BIRIMIAN

ASX Announcement ASX BGS

4 July 2018

HIGH GRADE MAIDEN ORE RESERVE FOR GOULAMINA

HIGHLIGHTS

- **Maiden Ore Reserve for Goulamina declared at 31.2Mt grading 1.56% Li_2O**
- **Supports a 16-year operating mine life at a production rate of 2Mtpa[1]**
- **59.5Mt of Inferred Resource remain available for potential upgrade to Indicated Mineral Resource status and possible subsequent conversion to Ore Reserve**

Birimian Limited (*ASX: BGS*) (**Birimian** or **the Company**) is pleased to announce the maiden Ore Reserve estimate for the Goulamina Lithium Project in Mali (**Goulamina** or **the Project**), based on the findings of the updated Pre-Feasibility Study (**PFS**).

The PFS, which is the subject of a separate announcement released today, demonstrates the technical and financial viability of a large scale, low cost open-cut mining operation and processing facility producing spodumene concentrate and recommends advancing the Project to the next stage of evaluation with a Feasibility Study.

Birimian Executive Director and Chief Executive Officer, Mr Greg Walker, said "The declaration of a maiden Ore Reserve is a major milestone for Birimian. The fact that the Company has been able to announce a substantial Ore Reserve of more than 31Mt – sufficient to support mining operations for an initial 16 years - and at a high grade of 1.56% Li_2O is indicative of the outstanding quality of the Project.

"This significant result at Goulamina and the upside demonstrated by the recently announced increased Mineral Resource positions this Project as one of the world's leading hard-rock lithium projects. The Company looks forward to rapidly advancing Goulamina towards development, while further expanding the Project's Mineral Resources."

[1] This production target was first announced in the ASX announcement entitled "*Goulamina Pre-Feasibility Study Delivers Strong Project Outcomes"* dated 4 July 2018 and released with this announcement. All material assumptions underpinning the production target continue to apply and have not materially changed.

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Mineral Resource Status

In late April 2018, Birimian released an update of the Goulamina Mineral Resource estimate (*BGS, 27 April 2018*), followed by a further update on 29 June 2018 (*BGS, 29 June 2018*). The current Mineral Resource estimate is detailed in Table 1 below. The Indicated component of the Mineral Resource and the findings of the PFS have been used to determine the Ore Reserve estimate announced in this release and used in the PFS.

It should be noted that the Inferred Resources were not considered in the determination of the Ore Reserve statement announced herein.

Table 1: Mineral Resources JORC Code (2012)[2]

Mineral Resources					
Category	**Domain**	**Tonnes (Mt)**	**Li_2O (%)**	**Li_2O (Mt)**	**Fe_2O_3 (%)**
Indicated	Main	12.2	1.24	0.15	0.96
	West	11.5	1.54	0.18	1.07
	Sangar I	13.8	1.64	0.23	1.03
	Sangar II	6.2	1.47	0.09	1.05
SUB-TOTAL INDICATED		**43.7**	**1.48**	**0.65**	**1.02**
Inferred	Main	3.3	0.91	0.03	1.05
	West	3.7	1.29	0.05	0.92
	Sangar I	10.1	1.53	0.15	1.00
	Sangar II	3.7	1.27	0.05	1.09
	West II	0.5	1.1	0.01	1.3
	Danaya	38.2	1.14	0.45	1.06
SUB-TOTAL INFERRED		**59.5**	**1.21**	**0.74**	**1.05**
TOTAL RESOURCE		**103.2**	**1.34**	**1.39**	**1.04**

Note: Apparent errors of summation may occur due to rounding.

Maiden Ore Reserve Estimation

The Ore Reserve estimate, as shown in Table 2, was prepared by Mr Quinton de Klerk, Director–Mining Engineering at Cube Consulting Pty Ltd (**Cube**) as Competent Person in accordance with the requirements of the JORC Code (2012 edition).

[2] The information in this announcement that relates to Mineral Resources is based on information previously announced by the Company in an announcement to the Australian Securities Exchange entitled "18.06.29 Danaya Mineral Resource Upgrade" (*BGS, 29 June 2018*), which is available to view on the Company's website at www.birimian.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimate in 29 June 2018 announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

In determining the Ore Reserve estimate, only Indicated Resources (as detailed in Table 1) have been considered and the Ore Reserve is a subset of those Indicated Resources. No Inferred Resources were used for the purposes of Ore Reserve determination and, where they occurred within the pit shell, they were treated as waste material.

