

## GOULAMINA MINERAL RESOURCE INCREASED BY 33.8 Mt TO 142.3 MT

- Total Goulamina Resource increased by 31% to 142.3 Mt @ 1.38% Li<sub>2</sub>O
- Danaya Domain Resource, which is located within the broader Goulamina Project, increased by 33.8 Mt to 56.1 Mt @ 1.24% Li<sub>2</sub>O, a 152% jump
- The result confirms the prevalence of a high-grade resource at Danaya and supports possible extension of the current 23-year Goulamina Project mine life
- Revised Danaya resource model reveals new drilling targets and further exploration potential
- Drilling at Northeast Domain is continuing, with further Mineral Resource updates targeted for H1 2023

Leo Lithium Limited (**ASX: LLL**) (**Leo Lithium** or the **Company**) is pleased to announce a substantial upgrade to the Mineral Resource estimate (MRE) of its Goulamina Lithium Project (**Goulamina** or the **Project**).

A resource definition drilling campaign was undertaken in H2 2022 on pegmatite dykes in the south-west of the Goulamina Lithium Project, part of the Danaya Domain (**Danaya**). The recently completed assessment of drilling results and the updated MRE for Danaya has increased the Danaya MRE by 152%, from 22.3 Mt to 56.1 Mt and the total Goulamina resource base by 31% from 108.5 Mt at 1.45 % Li<sub>2</sub>O to **142.3 Mt @ 1.38% Li<sub>2</sub>O (Table 1)**.

**Leo Lithium Managing Director, Simon Hay, commented:**

*"We are pleased to report a considerable resource upgrade which confirms the outstanding scale, high-grade nature, and further growth potential of the Goulamina Project. An increase in Danaya of 33.8 Mt from a moderate drilling campaign of approximately 12,700 metres, is a fantastic outcome. These results continue to reveal high-grade, thick intercepts and confirm our expectations of multiple, wide mineralised pegmatite zones. Also, the deposit remains open at depth and along strike, creating new drilling targets for the team. This significant upgrade also supports the possible extension of the 23-year mine life of the Goulamina Project."*

*Resource definition drilling continues on the Northeast Domain with drilling results to be announced shortly, and a Mineral Resource estimate subsequently set to be restated in the current half year. These results are also encouraging ahead of first spodumene concentrate product in Q2 2024 and the early revenue opportunity from the targeted export of direct shipped ore in H2 2023."*

Table 1: Goulamina Lithium Project Mineral Resource Estimate summary (no reporting cut off applied) – January 2023

Classification	Tonnes (Mt)	Li <sub>2</sub> O (Mt)	Li <sub>2</sub> O (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	SG (t/m <sup>3</sup> )
Measured	8.4	0.13	1.57	0.98	2.75
Indicated	72.8	1.05	1.44	0.88	2.74
Inferred	61.1	0.79	1.29	0.85	2.74
<b>Total</b>	<b>142.3</b>	<b>1.97</b>	<b>1.38</b>	<b>0.87</b>	<b>2.74</b>

Notes:

- Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).
- Data is reported to significant figures and differences may occur due to rounding.
- Mineral Resources have been reported at a 0% Li<sub>2</sub>O cut-off grade.

Independent resource consultancy CSA Global was commissioned to undertake the Danaya MRE update resulting in the classification of Indicated and Inferred Mineral Resources. The resources that report to the Danaya MRE are constrained below the Top of Fresh Rock (TOFR) surface and reported within a US\$1250 optimised pit shell. Mineralised Pegmatite material within the optimised pit shell is considered to have reasonable prospects for eventual economic extraction (RPEEE).

## Goulamina Lithium Project Mineral Resources

The updated Mineral Resource for the Danaya Domain incorporates all historical data and recent drilling data completed by Leo Lithium between May and October 2022. The results of the updated MRE for Goulamina are presented in Tables 2 and 3 and shown in Figures 2-5. The Danaya Domain is the only domain updated in this MRE. There are no changes to the NE Domains; Main, West 1, West 2, Sangar 1 and Sangar 2 (refer FFX ASX release 8 July 2020 and LLL ASX release 21 June 2022).

Table 2: Total Goulamina JORC Mineral Resource (no cut-off applied) – January 2023

Classification	Domain	Tonnes (Mt)	Li <sub>2</sub> O (Mt)	Li <sub>2</sub> O (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	SG (t/m <sup>3</sup> )
Measured	Main	4.3	0.06	1.47	0.98	2.75
	West I	3.5	0.06	1.67	1.01	2.75
	Sangar II	0.6	0.01	1.69	0.79	2.75
	<b>Subtotal</b>	<b>8.4</b>	<b>0.13</b>	<b>1.57</b>	<b>0.98</b>	<b>2.75</b>
Indicated	Main	7.2	0.09	1.21	1.00	2.75
	West I	9.9	0.14	1.43	1.01	2.75
	West II	1.9	0.03	1.43	0.63	2.75
	Sangar I	19.3	0.31	1.61	0.69	2.75
	Sangar II	10.1	0.16	1.54	0.71	2.75
	Danaya	24.4	0.33	1.34	1.04	2.73
	<b>Subtotal</b>	<b>72.8</b>	<b>1.05</b>	<b>1.44</b>	<b>0.88</b>	<b>2.74</b>
Inferred	Main	2.6	0.03	1.05	1.03	2.75
	West I	6.6	0.10	1.48	0.89	2.75
	West II	3.5	0.04	1.26	0.85	2.75
	Sangar I	11.9	0.18	1.54	0.29	2.75
	Sangar II	4.8	0.07	1.45	0.27	2.75
	Danaya	31.7	0.37	1.16	1.12	2.73
	<b>Subtotal</b>	<b>61.1</b>	<b>0.79</b>	<b>1.29</b>	<b>0.85</b>	<b>2.74</b>
<b>Total</b>		<b>142.3</b>	<b>1.97</b>	<b>1.38</b>	<b>0.87</b>	<b>2.74</b>

Notes:

- Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).
- Data is reported to significant figures and differences may occur due to rounding.
- Mineral Resources have been reported at a 0% Li<sub>2</sub>O cut-off grade.

Table 3: Danaya Mineral Resource (no cut-off applied) – January 2023

Classification	Tonnes (Mt)	Li <sub>2</sub> O (Mt)	Li <sub>2</sub> O (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	SG (t/m <sup>3</sup> )
Indicated	24.4	0.33	1.34	1.04	2.73
Inferred	31.7	0.37	1.16	1.12	2.73
<b>Total</b>	<b>56.1</b>	<b>0.70</b>	<b>1.24</b>	<b>1.09</b>	<b>2.73</b>

Table 4: Danaya Mineral Resource (no cut-off applied) January 2023 compared to previous MRE in July 2020

Classification	Tonnes (Mt)		Change (%)
	Jan. 2023	July 2020	
Indicated	24.4	7.8	213
Inferred	31.7	14.5	119
<b>Total</b>	<b>56.1</b>	<b>22.3</b>	<b>152</b>

