 60m.

All minor pegmatite bodies were classified as an Inferred Mineral Resource Estimate due to the lack of detailed drilling or the uncertainty of geometry of the mineralisation.

The main shallow pegmatite at Grandao lies entirely above 250m vertical depth. The deep pegmatite has been reported to a depth of 230m vertical.

Production and Marketing of Co-products

The minerals quartz and feldspar are major mineral components of the Mina do Barroso pegmatites making up over 75% of the rock mass. The pegmatite rock at Mina do Barroso has historically been mined to supply material used in the manufacture of glass and ceramics and current mining at NOA and Aldeia continue to supply high quality feed for local ceramic producers.

Samples of the quartz and feldspar co-product from the Grandao deposit have been successfully evaluated for use in a range of industrial glass and ceramic applications. In each case, comparisons were made against current commercial grades of quartz and feldspar that are in regular use throughout Western Europe.

Representative samples were analysed for mineralogy, chemistry, particle sizing and other properties so that comparisons could be made against other leading material on the market and detailed technical data sheets prepared.

Feldspars in Ceramic Glaze Formulations

High Grade Feldspar purified by froth flotation and Fine Grade Feldspar (quartz/feldspar tailings) have both been evaluated as the sole feldspathic flux component in a typical porcelain glaze recipe.

Transparent porcelain glazes were prepared by Potterycrafts in Stoke on Trent, comparing High Grade Feldspar against similar products produced by Finnish supplier Sibelco and Fine Grade Feldspar against Cornish Stone, supplied by Goonvean Ltd in Cornwall, UK.

The prepared glazes were applied to a number of porcelain tiles and fired to 1250 deg. C. No problems were encountered during the preparation and firing of the trial glazes with no bubbles, foaming or viscosity problems encountered. The fired tiles were similar in appearance to the standard tiles and Savannah's High Grade Feldspar is a satisfactory raw material for use in ceramic glaze formulations.

Vitrification of Feldspar

Vitrification is the process of melting that ceramic raw materials go through as they are fired to maturity. Feldspars are used in ceramic body and glaze formulations as a flux to lower the temperature of vitrification, hence reducing energy costs. They form a glassy phase which cements refractory particles (quartz and alumina) together and trigger the formation of mullite from clay minerals.

In a fully vitreous ceramic body, the spaces between refractory particles are completely filled up with glass, fusing the particles together and making the body impervious to water.

Testing of the Savannah's products was positive with a summary of key results below:

- Vitrification tests indicate that Savannah's products can match existing grades in commercial use for ceramic body and glaze formulations
- All firings showed a high level of whiteness, better than the benchmark grades used for comparison
- No dark specks, striations or inhomogeneity were found

Bone China Evaluation

Fine Grade and High Grade Feldspar from Savannah were each used in the preparation of typical bone china bodies and compared against a standard body containing feldspar supplied by Imerys.

The work was completed by Global Ceramic Materials (GCM), a leading supplier of bone china bodies and ceramic raw materials with major export contracts across the world. Savannah's Feldspar products worked well within a traditional bone china body recipe. Minor changes to processing and body recipes could be made to suit the existing formulation and achieve the required product specifications.

Hotel Ware

Savannah's High Grade Feldspar was used to produce ceramic bowls destined for sale in the Asian hotelware market by two established companies in Stoke in Trent. Ceramic bodies were prepared by Furlong Mills Ltd, comparing a trial body containing High Grade Feldspar against a standard body containing Forshammer feldspar, a popular grade supplied by Sibelco from Sweden. The bowls were pressed into shape, dried and fired at the Portmeirion factory. No problems were encountered throughout the production process and the trial bowls matched the standard in all aspects of appearance, shape, contraction and colour were all identical.

Savannah's High Grade Quartz was also used to produce ceramic bowls (different design) at Furlong Mills and Portmeirion, using similar procedures as described above. The Savannah quartz was compared against a standard body containing Loch Aline quartz, the market leader in the UK, supplied by Gruppo Minerali & Pilkingtons.