The Ore Reserve was developed assuming a whole-of-ore mining methodology, resulting in 2% of available ore being rejected to waste from the contact zone between ore and waste.

Table 2: Maiden Ore Reserve Statement JORC Code (2012)

Category	Cut-off Li_2O%	Tonnes (M)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Probable	**0.00%**	**31.2**	**1.56**	**1.03**	**486,000**

The key PFS elements used to determine the Ore Reserve estimation are shown in Table 3 below.

Table 3: Key Inputs from PFS to Ore Reserve Estimate

Key Input	PFS
LOM metallurgical recovery (avg.)	70.4%
Li_2O concentration	6%
LOM operating cost C1 (avg.)	US$281*
LOM product selling price	US$666/t*

*Per tonne concentrate.

Processing and other costs utilised in the Ore Reserve estimation were as determined by the technical and financial consultants who contributed to the PFS. Ausenco Services Pty Ltd (**Ausenco**) were the lead contractors for the completion of the PFS and report generation. Ausenco also undertook process plant and infrastructure designs and the development of associated capital and operating cost estimates.

The mine plan associated with the Ore Reserve assumes a two-stage mining schedule to minimise the initial strip ratio and improve Project economics. The mine plan is not yet fully optimised and further work will be required as part of any future Feasibility Study (**FS**). The final pit design is depicted in Figure 1.