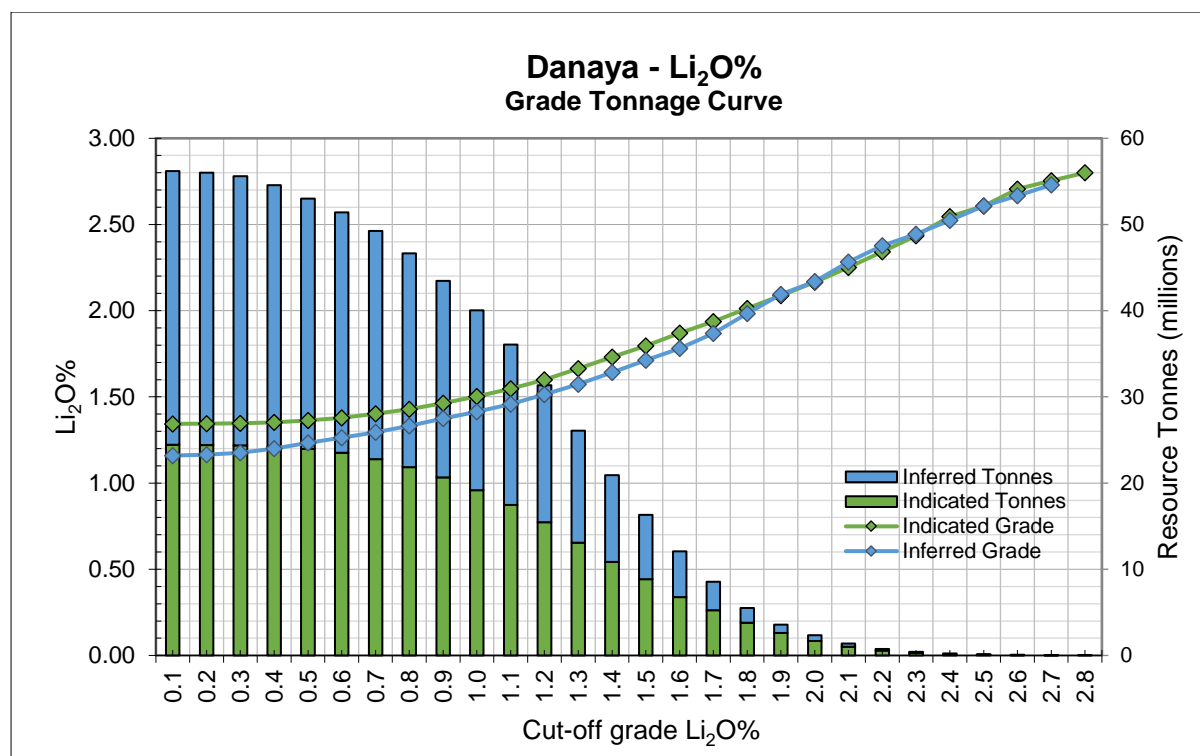


Figure 1: Grade-tonnage curve for Danaya Indicated and Inferred Mineral Resources

## Danaya

During the 2022 resource definition drilling campaign, Leo Lithium drilled 60 reverse circulation (RC) holes (including 6 Pre-Collar RC holes) for a total of 9,292 m and 17 Diamond (DD) holes (including 6 diamond tails) for a total of 3,428 m. Collar locations are shown in Figures 2 and 3.

Significant intersections have been reported in ASX announcements dated:

- 3 November 2022 (Resource Drilling Reveals Thick, High Grade Spodumene Intercepts)
- 14 December 2022 (Further High-Grade Drilling Results at Danaya)

Since the last published MRE on 20 July 2020, the Danaya Mineral Resource has increased by 152% to **56.1 Mt @ 1.24% Li<sub>2</sub>O**. The Indicated resource classification at Danaya increased by 213% to **24.4 Mt @ 1.34% Li<sub>2</sub>O (Table 2 and Table 3)**. An oblique view of the updated Danaya block model is shown in Figure 2 and Figure 3. Two representative sections are shown in Figure 4 and Figure 5. Danaya diamond core assay results are still pending and are therefore not included in this MRE, although diamond core geological and structural information was used to assist in defining the pegmatite solids. Assay results will be reported once received and reviewed.

Future drilling will focus on further resource extensions below and along strike of the optimised RPEEE pit shell as well as increasing the confidence level by converting Inferred to Indicated material within the pit shell.

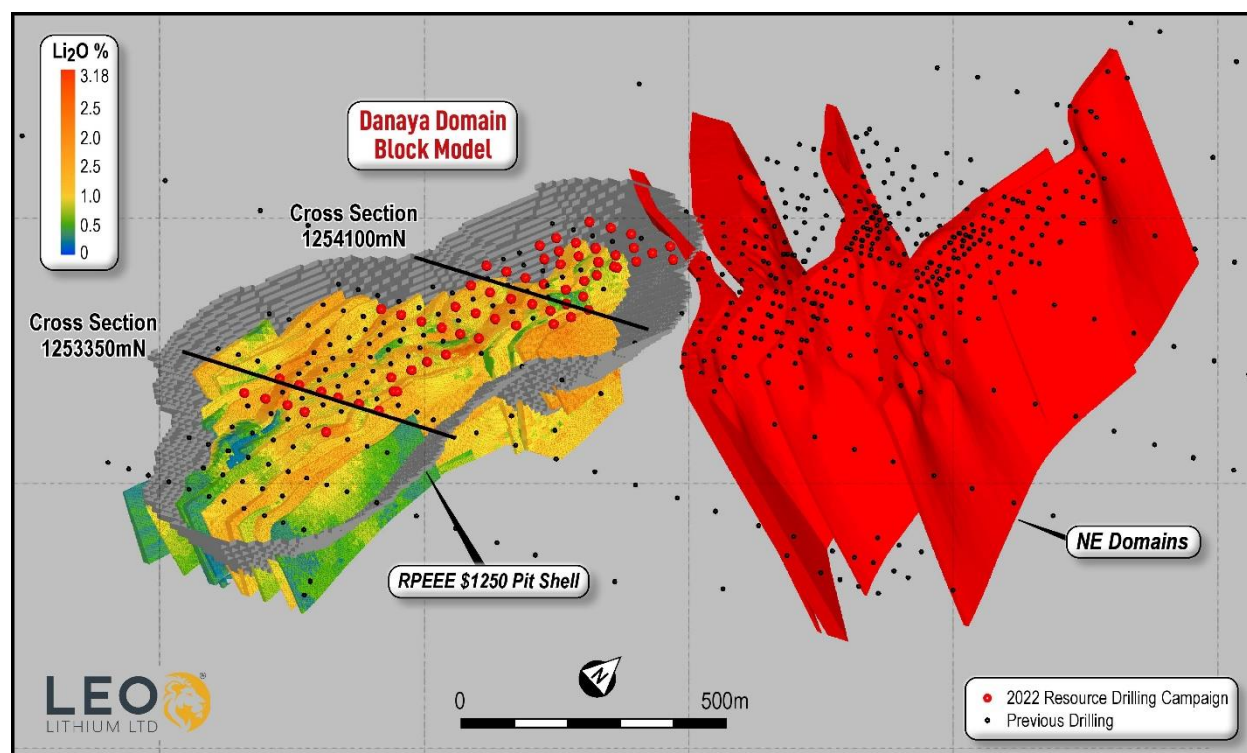


Figure 2: Oblique view of the updated Danaya Domain Block Model and the geological model of the Northeast Domains. Block Model  $\text{Li}_2\text{O}$  grade shown and coloured by grade. Northeast Domains in red. US\$1250 RPEEE pit shell shown in grey. Only material within the pit shell is reported as Mineral Resource.