No problems were encountered throughout the production process and the trial bowls matched the standard in all aspects of appearance, shape, contraction and colour.

Container Glass

High Grade Quartz and High Grade Feldspar were used in typical formulations for container glass, substituting for standard grades in regular commercial use. The glass melt samples matched or exceeded the benchmark in quality, showing no problems with seed, bubbles, cord or inhomogeneity.

Float Glass

High Grade Feldspar was used in a typical formulation for float glass, substituting for a standard grade in regular commercial use. The glass melt samples matched or exceed the benchmark in quality, showing no problems with seed, bubbles, cord or inhomogeneity.

Lead Crystal Glass

High Grade Quartz was used in a typical formulation for lead crystal glass, substituting for a standard grade in regular commercial use. The glass melt samples matched or exceed the benchmark in quality, showing no problems with seed, bubbles, cord or inhomogeneity.

Competent Person and Regulatory Information

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 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.

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.

****ENDS****

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

David Archer	Savannah Resources plc	Tel: +44 20 7117 2489
David Hignell / Charlie Bouverat (Nominated Adviser)	SP Angel Corporate Finance LLP	Tel: +44 20 3470 0470
Christopher Raggett (Joint Broker)	finnCap Ltd	Tel: +44 20 7220 0500
Grant Barker (Joint Broker)	Whitman Howard	Tel: +44 20 7659 1225
Melissa Hancock / Cosima Akerman (Financial PR)	St Brides Partners Ltd	Tel: +44 20 7236 1177

About Savannah

Savannah is a diversified resources group (AIM: SAV) with a portfolio of energy metals projects - lithium in Portugal and copper in Oman - together with the world-class Mutamba Heavy Mineral Sands Project in Mozambique, which is being developed in a consortium with the global major Rio Tinto. The Board is committed to serving the interests of its shareholders and to delivering outcomes that will improve the lives of the communities we work with and our staff.

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 - **JORC 2012 Table 1**

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, 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 substantial number of diamond holes were also completed. Core was HQ size, sampled at 1m intervals in the pegmatite, with boundaries sampled to geological boundaries. Half core samples were collected for analysis. • Drilling was on a nominal 40m by 40m to 80m by 80m spacing with selected infill to 40m by 20m spacings. • 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-109m.
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 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.*	• 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 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.*	• 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

Criteria	JORC Code Explanation	Commentary
	• *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.*	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. • For the ceramics mineralogy composites, the pegmatite portions of 79 drill holes were identified and 10g portion of individual pulps were combined in the laboratory to produce 141 composites for analysis.
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 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.*	• 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 initially analysed using ALS Laboratories ME-MS89L Super 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. • Duplicate sample regime is used to monitor sampling methodology and homogeneity. • Samples analysed by x-ray florescence (XRF) were completed by ALS laboratories MEXRF26 whole rock fusion method. • 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.* • *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.*	• All information was internally audited by company personnel. • Several historical holes were 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. • Oxide results were reported as percentage values
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.*	• 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.

Criteria	JORC Code Explanation	Commentary
	• *Quality and adequacy of topographic control.*	• An accurate, aerial topographic survey was obtained with accuracy of +/- 0.5m.
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 40m by 40m to 80m by 80m spacing and based on geological targets with selected infill to 40m by 20m. • Drill data is at sufficient spacing to define Measured, 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 orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling was generally vertical and intersected the gently dipping deposit at close to orthogonal to the known dip of the main pegmatite. • Intersections were close to true width for the main pegmatite. • 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 Mina do Barroso 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 estimates.
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 15m-109m. • The pegmatite bodies are comprised largely of silicate minerals. The average composition determined by XRD was albite 38%, quartz 27%, spodumene 12%, muscovite 12% and microcline 10%. Undetermined minerals accounted for 1.5% of the rock mass

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 understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Grid used WSG84.
		• No material data has been excluded from the release.
		• Drill hole intersections used in the resource have been previously reported.