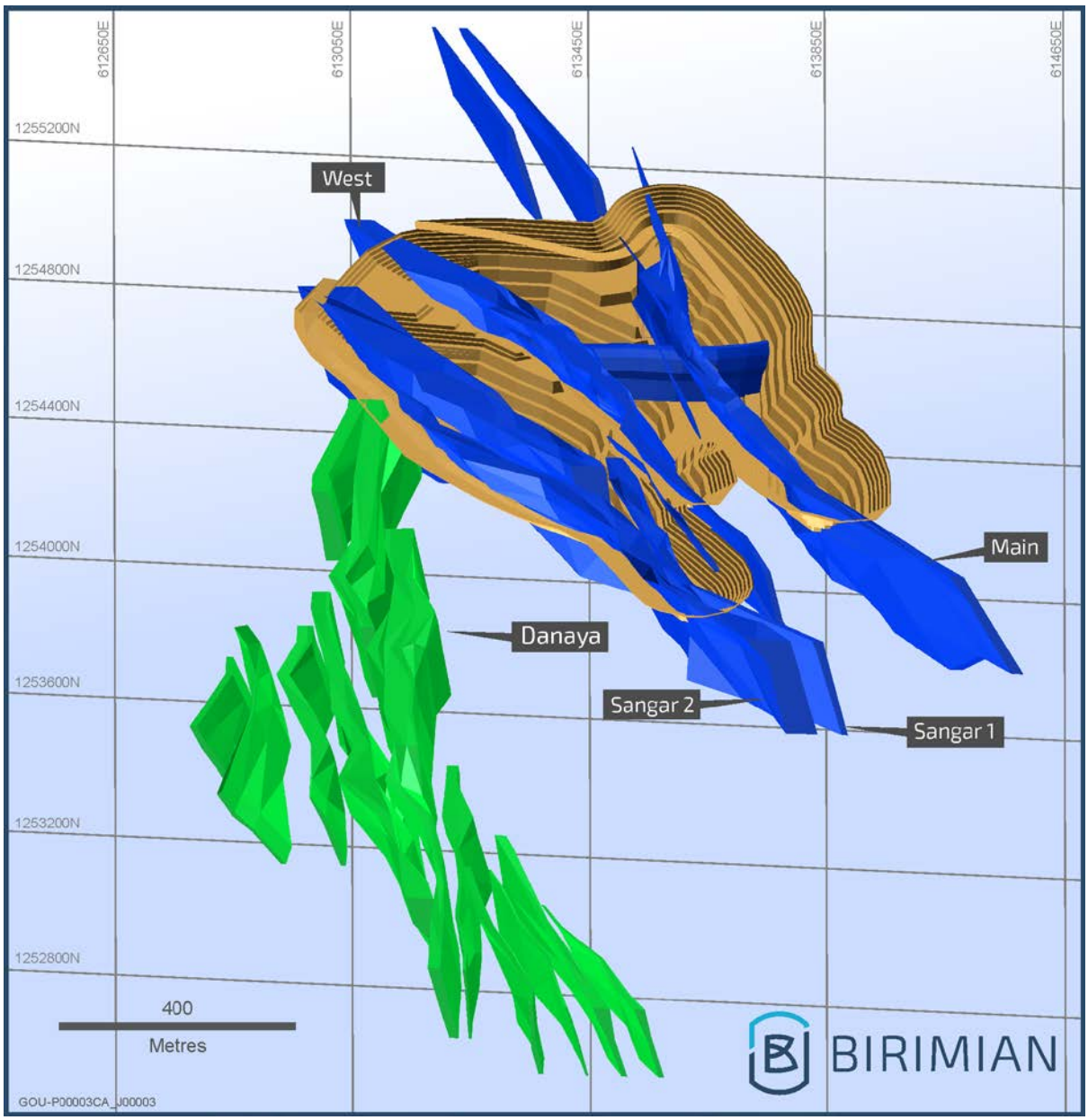

Figure 1: Open pit outline covering the Main, West and Sangar I and II deposits (in blue).

Additional Information Used for Clarification of Ore Reserves

Material Assumptions

The material assumptions and outcomes from the PFS material to understanding the reported estimates of Ore Reserves are disclosed in the announcement released simultaneously with this announcement.[3]

An open pit optimisation was completed to form the basis for pit designs and subsequent mining and processing schedules.

The mining costs used by Mr Quinton De Klerk to calculate the Ore Reserve estimate were based on LOM costs developed for the PFS.

Criteria Used for the Classification of Ore Reserves

In determining the Ore Reserve estimate, only Indicated Resources, as detailed in Table 1 above, were considered and the Ore Reserve is a subset of those Indicated Resources. No Inferred Resources were used for the purposes of Ore Reserve determination and, where they occurred within the pit shell, they were treated as waste material. The classification of the Indicated Resources on which the Ore Reserve is based is addressed further under the heading "Mineral Resource Status" on page 2 of this announcement.

The pit optimisation was completed using Whittle software based on conventional open pit mining as described above. The model was estimated by Localised Uniform Conditioning methods with an assumption of mining selectivity dimensions of 5mN x 5mE x 5mRL.

The Ore Reserve estimate has been classified based on the guidelines specified in the 2012 JORC Code and in the opinion of the Competent Person, the material costs and modifying factors used in the generation of the Ore Reserves are reasonable.

Mining Method and Assumptions

Mining factors and assumptions are based on the recently completed PFS update, announced today.[3]

An open pit optimisation was completed. Slope design criteria and processing recoveries were applied in the pit optimisation process, together with cost estimates for mining, processing, transport, sales and revenue projections, to form the basis for pit designs (see Figure 2) and subsequent mining and processing schedules.

Mining would take place using conventional open pit mining methods of truck and excavator in back-hoe configuration. A small-scale mining fleet, utilising 100t excavators matched with 90t rear dump trucks, was selected using contract mining services.

[3] Refer ASX announcement entitled "*Goulamina Updated Pre-Feasibility Study Delivers Strong Project Outcomes*" dated 4 July 2018 and released with this announcement. All material assumptions underpinning the production target, or the forecast financial information derived from the production target, continue to apply and have not materially changed.

Open pit wall slope angles were based on a geotechnical assessment. A ramp width of 25m was based on the selected truck size. The resulting overall slope angles on the final pit approximate 46° in fresh rock and 36° in weathered material, depending on ramp location. The shell selected for pit design from the open pit optimisation was based on key assumptions, including those as noted in Table 3.

Mine design criteria used for the detailed pit design include:

- 5m blast bench height mined in 2 x 2.5m flitches;
- pit stages large enough to negate any minimum mining width issues; and
- ramp width of 25m and 10% gradient.

Mining infrastructure was limited to Run of Mine (**ROM**) pad, haul roads, workshops and other buildings required for a contract mining operation.

No mining dilution has been added to the Ore Reserve model due to it being a recoverable estimate and the fact that the whole-of-ore mining concept applied intrinsically includes internal dilution. A mining loss of 2% was applied to account for anticipated losses at the edges of the ore zones. The whole-of-ore mining concept also assumes a 0% Li_2O cut-off grade.

The quantities of materials to be mined from the open pit are:

- 31.2Mt of spodumene-bearing ore at 1.56% Li_2O head grade;
- 109.1Mt of waste material; and
- 140.3Mt of total material.

The mining operation will be conducted on a seven day per week, 24 hour per day basis. Each day will comprise 3 x 8 hour shifts to comply with Malian labour law.