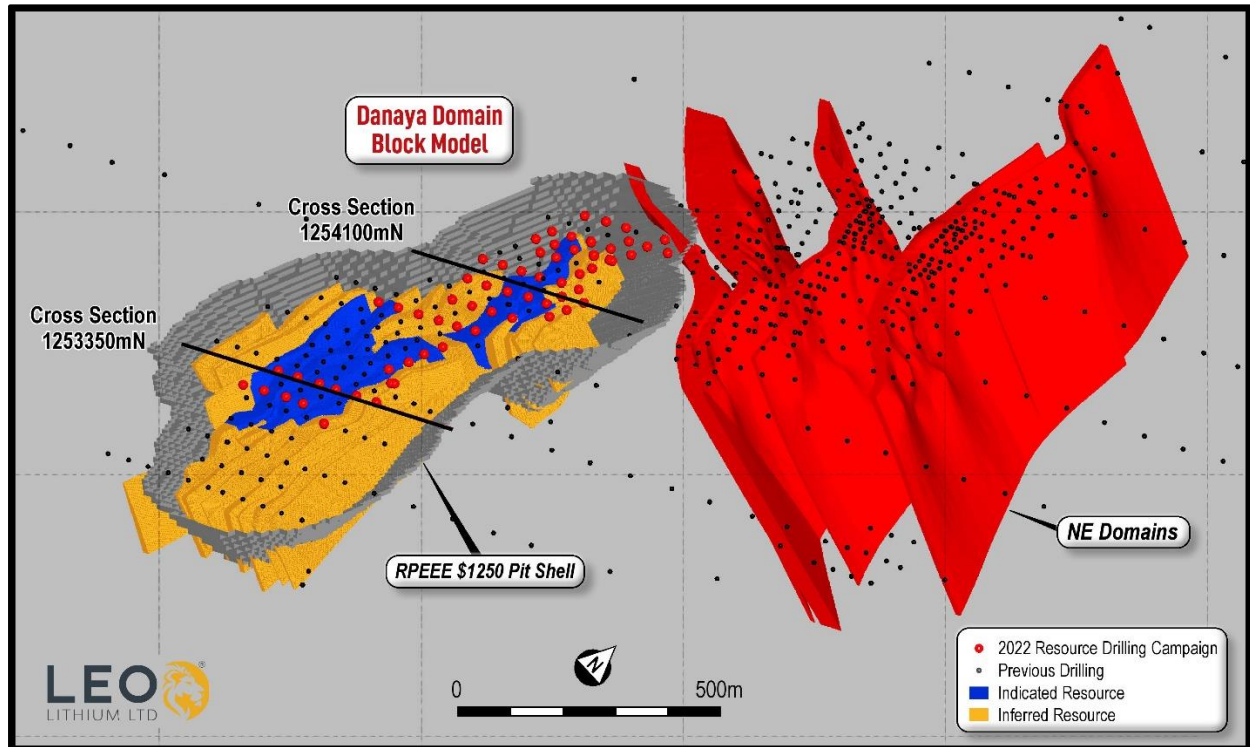


Figure 3: Oblique view looking Northwest, of the updated Danaya block model. Indicated resource category in blue and inferred Resource category in Orange. Geological model of Northeast Domains in red.

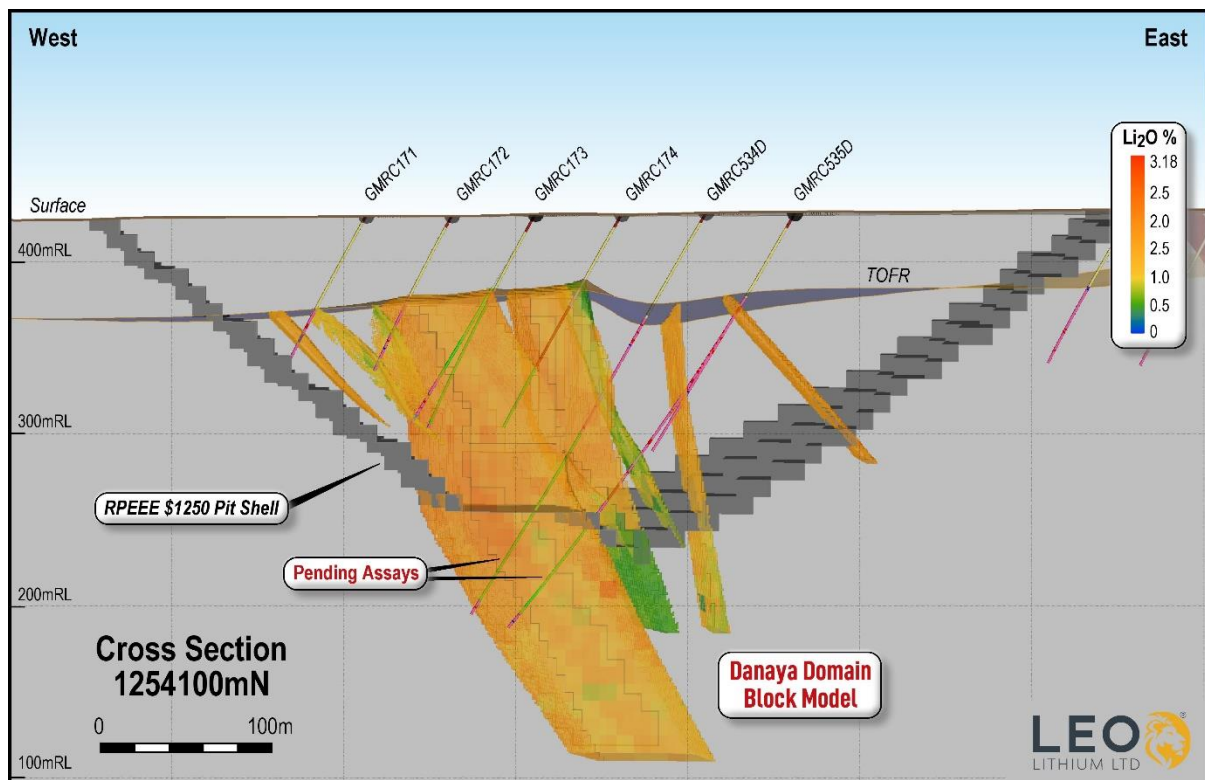


Figure 4: Section 1254100mN showing the Danaya block model coloured by grade. Block model grade legend in upper right hand corner. Assays pending for diamond tails GMRC534D and GMRC535D. Mineral Resource reported below top of fresh rock surface and within RPEEE pit shell.

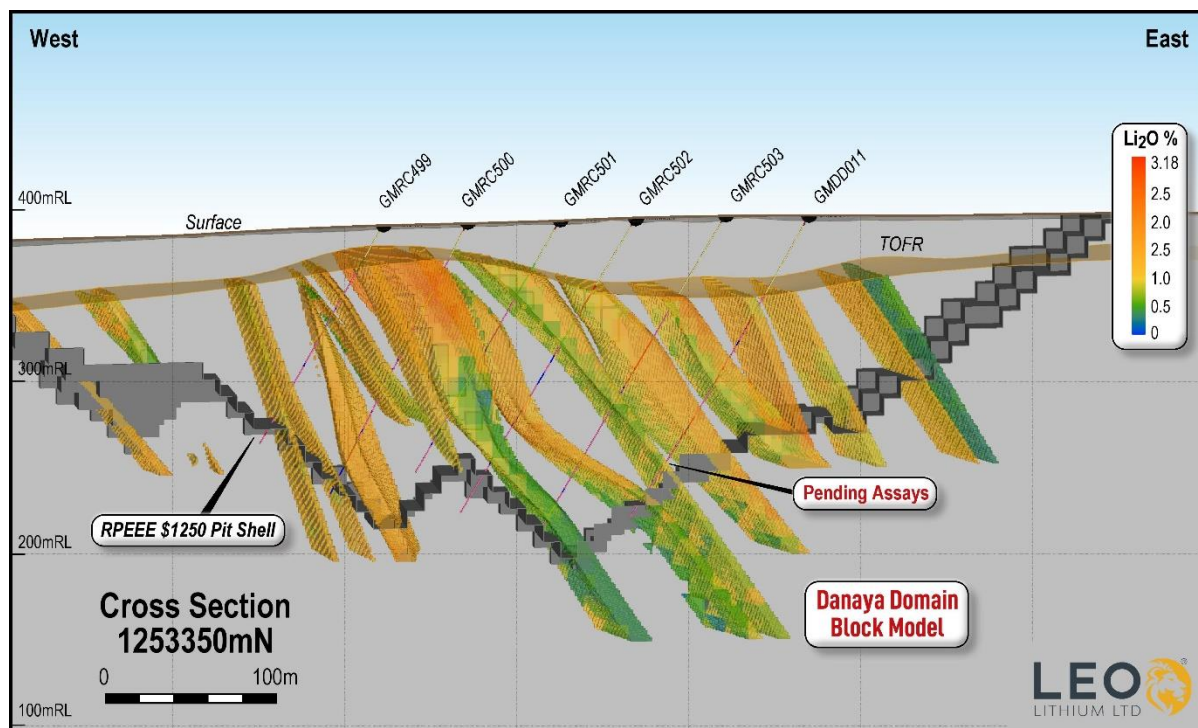


Figure 5: Section 1253350mN showing the Danaya block model coloured by grade. Block model grade legend shown in upper right hand corner. Assays pending for Diamond hole GMDD011. Mineral resource reported below top of fresh surface and within RPEEE pit shell.