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.*	• Exploration results 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*	• The majority of holes have been drilled at angles to intersect the mineralisation approximately perpendicular to the orientation of the mineralised trend. • The geometry of the steep pegmatite at Grandao is steep dipping and some holes have drilled at a close

Criteria	JORC Code explanation	Commentary
	reported, there should be a clear statement to this effect (e.g.'down hole length, true width not known').	angle to the mineralisation in that part of the deposit.
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 release.
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 exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Geological mapping and rock chip sampling has been conducted over 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 Resources.

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 Grandao mineralisation are well defined in outcrop and in drilling and boundaries are generally very sharp and distinct. • Zonation of lithium within the pegmatite is evident, and typically the margins are weakly mineralised. • Xenoliths or inliers of barren schist country rock occur within the pegmatite, and these have been excluded from the estimate where large enough to model.
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 Grandao main pegmatite has a drilled extent of 500m NS and 700m EW and a maximum vertical depth of 200m. The thickness of the mineralisation ranges from 10m to 60m. • The Grandao lower pegmatite has a modelled strike extent of 320m NS and a dip extent of 230m and a maximum vertical depth of 150m. The true thickness of the mineralisation ranges from 15m to 20m.
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 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.*	• Inverse distance squared was used to estimate block grades for oxides within the resource. • Surpac software was used for the estimation. • Samples with XRF oxide values were composited to 5m intervals. Due to the extremely low CV of the data no high grade cuts were applied to oxides in the estimate. • At Grandao the parent block dimensions were 10m EW by 20m NS by 5m vertical with sub-cells of 2.5m by 5m by 2.5m. Cell size was based on the original lithium block model. • No previous by-product estimate has been reported. The previous lithium resource was reported in March 2019. • The recovery of by-products has been determined by preliminary metallurgical test work. • 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 300m was used with a minimum of 1 sample and a maximum of 4 samples which resulted in all blocks being estimated. • 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.

Criteria	JORC Code explanation	Commentary
	• *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.*	• The oxide mineralisation was constrained by wireframes prepared to define the pegmatite bodies. • For validation, quantitative spatial comparison of block grades to assay grades was carried out using swath plots. • 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 economic evaluation being carried out for the lithium mineralisation at Grandao has confirmed that good potential exists for open pit mining if sufficient resources can be delineated to consider a mining operation. • Pit optimisation and project evaluation has allowed a pit shell to be generated which represents a likely life-of-mine pit. • The ceramics Mineral Resource has been restricted to only the pegmatite lying within the pit shell. It is reported without a cut-off grade as all pegmatite recovered from the pit has the potential to be processed either by processing of tailings or as a bulk product.
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 site. • 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 feldspar, micas and quartz has the potential to be recovered by processing of the tailings from lithium production. • Additional metallurgical test work is underway.
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*	• 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.

Criteria	JORC Code explanation	Commentary
	environmental assumptions made.	
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 3,370 core samples. Bulk density values applied to the estimates were 2.5t/m^3 for transitional lithologies, 2.65t/m^3 for unoxidised pegmatite and 2.67t/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 Resources was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). • The portion of the deposit defined by 40m by 20m to 40m by 40m drilling and showing excellent continuity of geology and Li_2O grade has been reported as Measured Mineral Resource. • The portion of the deposit defined by 40m by 40m to 80m by 80m drilling has been reported as Indicated Mineral Resource. • The remainder of the Mineral Resource was classified as Inferred due the sparse drilling. Inferred Mineral Resource was extrapolated up to 120m past drill hole intersections. • 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 high level of accuracy. • The Mineral Resource statement relates to global estimates of tonnes and grade. • There is no historic production data to compare with the Mineral Resource.