Water, power and telecommunications are delivered to the mining operations from infrastructure developed elsewhere on site.

All material will require drilling and blasting, with costs for bulk explosives and blasting accessories based on budget quotes from two established explosives supply companies operating in the region. Road and running surface maintenance is not expected to be onerous since much of the running will be on firm floors. Maintaining these surfaces will be possible with planning and management. This is considered to be a compact site with a relatively small fleet required.

Ore will be delivered from the open pit to stockpiles on the ROM pad. This ore will then be re-handled for mill feed using a front-end loader for delivery into the processing plant feed hopper. Mill feed operations will be available seven days per week, 24 hours per day, with a feed rate of up to 400 tph. Open pit mining to be implemented at the Project will be undertaken by a contract mine services provider.

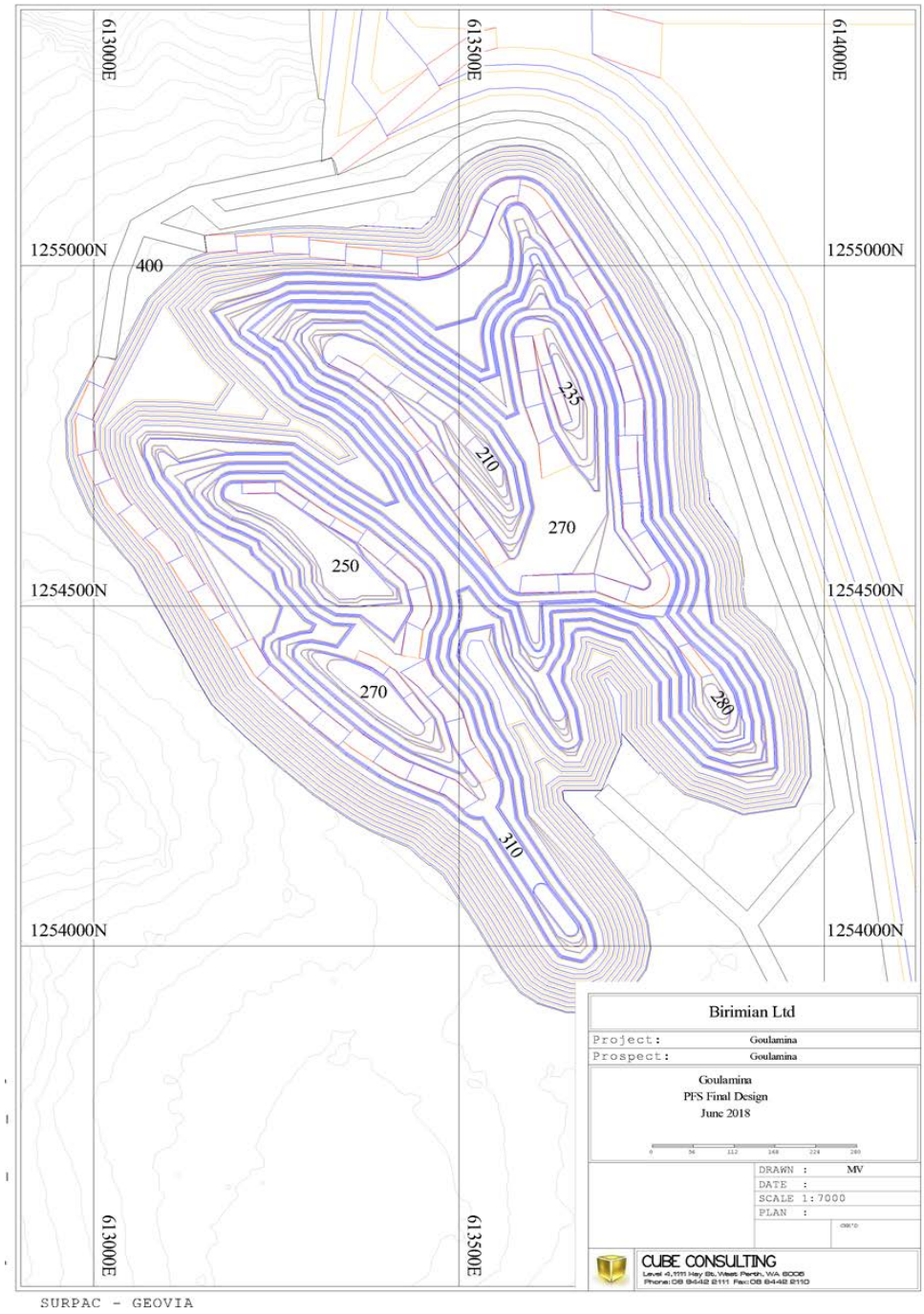

Figure 2: Goulamina PFS Proposed Pit Design.