At Danaya, infill drilling and resource extension drilling has resulted in a re-interpretation of the Danaya geology. The structural and geological information from the drilling campaign has been used to update the geological model which builds the framework for this resource update.

The Danaya Domain consists of a Spodumene Pegmatite dyke swarm, which is striking North-Northwest and is moderately to steeply dipping to the East. The dykes are currently modelled to a strike length of 1700m with individual true dyke widths of up to 70 m. The pegmatites are characterised by typical pinching and swelling.

Weathered oxidised material in the Danaya domain is excluded from the resource. Only material below the TOFR surface is reported as part of the MRE.

## Outlook

Drilling activity at the Northeast Domain is ongoing with one RC rig and one diamond rig. It is anticipated to restate the Goulamina resource in H1, 2023. The Danaya MRE has also highlighted opportunities to further extend the Danaya Mineral Resource with additional resource drilling.

## SUMMARY OF MINERAL RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to **Table 1, Sections 1 to 3** included below in **Appendix 1**).

### Mineral Tenement

The Goulamina Project is entirely within the Torakoro Exploitation Permit PE 19/25 in Mali, PE 19/25 is 100% held by Lithium du Mali a 50-50 joint venture between Leo Lithium and Ganfeng Lithium.

### Geology

The Project area is located within the Bougouni region of Southern Mali, where broadly North-South trending belts of Birimian aged (Paleoproterozoic) meta-volcanic and meta-sedimentary rocks are intruded by syn-and post-orogenic granitoids.

Within the Project area, outcrop is limited, and the understanding of basement geology therefore comes mainly from drillholes. Regolith typically comprises a surficial transported horizon overlying a laterite weathering profile. A prominent feature of the Lateritic Profile is a plateau of a hard iron-rich ferricrete ("cuirasse"). Limited outcrop mapping and information from geological logging of exploration drillholes indicates Northeast striking metapelite and metagreywacke rocks in the North and Eastern parts of the property.

The Goulamina Pegmatite deposit is entirely hosted within a granodiorite. The most abundant dyke facies within the Danaya Domain consists of a relatively homogenous coarse spodumene pegmatite which makes up approximately 85% of the Danaya dyke swarm. Crystal sizes range from few centimetres to up to 10 cm. The remaining 15% of the Danaya dyke swarm is composed of a fine-grained aplite which is often mineralised but can also be barren. Aplites distribution within the Danaya Domain is not predictable and therefore not domained separately.

The Lithium-bearing pyroxene mineral spodumene is the only recognised lithium mineral, along with other major minerals of quartz and feldspar (albite and microcline). Geological logging also identified accessory amounts of muscovite, tourmaline, apatite and biotite.

### Drilling Techniques and Hole Spacing

Danaya holes were drilled in several contiguous phases, from October 2017 to December 2022. Drill holes were generally dipping -60 degrees, oriented due west, to intercept the steeply dipping pegmatite dykes at a high angle.

RC drilling was completed by AMCO Drilling SARL (AMCO), and Capital Drilling (MALI) SARL (Capital), using nominally 5.5-inch diameter equipment, with a face sampling downhole hammer.

Core drilling equipment at Danaya was supplied and operated by AMCO and Capital. Drillhole diameter ranges from PQ size within highly weathered and oxidized zone and standard HQ size diameter within fresh rock. Diamond holes were drilled from surface or as diamond tails on RC holes. Core was orientated down hole so that structural measurements could be taken. Diamond Core drilled by Capital drilling in the 2022 campaign was not assayed in time to be included in the Danaya MRE, although the geological and structural information was used to define the pegmatite solids.



Drill holes for the resource programs are spaced approximately 30 to 50 metres apart on 25 m, 50 m or 100 m spaced sections. The spacing is sufficient to establish grade and geological continuity and is appropriate for the resource classifications applied.

## Sampling Techniques

Samples were collected from RC drilling and submitted for assay. Samples submitted to the laboratory typically weighed 2-2.5 kg over an average 1 m interval. Samples were subsampled by a riffle splitter at the drill rig.

Diamond drill core was collected directly into core trays. The drill core was then transported to the core processing facility where the core was marked up by metre marks and bottom orientation line. Core was cut longitudinally along a cut line next to the core orientation line. Half core without orientation line was collected on a metre basis where possible, sample lengths at contacts varied in length.

Pegmatites along with at least two metres of granitic material either side of the pegmatite contact are sampled and prepared for assay. Granitic material distal to the pegmatites is not sampled and is treated as having an assay of 0 %  $\text{Li}_2\text{O}$ .

## Sample Analysis

Recent sample preparation work was conducted by SGS Mali SARL (SGS) in Bamako, Mali. Samples were weighed, dried and crushed to -2 mm in a jaw crusher. Representative 1 kg split sample of the crushed sample was subsequently pulverised in a tungsten carbide ring mill to achieve a nominal particle size of 85% passing 75 microns. Sample sizes and laboratory preparation techniques are considered appropriate. Representative sub-samples of the pulverised material were sent to the SGS laboratory in Randfontein in South Africa for assay. Analysis of lithium and a suite of other elements was undertaken by inductively coupled plasma atomic emission spectroscopy (ICPAES), after a sodium peroxide fusion (SGS method ICP90A). The sodium peroxide fusion method is a total dissolution technique for lithium bearing silicate minerals. Detection limits for Lithium are 0.01 – 10%.

In the 2017/2018 campaign, samples were prepared by ALS Mali SARL (ALS) in Bamako and representative sub-samples were sent to ALS in Perth for Assay. Analysis was undertaken by ICPAES, after a sodium peroxide fusion (ALS method ME-ICP89, and ME\_MS91).

## Estimation Methodology

Estimation domains for all mineralised pegmatites (except for several insignificant narrow structures of uncertain orientation), were digitised on cross sections and built in Leapfrog™ Geo software. Drill hole sample data were flagged using domain codes generated within each of the mineralised domain wireframes. Samples were composited to 1 m intervals based on an assessment of the drillhole sample interval lengths.

Grade estimation was by Ordinary Kriging for  $\text{Li}_2\text{O}$  and  $\text{Fe}_2\text{O}_3$  using GEOVIA Surpac™ software. The estimate was resolved into 10 m (E) x 20 m (N) x 10 m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Based on the statistical analysis of the data population, no top-cuts were applied for  $\text{Li}_2\text{O}$  and  $\text{Fe}_2\text{O}_3$ . The estimation search employed a dynamic anisotropy to allow the ellipse to rotate along the arcuate mineralisation domains.

Model validation was carried out using a combination of visual and statistical comparison of input data and estimated block grades, swath plots, and wireframe volume checks.

### **Cut-off Grade**

There is a strong correlation between pegmatites and lithium mineralisation. There is usually a sharp cut-off in mineralisation at the contact between the lithium-bearing pegmatites and the host granitic material. The boundaries of the pegmatites are in most cases used as a de facto grade boundary. In some instances, where it appears that the contact has not been interpreted correctly, possibly due to metasomatic or metamorphic alteration at the boundary, the grade boundary is based on the grade distribution.

Leo Lithium intends to mine the spodumene pegmatites from footwall to hanging wall as they are generally mineralised throughout. This approach is based on preliminary economic considerations and the ability to make a saleable lithium concentrate from mining the entire pegmatite rather than defining internal low-grade components. The Mineral Resource reporting cut-off grade has been set to 0% Li<sub>2</sub>O for this purpose.