Metallurgical Factors and Assumptions

The metallurgical process proposed for Goulamina is a proven process for the beneficiation of spodumene-containing ores to saleable spodumene concentrates (**Concentrate**).

The process is well tested and involves crushing, reflux classification, DMS, grinding, flotation, magnetic separation, flotation concentrate filtration and bulk transport to consumer, of a combined DMS/flotation concentrate. Likely target markets for the Concentrate produced at Goulamina are lithium battery chemical manufacturers servicing the Electric Vehicle (**EV**) market and other lithium battery uses, such as residential and industrial scale solar energy storage systems.

Metallurgical testwork has been conducted on 32 composite samples. These composites were developed to represent the potential variability of the ore across the three known ore zones (Main, West and Sangar) and biased toward the first three years of anticipated ore supply. They were tested against the flowsheet developed for the pre-feasibility study released by the Company on 4 September 2017 (*BGS; 4 Sep 2017*) and outlined above.

Metallurgical performance of the ore and process flowsheet were not optimised during the metallurgical testwork program and optimisation of both remains a task for any future work.

The testwork program was conducted by Nagrom & Company (**Nagrom**) in Kelmscott, Western Australia, and ALS Metallurgy Pty Ltd (**ALS**) in Balcatta, Western Australia, under the supervision of Birimian. Nagrom performed RC and mica removal testwork (including mica picking) and ALS completed the remainder of the testwork program.

The program included: mineralogy; comminution parameters; feed analysis; mineral beneficiation (HLS, milling and flotation) and tailings characterisation.

Overall product grade and recovery determined in the testwork is 5.9% Li_2O and 70.4%, respectively.

Based upon preliminary additional testwork, it is considered that optimisation of the flowsheet and conditions during any future FS testwork program will be able to increase the Li_2O grade above 6%, while maintaining or increasing overall recovery.

Testwork indicated Concentrate iron levels of 1.35% Fe_2O_3, which are at the high end of the generally accepted range. Birimian is aware that the current indicated required product specification for the target market to avoid penalties is a maximum 1.4% Fe_2O_3 in concentrate. Further metallurgical testwork and investigation into Concentrate iron levels will be undertaken and it is believed that a material reduction in these levels can be achieved at the same or higher metallurgical recovery.

Additional metallurgical testwork in the areas of crush size, grind size and flotation performance has indicated that overall process recovery may be materially improved, however insufficient work has been undertaken to-date to enable such data to be incorporated into the PFS outcomes. Future testwork will aim to both improve and optimise the metallurgical design criteria to achieve both higher overall recoveries and Concentrate grades.

Cut-off Grade

The whole-of-ore mining concept adopted for the Ore Reserve estimate assumes a 0% Li_2O cut-off grade.

Infrastructure

No appropriate infrastructure is available at the Project site, but there is sufficient available land to develop such required infrastructure on the permit held by Timbuktu Ressources SARL (100% Birimian). An existing major highway within 20 km of the identified Ore Reserve is suitable for the transport needs of the Project. The establishment costs of all other infrastructure required for the Project (including an access road to the highway described above) have been included in the capital cost estimate and no material obstructions to their development have been identified.

Market Assessment

The demand, supply and stock situation for spodumene concentrate, consumption trends and factors likely to affect supply and demand into the future were assessed based upon:

- the current and near to mid-term primary lithium supply/demand dynamics;
- pricing structure of non-transfer priced sales agreements; and
- pricing outlook by peer lithium development companies.

A customer and competitor analysis was not formally undertaken, however the identification of likely market windows for spodumene concentrate was undertaken based upon:

- an assessment of the current and near to mid-term primary lithium supply/demand dynamics;
- pricing structure of non-transfer priced sales agreements; and
- pricing outlook by peer lithium development companies.

Price forecasts were developed as described above and volume forecasts were developed based upon the forecast monthly ore treatment rate, lithia (Li_2O) grade and derived metallurgical recovery.

The customer specification assumed for spodumene concentrate is 6% Li_2O, with a reject limit of 5% Li_2O.