### **Classification criteria**

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralised zones, drilling density, confidence in the underlying database and the available bulk density information. The Danaya Mineral Resource has been classified as Indicated and Inferred in accordance with guidelines contained in the JORC Code.

The Indicated Mineral Resources are reported for areas within the Danaya mineralised domains with 50 m x 50 m spacing, and with estimation quality slope of regression greater than 0.6.

Inferred Mineral Resources are reported for the periphery and depth extents of the major Danaya mineralisation domains and in smaller domains with limited samples. The Inferred classification generally represents areas with greater than 50 m x 50 m drillhole spacing, and estimation quality slope of regression less than 0.6.

### **Mining and metallurgical methods and parameters**

An updated Definitive Feasibility study (DFS) was completed December 2021. The Project is scheduled to be mined using conventional open-pit mining methods involving drilling, blasting, loading and hauling. The Danaya Mineral Resource is reported above a Whittle™ optimised pit shell (at US\$1250) to determine the extent of resources that have reasonable prospects for eventual economic extraction. The optimisation parameters used for the RPEEE pit shell are based on the DFS outcomes completed in December 2021 (Firefinch ASX release 6/12/2021)

The MRE is supported by metallurgical test work undertaken between 2017 and 2020. The test work programs included comminution test work, mineralogy using QEMSCAN, reflux classification, heavy liquid separation and dense mediate separation (DMS) test work, flotation, and magnetic separation test work. A process flowsheet was developed based on the metallurgical test work programs. These resulted in achieving 87% Li<sub>2</sub>O recovery in flotation, and overall recovery of >76% Li<sub>2</sub>O, producing a high-quality chemical grade spodumene concentrate at >6% Li<sub>2</sub>O with low mica. The results of these test work programs support the DFS.



**Leo Lithium (ASX: LLL)** is developing the world-class Goulamina Lithium Project (Goulamina) in Mali. Goulamina represents the next lithium project of significant scale to enter production. The hard rock lithium project will be the first of its kind in West Africa. Early-stage development is underway and first production is targeted for H1 2024.

**Globally significant project:** Forecast spodumene concentrate production of 506ktpa, increasing up to 831ktpa under Stage 2<sup>1</sup>, positions Goulamina amongst the world's largest spodumene projects.

**Development underway and substantially funded:** One of a limited number of lithium development projects globally which are substantially funded. Ganfeng have provided US\$130 million in equity funding and a US\$40 million debt facility.

**Large scale, high grade orebody:** World-class, high grade hard rock lithium deposit with a Mineral Resource of 142.3 Mt at 1.38% Li<sub>2</sub>O and Ore Reserve of 52 Mt at 1.51% Li<sub>2</sub>O (1.9 Mt LCE). Drilling is underway targeting increases to the current resources and reserves.

**Quality product:** High quality spodumene concentrate with test work validating 6% Li<sub>2</sub>O with low impurities and having been successfully converted to battery grade lithium hydroxide.

**World-class partner:** Project being developed in 50/50 partnership with Ganfeng, the world's largest lithium chemical producer by production capacity, providing funding, offtake and operational support to de-risk development.

**Decarbonisation thematic:** Providing an essential raw material to the lithium-ion battery value chain for a clean energy future.

This announcement has been approved for release to the ASX by the Board.

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1. Based on first 5 years of steady state Stage 2 production.

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## Ore Reserves, Mineral Resources and Production Targets

The information in this announcement that relates to production targets, previous Danaya Mineral Resource and current Ore Reserves is extracted from the Company's replacement prospectus dated 6 May 2022 (Prospectus) which is available at [leolithium.com](https://leolithium.com). The Company confirms that all material assumptions and technical parameters underpinning the production targets, Mineral Resource and Ore Reserve estimates in the Prospectus continue to apply and have not materially changed and it is not aware of any new information or data that materially affects the information included in the Prospectus.

## Competent Persons Statement

The information in this announcement that relates to Exploration Results at Goulamina is based on information compiled by Mr Sebastian Kneer. Mr Kneer is a full-time employee of Leo Lithium Limited and a member of the Australian Institute of Geoscientists. Mr Kneer has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Kneer is responsible for the data quality informing the Danaya Mineral Resource including Sections 1 and 2 of the JORC Table 1. Mr Kneer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Danaya Mineral Resources is based on information compiled by Mr Matt Clark. Mr Clark is a member of the Australasian Institute of Mining and Metallurgy. Mr Clark has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity 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 (the JORC Code)". Mr Clark is responsible for the Danaya Mineral Resource estimate including Sections 3 of the JORC Table 1. Mr Clark consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Northeast Goulamina Mineral Resources is based on information compiled by Mr Simon McCracken. Mr McCracken is a member of the Australian Institute of Geoscientists. Mr McCracken has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity 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 (the JORC Code)". Mr McCracken consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Appendix 1 - JORC 2012 - Table 1