Economics

The economic analysis of Goulamina has been based on cash flows derived from Concentrate sales, driven by the operational production schedule and mine plan. The cash flow projections include:

- initial and sustaining capital cost estimates;
- mining, processing and Concentrate transport and logistics costs to FOB status at the Port of Abidjan, Ivory Coast;
- revenue estimates based on the LOM Concentrate pricing forecast;
- all relevant government fees, royalties, taxes and the like;
- closure costs based on an estimate provided by Digby Wells Environmental (**Digby Wells**); and
- a 10% real discount rate.

Other material factors include:

- an average ore grade of 1.56% Li_2O for the LOM;
- average process recoveries of 70.4% to a 6% Li_2O Concentrate;
- average Concentrate selling price of US$666/t, FOB Abidjan;
- the following exchange rates relative to US$:

Currency	Rate
US$	1.00
A$:	1.333
Euro:	0.83
ZAR:	11.765
XOF:	555.556

- Mali corporate tax rate of 25%;
- Mali ad valorem royalty of 3% and Mali ISCP royalty of 3%; and
- an annual inflation rate of 2%.

Environmental Factors

Environmental consultant Digby Wells has been engaged to undertake a formal Environmental and Social Impact Assessment (**ESIA**) of the Project. The ESIA Terms of Reference were presented to relevant governmental agencies on 13 April 2017 and have been approved. Subsequently, the required public consultation process has been undertaken successfully and the preliminary ESIA is in its final stages of preparation prior to lodgement for final assessment. Digby Wells completed biodiversity, wetlands, soils and heritage field work in early June 2017. In a preliminary report, Digby Wells advised the Company that it found no areas of significant concern that would warrant relocation of Project infrastructure as currently envisaged.

The ESIA process is continuing and the Company is confident that all relevant government approvals and permits will be obtained without material delay to the Project or having materially adverse conditions imposed.

Other Non-Mining Modifying Factors

No material naturally occurring risks have been identified.

The Company has engaged in discussions with potential offtake partners and the process is ongoing.

Greg Walker
Executive Director and CEO
Birimian Limited

APPENDIX 1

Competent Person's Statement

The information in this announcement that relates to Ore Reserves is based on, and fairly represents, information and supporting documentation prepared by Mr Quinton de Klerk Fellow of The Australasian Institute of Mining and Metallurgy. Mr de Klerk is a full-time employee of Cube Consulting Pty Ltd. Mr de Klerk 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 Ore Reserves'. Mr de Klerk consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward looking and cautionary statements

This announcement contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral resources, results of exploration and relations expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of lithium and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

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APPENDIX 2

JORC Code, 2012 Edition – Table 1
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (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.*	• Reverse Circulation (RC) drill holes were routinely sampled at 1m intervals down the hole. • Samples were collected at the drill rig by riffle or cone splitting drill spoils to collect a nominal 3 – 5 kg sub sample, with an additional 50% split for material > 5 kg. • Routine standard reference material, sample blanks, and sample duplicates were inserted or collected at every 10th sample in the sample sequence for RC drill holes. • Diamond drill holes (DD) were routinely sampled at 1m intervals through zones of interest. Drill core was sawn in half length-wise and a half of core sent for analysis. • All samples were submitted to ALS Bamako for preparation. Analysis was undertaken at ALS Perth by method ME-ICP89.
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).*	• Drill holes were completed by reverse circulation and diamond drilling techniques. • RC hole diameter is nominally 5.5 inch. A face sampling down hole hammer was used at all times. • Diamond drill hole are HQ-sized (64mm diameter core).
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.*	• A qualitative estimate of sample recovery was done for each sample metre collected. • Split samples were weighed to ensure consistency of sample size and to monitor sample recoveries. • Drill sample recovery and quality is considered to be excellent.
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.*	• All drill sample intervals were geologically logged by Company geologists. • Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering using a standardised logging system. • A small sample of washed RC drill material was retained in chip trays for future reference and validation of geological logging. • DD half core is retained in core trays at site.
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*	• RC 1m samples were riffle split or cone split at the drill rig. Approximately 10% of RC samples within the pegmatites were sampled wet. • Routine field sample duplicates were taken to