### JORC Table 1 Section 1 – Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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 downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>One metre samples were collected using Reverse Circulation (RC) drilling with a ~140mm bit.</li> <li>The entire sample is collected from the cyclone on the rig in plastic bags and then split by hand using a riffle splitter to collect a nominal 2 kg sample in a prenumbered cotton sample bag.</li> <li>The entire sample is dried, then is crushed to 75% passing 2mm in a jaw crusher.</li> <li>A 1.5kg sample is split using a riffle splitter.</li> <li>The 1.5kg split is pulverised in a tungsten carbide ring and puck pulveriser to 85% passing 75 µm.</li> <li>Diamond core was drilled using HQ size (64mm) core and sampled as one metre intervals and sampled to lithology contacts.</li> <li>Diamond core is split longitudinally with a core saw, with half being retained in core trays at site or sent to Perth, Western Australia (mineralised material only) to support metallurgical testing, and the remaining material being split into 1m (dominantly) samples and assayed using the same process as for RC samples.</li> <li>Pegmatites along with at least two metres of granitic material either side of the pegmatite contact are sampled and prepared for assay. Granitic material distal to the pegmatites is not sampled and is treated as having an assay of 0 % Li<sub>2</sub>O.</li> </ul>
<b>Drilling techniques</b>	<p><i>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).</i></p>	<ul style="list-style-type: none"> <li>Samples in the Danaya Resource program were collected using a combination of RC and Diamond drillholes drilled from surface and as tails to RC holes.</li> <li>Diamond tails were drilled as HQ-diameter with triple tube.</li> </ul>
<b>Drill sample recovery</b>	<p><i>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.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>The entire sample was collected from the cyclone and subsequently split by hand in a riffle splitter.</li> <li>Condition of the sample is recorded (ie Dry, Moist, or Wet)</li> <li>Where samples were wet (due to ground water) there is a possibility that the assay result could be biased through loss of fine material.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Core recovery is measured by comparing the length of core recovered against the expected length</li> <li>Core is usually collected using triple tube drilling which optimises the integrity of the core within the drill rods</li> <li>Core recovery from diamond core is excellent with only minor (&lt;1%) amounts of core lost.</li> </ul>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>Chips and core were geologically logged at site in their entirety, and in the case of RC drilling a representative fraction collected in a chip tray. The logs are sufficiently detailed to support Mineral Resource estimation. Logged criteria includes lithology, weathering, alteration, mineralisation, veining, and sample condition.</li> <li>Geological logging is qualitative in nature although percentages of different lithologies, sulphides, and veining are estimated.</li> </ul>
<b>Subsampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>All RC samples collected for resource purposes are riffle split by hand using a stand-alone splitter. This technique is appropriate for collecting statistically unbiased samples. The riffle splitter is cleaned with compressed air and soft brushes between each sample.</li> <li>Samples are weighed to ensure a sample weight of between 2 and 3 kg. Samples of between 2 and 3 kg are considered appropriate for determination of contained lithium and other elements using the sodium peroxide fusion process.</li> <li>Diamond core is split longitudinally with a core saw, with half being sampled for resource purposes, and the other half being retained in core trays.</li> <li>Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%. <ul style="list-style-type: none"> <li>Field duplicates are inserted every 20 samples.</li> <li>Blanks (derived from unmineralized river sand) and Certified reference material standards (CRMs) are inserted alternately every 20 samples.</li> </ul> </li> </ul>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Samples are analysed for Lithium using an industry standard technique (SGS method ICP90A) by: <ul style="list-style-type: none"> <li>drying the sample</li> <li>crushing the sample to 75% passing - 2mm</li> <li>1.5kg split by riffle splitter</li> <li>Pulverise to 85% passing 75 microns in a tungsten-carbide ring and puck pulveriser</li> <li>Samples are analysed for lithium and other elements by ICPOES after a sodium peroxide fusion</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	<ul style="list-style-type: none"> <li>Laboratory checks include: <ul style="list-style-type: none"> <li>Every 50th sample is screened to confirm % passing 2mm and 75 microns.</li> <li>1 reagent blank every 84 samples</li> <li>1 preparation blank every 84 samples</li> <li>2 weighed replicates every 84 samples</li> <li>1 preparation duplicate (re split) every 84 samples</li> <li>3 SRMs every 84 samples</li> </ul> </li> <li>Certified reference standards, Blanks, and duplicates are inserted into the sample stream as the samples are collected at a rate of 10%. <ul style="list-style-type: none"> <li>Field duplicates are inserted every 20 samples</li> <li>Blanks (derived from unmineralized river sand) and Certified reference standards (CRMs) are inserted alternately every 20 samples</li> </ul> </li> <li>Acceptable levels of accuracy and precision were established in the quality control data.</li> </ul>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>All drilling and exploration data are stored in the company database which is hosted by an independent geological database consultant.</li> <li>Drilling and sampling procedures have been developed to ensure consistent sampling practices are used by site personnel.</li> <li>Logging and sampling data are collected on a Toughbook PC at the drill site and provided directly to the database consultant, to limit the chance of transcription errors.</li> <li>No twin holes have been completed.</li> <li>Where duplicate assays are measured the value is taken as the first value, and not averaged with other values for the same sample.</li> <li>QAQC reports are generated regularly by the database consultant to allow ongoing reviews of sample quality.</li> <li>There are no adjustments to assay data.</li> </ul>
<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>Drill hole collars are initially located using GPS. They are subsequently surveyed using RTK DGPS systems.</li> <li>Down hole dip and azimuth are collected using a north seeking Gyro measuring every 20 to 50m for RC drilling.</li> <li>Coordinates are recorded in UTM WGS94 29N</li> <li>Topographic control is considered adequate for the current drill spacing.</li> </ul>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>Drill holes for the resource programs are spaced approximately 30 to 50 metres apart on 25m, 50m or 100m spaced sections.</li> <li>The spacing is sufficient to establish grade and geological continuity and is appropriate for Mineral Resource and Ore Reserve estimation and the resource classifications applied.</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Samples from pegmatite rocks are collected every metre and are not composited into longer lengths. Samples in unmineralized granites are collected every metre but are composited to 6m prior to assay.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Mineralised zones in the north-eastern domains are interpreted to dip moderately to the northeast. Drilling is generally oriented - 60 degrees due west. Intersection angles on the mineralised zone are between 35 and 65 degrees depending on the local strike of the mineralised pegmatite. True widths of mineralisation are between about 75% and 40% of downhole widths.</li> <li>Mineralised zones in the Danaya resource area are hosted within intersecting dykes that are interpreted to dip towards the east-northeast. RC drilling does not allow orientations of contacts to be measured directly, but sufficient information is available from diamond drilling to measure the orientations of the major mineralised pegmatites. Drilling is generally oriented -60 degrees due west. Intersection angles on the mineralised zone are between 15 and 35 degrees depending on the strike of the mineralised pegmatite.</li> <li>The relationship between drilling orientation and structural orientation is not thought to have introduced a sampling bias.</li> </ul>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>Samples are delivered from the drilling site in batches of 300 to the SGS laboratory in Bamako with appropriate paperwork to ensure the chain of custody is recorded. Prepared pulps are shipped by SGS using DHL from Bamako to their South African Randfontein facility for assay determination.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>QAQC checks of individual assay files are routinely made when the results are issued.</li> <li>QAQC reports are prepared monthly by LLLs database contractors. Any issues attributable to the assay laboratory e.g. Standards reporting out of specification, are queried with the laboratory directly. These queries have resulted in explanations being provided to LLL, and in various re-assaying campaigns by SGS to the satisfaction of LLL.</li> <li>QAQC reports are generated for the entire program at the end of the program, to support the resource estimate.</li> </ul>

## JORC 2012 Table 1 Section 2 – Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	<ul style="list-style-type: none"> <li>The Goulamina Project is entirely within the Torakoro Exploitation Permit PE 19/25 in Mali, PE19/25 is 100% held by Lithium du Mali a 50-50 joint venture between Leo Lithium and Ganfeng.</li> </ul>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>Lithium du Mali (formerly Firefinch, Mali Lithium and Birimian Gold) has completed substantial exploration in the area including soil sampling, Auger Drilling, Air-core Drilling, RC Drilling and diamond drilling. The current program was designed infill areas of broad spaced (100m sections) drilling and extend the depth potential of the Goulamina deposit.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The Pegmatites are Lithium-Caesium-Tantalum (LCT) type Spodumene bearing Pegmatites. The pegmatites are hosted entirely within granitic rocks.</li> </ul>
<b>Drillhole information</b>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i></p> <ul style="list-style-type: none"> <li><i>easting and northing of the drillhole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>downhole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Exploration Results are not being reported.</li> </ul>
<b>Data aggregation methods</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> <li>Exploration Results are not being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i></p>	<ul style="list-style-type: none"> <li>In the northeast part of the deposit, five main north-northwest-south-southeast striking pegmatites are interpreted to dip moderately to the east-northeast. Drilling is generally oriented -60 degrees due west. Intersection angles on the northeast mineralised pegmatites vary between 35 and 75 degrees. True widths of mineralisation vary depending on the local strike and dip of the pegmatite.</li> <li>In the Danaya area, pegmatite dykes are variously oriented. Drilling is generally oriented 60 degrees towards the west, and in a few cases 70 degrees towards the east. The true width of intersections at Danaya is derived from the interpreted orientation of the pegmatites and the down hole width.</li> </ul>
<b>Diagrams</b>	<p><i>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 drillhole collar locations and appropriate sectional views.</i></p>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts are provided elsewhere in this report</li> </ul>
<b>Balanced reporting</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>No new exploration intercepts are being reported.</li> </ul>
<b>Other substantive exploration data</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Other exploration information is not meaningful or material to this report or has been reported previously.</li> <li>All meaningful data relating to the Mineral Resource has been included.</li> </ul>
<b>Further work</b>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>Additional drilling is planned to extend and infill the existing Mineral Resource.</li> <li>Additional metallurgical test work is planned.</li> </ul>



## JORC 2012 Table 1 Section 3 – Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	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.	<ul style="list-style-type: none"> <li>The drilling database is maintained by Leo Lithium's database consultant (Rock Solid Data Consultancy) using DataShed software. Look-up tables and fixed formatting are used for entering logging, spatial and sampling data for the deposit databases. Sample numbers are uniquely coded and pre-numbered bags are used. Lithology, collar and downhole survey, and sampling and assay data are transferred to the database consultant from Leo Lithium's offices in Mali electronically (via email).</li> <li>User access to the database is regulated by specific user permissions. Only the Database Administrator can overwrite data.</li> <li>All data has passed a validation process; any discrepancies have been checked by Leo Lithium personnel before being updated in the database.</li> <li>Data used in the MRE is sourced from a Microsoft Access database export. CSA Global imported the Microsoft Access database file into Surpac and Leapfrog Geo for validation and modelling.</li> <li>Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars.</li> <li>No significant validation errors were detected.</li> </ul>
<b>Site visits</b>	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.	<ul style="list-style-type: none"> <li>Two previous site visits have been made to the Project by Leo Lithium representatives.</li> <li>Local geology, and general site set-up as well as the sample preparation laboratory were observed on the first visit and drilling and sampling practices and procedures were reviewed while drilling was underway, on the second visit.</li> <li>The sample preparation laboratory was changed to SGS as it could offer pulverisers made of tungsten carbide, which result in lower iron contamination. The SGS laboratory sample preparation facility was observed to be clean, tidy, and well organised.</li> <li>Drilling and sampling practices were found to be industry standard, and no deleterious issues were noted.</li> <li>A site visit was made to the Project in November 2022 during the resource drilling at Danaya by Sebastian Kneer (General Manager Geology &amp; Exploration at Leo Lithium). Mr Kneer assumes Competent Person status for JORC Table 1 Sections 1 and 2 supporting the MRE.</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>During the Project site visit, the drilling, sampling, geological logging, density measurements and sample storage facilities, equipment and procedures were witnessed, and discussions held with Leo Lithium geologists and field staff. The facilities and equipment were appropriate, and the procedures were well designed and being implemented consistently.</li> <li>In the Competent Person's opinion, the geological and sampling data being produced is appropriate for use in an MRE.</li> </ul>
<b>Geological interpretation</b>	<p>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</p> <p>Nature of the data used and of any assumptions made.</p> <p>The effect, if any, of alternative interpretations on Mineral Resource estimation.</p> <p>The use of geology in guiding and controlling the Mineral Resource estimate. The factors affecting continuity both in grade and geology.</p>	<ul style="list-style-type: none"> <li>The geological interpretation of the northern part of the resource encompassing the Main, West I, West II, Sangar I and Sangar II domains is well understood. The recent drilling campaign has confirmed the interpretation of these zones.</li> <li>The geological confidence in the interpretation of the Danaya has been increased by using optical and acoustic sounding techniques to measure the orientation of some of the geological contacts and foliations. The orientation and structural relationships of the dykes has been sufficiently resolved using available diamond drilling and structural measurements.</li> <li>There is a strong correlation between pegmatites and lithium mineralisation. There is usually a sharp cut-off in mineralisation at the contact between the lithium-bearing pegmatites and the host granitic material. The boundaries of the pegmatites are in most cases used as a de facto grade boundary. In some instances, where it appears that the contact has not been interpreted correctly, possibly due to metasomatic or metamorphic alteration at the boundary, the grade boundary is based on the grade distribution.</li> <li>The Competent Person, Mr Matt Clark is confident any alternative interpretations would result in globally immaterial differences in the MRE.</li> </ul>
<b>Dimensions</b>	<p>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.</p>	<ul style="list-style-type: none"> <li>The Goulamina Mineral Resource has an overall strike extent of 2.9km N-S, and 1.5km E-W. This includes the Danaya area with a strike of 1.6km N-S, and width of 0.5km E-W. Mineralisation is exposed at surface in the central portion of the Main Zone. The remaining mineralisation domains including the in the Danaya area are buried below laterite and weathered saprolite, and saprock. Weathering and laterisation processes have removed most of the Li<sub>2</sub>O from the pegmatites between the surface and the base of complete oxidation. No resources have been defined in the weathered part of the resource as this clay-rich material is deleterious to the process and cannot be economically beneficiated.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>In the northeast part of the deposit the deepest drilling extends to 350m below surface and the deepest known mineralisation is at 340m below surface. The Inferred Resource extends to 300m below surface. The interpreted mineralisation has not been closed off at depth, although in a few areas, deep watercourses appear to have preferentially eroded spodumene (and <math>\text{Li}_2\text{O}</math>) from the pegmatite host.</li> <li>At Danaya, the deepest drilling extends to 245m below surface and the deepest known mineralisation is at 230m below surface. The Inferred Resource extends to 245m below surface within interpreted wireframes that are extrapolated 50m down dip from the closest drillhole.</li> </ul>
<b>Estimation and modelling techniques</b>	<p>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.</p> <p>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</p> <p>The assumptions made regarding recovery of by-products.</p> <p>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</p> <p>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</p> <p>Any assumptions behind modelling of selective mining units.</p> <p>Any assumptions about correlation between variables</p> <p>Description of how the geological interpretation was used to control the resource estimates.</p> <p>Discussion of basis for using or not using grade cutting or capping.</p> <p>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</p>	<ul style="list-style-type: none"> <li>The continuous and consistent nature of the mineralised northern domains (Main, West I, West II, Sangar I and Sangar II) allows geostatistical studies (variography) to be used to develop weighting parameters for ordinary kriging.</li> <li>The previous estimate of the Danaya zone by Mali Lithium in July 2020 used a probabilistic approach to model the pegmatites given uncertainties around the pegmatite orientations. Given the data available, it was deemed not possible to generate a set of 3D wireframes.</li> <li>The update to the Danaya resource includes new 3D geological wireframes based on the infill drilling and increased confidence in the continuity of spodumene mineralisation between drill sections. The modelled pegmatite dyke orientations are supported by structural data from diamond core.</li> <li>High-grade lithia values were reviewed, and the application of top-cuts is not considered necessary.</li> </ul> <p>In the north-eastern domains:</p> <ul style="list-style-type: none"> <li>Mineralised domains for all mineralised pegmatites (except for several insignificant narrow structures of uncertain orientation), were digitised on cross sections and wireframed into three dimensional shapes. Five domains are identified in the north-eastern part of the resource (Main, West I, West II, Sangar I and Sangar II). While the Danaya resource was wireframed separately.</li> <li>Drill hole sample data were flagged using domain codes generated within each of the mineralised domain wireframes.</li> <li>Following creation of a blank block model, each block is assigned a domain number, a lithology code, a weathering code, and subsequently a Mineral Resource classification code.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Anisotropic search directions are used by digitising a trend surface, which is then added to the block model and used to inform the search ellipsoid orientation for each block.</li> <li>Three separate estimation runs are completed for each lode with increasing search ellipse sizes (75m, 150m, 400m). The largest size search ellipsoid is used so that blocks distal from drilling, for example at depth, are informed with a grade. This allows a scoping-level optimisation to be undertaken to define areas that have reasonable prospects of eventual economic extraction and to ensure that placement of processing plant elements does not compromise the resource potential.</li> <li>The number of drill holes and individual samples required to inform a block varies with each estimation run. The 75m sized search ellipsoid required a minimum of 4 samples from each of 4 drill holes and a maximum of 20 samples. The 150m sized search ellipsoid requires at least 4 samples from a minimum of 3 drill holes, and the 400m search ellipsoid requires a minimum of 4 samples from each of 2 drill holes.</li> </ul> <p>In the Danaya domains:</p> <ul style="list-style-type: none"> <li>Geological wireframe interpretations were constructed using Leapfrog Geo software. Geological wireframes included weathering, lithological, faults, and mineralisation. The mineralised pegmatite domains were modelled as dykes in Leapfrog Geo using interval selections based on logged pegmatite and lithia grades.</li> <li>Prior to analysis, variables with detection limit assays were assigned a positive value equal to half the detection limit of the relevant grade variable.