Criteria	JORC Code explanation	Commentary
	dry. • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	evaluate whether samples were representative. • Additional sample preparation was undertaken by ALS at their Bamako laboratory. • At the laboratory, samples were weighed, dried and crushed to -2mm in a jaw crusher. A 1.0kg split of the crushed sample was subsequently pulverised in a ring mill to achieve a nominal particle size of 85% passing 75µm. • Sample sizes and laboratory preparation techniques are considered to be appropriate.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Analysis for lithium and a suite of other elements is undertaken at ALS Perth by ICP-AES after Sodium Peroxide Fusion. Detection limits for lithium are 0.01-10%. • Sodium Peroxide fusion is considered a “total” assay technique for lithium • No geophysical tools or other non-assay instrument types were used in the analyses reported. • Review of routine standard reference material and sample blanks suggest there is a small positive analytical bias for assays <0.3% Li_2O in the reported analyses. • Results of analyses for field sample duplicates are consistent with the style of mineralisation being evaluated and considered to be representative of the geological zones which were sampled. • Internal laboratory QAQC checks are reported by the laboratory, including sizing analysis to monitor preparation. • Review of the internal laboratory QAQC suggests the laboratory is performing within acceptable limits.
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.*	• Drill hole data is compiled and digitally captured by Company geologists in the field. • The compiled digital data is verified and validated by the Company’s database consultant before loading into the drill hole database. • Twin holes were not utilized to verify results. • Reported drill hole intercepts are compiled by the Company’s Exploration Manager using Micromine software. • There were no adjustments to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collars were set out in UTM grid Zone 29N and WGS84 datum. • Drill hole collars were initially set out using hand held GPS. • All drill holes are routinely surveyed for down hole deviation at approximately 50m spaced intervals down the hole. • Worldview 2 elevation data was used to establish topographic control where appropriate.

Criteria	JORC Code explanation	Commentary
		• Locational accuracy at collar and down the drill hole is considered appropriate for this stage of exploration.
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.*	• All holes were nominally drilled on 25m or 50m spaced east-west orientated drill sections. • Hole spacing on section varies between 25m and 50m. • The reported drilling has been used to estimate a mineral resource.
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.*	• Mineralisation at Goulamina outcrops at surface and the geometry of mineralisation is therefore well-defined. • Drilling orientation has generally not biased the sampling.
Sample security	• *The measures taken to ensure sample security.*	• Samples are stored on site prior to road transport by Company personnel to the ALS laboratory in Bamako.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Cube undertook a site visit during drilling operations in May 2016 to review the sampling techniques discussed above. No major issues were reported.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The reported results are from an area within the Torakoro Permit, which is held 100% by Timbuktu Ressources SARL, a member of the Birimian Limited group of companies. • Tenure is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The area which is presently covered by the Torakoro Permit was explored intermittently by government agencies in the period 1990 to 2008. Exploration consisted of soil sampling and mapping for gold. • In 2007-08, an evaluation of the commercial potential for lithium at Goulamina was undertaken by CSA Global as part of the SYSMIN 7 economic development program. • CSA undertook mapping and bulk sampling of the Goulamina outcrop but did not undertake drilling. Bulk sampling and preliminary processing testwork confirmed the viability of the pegmatite at Goulamina to produce a

Criteria	JORC Code explanation	Commentary
		chemical grade lithium concentrate.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Pegmatite-hosted lithium deposits are the target for exploration. This style of mineralisation typically forms as dykes and sills intruding or in proximity to granite host rocks. • Surficial geology within the Project area typically consists of indurated gravels forming plateau, and broad depositional plains consisting of colluvium and alluvial to approximately 5m vertical depth. • Lateritic weathering is common away from the Goulamina deposit and in the broader Project area.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• The drill holes which are the basis for this mineral resource announcement have the following parameters applied. All drill holes completed, including holes with no significant lithium intersections, are reported. • Grid co-ordinates are UTM WGS84_29N • Collar elevation is defined as height above sea level in metres (RL) • Dip is the inclination of the hole from the horizontal. Azimuth is reported in WGS 84_29N degrees as the direction toward which the hole is drilled. • Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. • Intersection depth is the distance down the hole as measured along the drill trace. • Intersection width is the down hole distance of an intersection as measured along the drill trace. • Hole length is the distance from the surface to the end of the hole, as measured along the drill trace. • No results from previous exploration are the subject of this announcement.
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.*	• All drill hole intercepts are reported from 1m down hole samples. • Intercepts are reported within the mineralised wireframes developed for the resource estimate. • No grade top cut off has been applied. • No metal equivalent reporting is used or applied.
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*	• See discussion in Section 1 • Results are reported as down hole length.