</li> <li>Drill hole sample data were flagged using domain codes generated within each of the mineralised domain wireframes. Samples were composited to 1 m intervals based on an assessment of the drillhole sample interval lengths.</li> <li>Statistical and geostatistical analysis was carried out using Snowden's Supervisor software.</li> <li>Sample populations were statistically analysed to derive geostatistical domain grouping. Statistical analysis included comparison of global grade distributions.</li> <li>Variography was completed for the grouped Danaya mineralisation domains. Variograms were calculated for lithia and iron oxide grade variables.</li> <li>Block modelling and grade estimation was carried out using Surpac software.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Quantitative kriging neighbourhood analysis was undertaken in Supervisor software to assess the effect of changing key kriging neighbourhood parameters on block grade and density estimates. Kriging efficiency (KE) and slope of regression (SOR) were determined for a range of block sizes, minimum and maximum samples, search dimensions and discretisation grids.</li> <li>A 10 m(E) x 20 m(N) x 10 m(RL) parent cell size was constructed covering the full volume of the mineralisation and additional space for mine infrastructure planning. The easting and elevation parent cell size was selected as just below half the average drill section spacing of 50 m x 50 m in the better drilled areas of the deposit. Sub-celling was employed to 1.25 m(E) x 2.5 m(N) x 1.25 m(RL) to improve block volume fitting to the wireframes.</li> <li>Mineralisation domains were coded in the block model, along with oxidation domains, and lithology.</li> <li>Three separate estimation runs are completed for each lode with increasing search ellipse sizes (161m, 215m, 322m). The largest size search ellipsoid is used so that blocks distal from drilling, for example at depth, are informed with a grade.</li> <li>The number of drill holes and individual samples required to inform a block varies with each estimation run. The 161m sized search ellipsoid required a minimum of 8 samples and a maximum of 28 samples. The 215m sized search ellipsoid requires at least 8 samples and maximum of 26 samples, and the 322m search ellipsoid requires a minimum of 8 samples, and maximum of 20 samples. The samples selected in the estimation search were not limited by the number of drillholes.</li> <li>Grade interpolation for Li<sub>2</sub>O was completed using ordinary kriging (OK) into the parent block cells. The search employed a dynamic anisotropy to allow the ellipse to rotate along the arcuate mineralisation domains.</li> <li>By-product recovery has not been considered for this deposit estimate.</li> <li>Fe<sub>2</sub>O<sub>3</sub>, which is deleterious to the beneficiation process, was estimated using ordinary kriging.</li> <li>No assumptions have been made regarding selective mining units at this stage.</li> <li>No correlation exists between Li<sub>2</sub>O and Fe<sub>2</sub>O<sub>3</sub> which were estimated independently.</li> <li>Model validation was carried out by: <ul style="list-style-type: none"> <li>Visually comparing block grades with surrounding drill hole grades</li> <li>Using swath plots to compare sectional drill hole and block grades as well as grades from previous models</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Volume comparisons between domain wireframes and contained blocks</li> <li>Global comparison between input grades and block grades.</li> <li>No mining has taken place and so no reconciliation data are available.</li> </ul>
<b>Moisture</b>	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul style="list-style-type: none"> <li>Tonnages have been estimated on a dry, in situ, basis.</li> </ul>
<b>Cut-off parameters</b>	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul style="list-style-type: none"> <li>No cut-off is applied to reporting. The pegmatites generally have mineralisation from footwall to hanging wall and will be mined in their entirety using visual geological control to avoid dilution at the contacts of the pegmatite.</li> </ul>
<b>Mining factors or assumptions</b>	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.	<ul style="list-style-type: none"> <li>Open cut mining using contract mining fleet and conventional drill and blast mining methods are envisaged in the DFS completed in 2020.</li> <li>An optimised pit shell (at US\$1250) was developed to determine the extent of resources that have reasonable prospects of eventual economic extraction.</li> <li>No assumptions regarding minimum mining widths and dilution have been made.</li> </ul>
<b>Metallurgical factors or assumptions</b>	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.	<ul style="list-style-type: none"> <li>The Mineral Resource estimate is supported by metallurgical test work undertaken between 2017 and 2020, by ALS, Nagrom and others, reported to the ASX on 27 November 2019 (Goulamina Metallurgy Test Work Surpasses Expectations), 17 September 2019 (Excellent Metallurgical Test Work Results) and 4 July 2018 (Goulamina Updated PFS Delivers Strong Project Outcomes). The test work programs included comminution test work, mineralogy using QEMSCAN, reflux classification, heavy liquid separation and DMS test work, flotation, and magnetic separation test work. A process flowsheet was developed based on the metallurgical test work programs. These resulted in achieving an average of 86.1% Li<sub>2</sub>O recovery in flotation, and overall average recovery of 78.2% Li<sub>2</sub>O, producing a high-quality chemical grade spodumene concentrate at &gt;6% Li<sub>2</sub>O. The results of the test work programs support the DFS released in 2020 and the DFS Update which was released in 2021.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Environmental factors or assumptions</b>	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.	<ul style="list-style-type: none"> <li>Environmental factors and assumptions have been studied as part of the Preliminary Feasibility Study (PFS) completed in 2019 and are reported there.</li> </ul>
<b>Bulk density</b>	<p>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.</p> <p>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.</p> <p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	<ul style="list-style-type: none"> <li>Bulk density determination for unweathered Danaya material is derived from an analysis of dry density measurements of drill core from 9 diamond drill holes.</li> <li>Whole core was used, but neither coated nor waxed. The rock material is not generally porous and does not have visible voids. The application of wax or other coating would not have a significant impact on the estimated density of the Mineral Resource.</li> <li>Weathered material is not considered as part of this Mineral Resource estimate. Bulk density is assumed, based on data from other equivalent granite-hosted deposits.</li> <li>Density is assigned in the model according to weathering horizons and rock types.</li> <li>The average bulk density factors applied to the current Danaya resource estimate are 2.73 t/m<sup>3</sup> for fresh pegmatite, 2.65 t/m<sup>3</sup> for fresh granite, and 2.50 t/m<sup>3</sup> for tonnage estimate for pegmatite and waste material above the top of fresh rock surface.</li> </ul>
<b>Classification</b>	<p>The basis for the classification of the Mineral Resources into varying confidence categories.</p> <p>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).</p> <p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p>	<ul style="list-style-type: none"> <li>Classification of the Mineral Resource was carried out taking into account the level of geological understanding of the deposit, quantity, quality and reliability of sampling data, assumptions of continuity and drillhole spacing.</li> <li>The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1, Section 2 and Section 3 of this table.</li> <li>The Danaya Mineral Resource is classified as an Indicated Mineral Resource for those volumes where in the Competent Person's opinion there is adequately detailed and reliable, geological, and sampling evidence, which are sufficient to assume geological and mineralisation continuity.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Indicated Mineral Resources are reported for areas within the Danaya mineralised domains with 50 m x 50 m spacing, and with estimation quality SOR greater than 0.6.</li> <li>The Danaya Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to imply but not verify geological and mineralisation continuity.</li> <li>Inferred Mineral Resources are reported for the periphery and depth extents of the major Danaya mineralisation domains and in smaller domains with limited samples. The Inferred classification generally represents areas with greater than 50 m x 50 m drillhole spacing, and estimation quality SOR less than 0.6.</li> <li>The MRE appropriately reflects the view of the Competent Person, Mr Matt Clark.</li> </ul>
<b>Audits or reviews</b>	The results of any audits or reviews of Mineral Resource estimates.	<ul style="list-style-type: none"> <li>Internal audits and peer review were completed by CSA Global which verified and considered the technical inputs, methodology, parameters and results of the Danaya estimate.</li> <li>No external audits of the Danaya estimate have been undertaken.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<p>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.</p> <p>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.</p> <p>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	<ul style="list-style-type: none"> <li>The relative accuracy of this Mineral Resource estimate is reflected in the reporting of the estimate as Measured, Indicated and Inferred Mineral Resources as per the guidelines of the 2012 JORC Code.</li> <li>The Mineral Resource statement relates to global estimates of in situ tonnes and grade.</li> <li>The model should not be used as a grade control model without addition of pit floor mapping to assist with determining actual pegmatite contacts as opposed to interpreted ones.</li> <li>No mining has taken place at this deposit to allow reconciliation with production data.</li> </ul>