Criteria	JORC Code explanation	Commentary
	lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
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.*	• No new drill hole information is reported in this press release; all historical drilling information, including maps and sections, has been previously reported in multiple ASX releases during 2017 and 2018.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Results have been comprehensively reported in this announcement. • Drill holes completed, including holes with no significant intersections, are 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.*	• There is no other exploration data which is considered material to the results reported in this announcement.
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.*	• RC drilling is ongoing.

Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

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.*	• Drilling database is maintained by Birimian's database consultant, Rock Solid Data Consultancy, in 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 used. Data transfer for downhole survey and assaying information is electronic via email. These and other workflow methods minimise the potential of errors. • Cube received data directly exported from Datashed in MS Access format, then completed validation checks on the database comparing maximum hole depths checks on all data, duplicate numbering, missing data, and interval error checks using validation rules generated in MS Excel, before importing records into a new MS Access database. Cube then verified the data using visual inspection of the drill holes in Surpac v6.8.1 in 3D, to identify any inconsistencies.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Matt Bampton, Principal Consultant, Cube Consulting, who is the Competent Person, conducted a site visit in May 2016, during which

Criteria	JORC Code explanation	Commentary
	• *If no site visits have been undertaken indicate why this is the case.*	time he inspected the Project area, including RC drilling, sampling and sample despatch for the receiving laboratory. Notes and photographs were taken and discussions were held with site personnel regarding geology and mineralisation of the deposits, procedures, sampling and database procedures, and Quality Control procedures. Minor recommendations were made for changes to process for future drilling programs. No other major issues were encountered.
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 confidence in the geological interpretation of the Main and West pegmatites at Goulamina is very good, as a result of the consistency of intercepts in RC and diamond core drilling programs and their correlation to the surface outcrops and sub-crops of spodumene-rich pegmatites. • The confidence in the geological interpretation of the two Sangar pegmatites is broadly similar, as the style and orientation of these pegmatites are consistent with the Main and West pegmatites. It may be more complex than has currently been interpreted, due to their relative proximity and the current drilling density. This confidence is reflected in the resource classification. • There is a very strong correlation between the mineralised portion of the pegmatite dykes and the total dyke intercept. In unweathered rock, very little pegmatite material is not significantly elevated in lithium content; thus the mineralisation boundaries for this resource match the lithological boundaries of the dykes. Portions of the weathered zones of the dykes exhibit partial depletion of spodumene, resulting in a lower level of lithium content.
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 Goulamina Mineral Resource area has dimensions of 1.2km (strike length) in six main dykes up to 100m (true width) and 250m (below surface). The maximum depth known to date for the deepest mineralisation is 220m below the surface.
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.*	• The block model was constructed using interpolation of lithium grade (as lithia - Li_2O) via Localised Uniform Conditioning (LUC), with Ordinary Kriging and Inverse Distance Estimation methods used as internal checks. A local recoverable model was considered to be appropriate for the intended level of mining studies. • High grade values were reviewed, but it was considered that application of top-cuts was not required. • Mineralised domains for five separate pegmatite dykes were digitised in cross-section using 3D strings and then wireframed to generate solids. These were a subset of a lithological interpretation of a total of 10 pegmatite dykes through the deposit area. • Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains and oxidation surfaces. Sample data was composited to three metre

Criteria	JORC Code explanation	Commentary
	• *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	downhole lengths using a best fit-method. • Interpolation parameters were set to a minimum number of 10 composites and a maximum number of between 22 and 30 composites in different domains for the estimate. A maximum search ellipse of 300m was used for estimation runs in the reportable resource. • Computer software used for the geostatistical and variographic analysis, modelling and estimation was a combination of Isatis and Surpac v6.8.1. • No by-product recoveries were considered; Fe_2O_3 was estimated by ordinary kriging, as an element of potential interest in terms of a future spodumene concentrate. • The parent block size used is 15mN x 10mE x 5mRL, and sub-blocked to 5mN x 5mE x 5mRL. The drilling density is generally a combination of a surface pattern of 25m x 25m, 50m x 25m and 50m x 50m. • No assumptions of selective mining units were made. • The mineralised domains acted as a hard boundary to control the Mineral Resource estimate. • Block model validation was conducted by the following means: o Visual inspection of block model estimation in relation to raw drill data on a section by section basis; o Volumetric comparison of the wireframe/solid volume to that of the block model volume for each domain; o A global statistical comparison of input and block grades, and local composite grade relationship plots ('swath plots' by Northing and RL), to the block model estimated grade for each domain; o Comparison of the (de-clustered) cut grade drill hole composites with the block model grades for each lode domain in 3D; and o No mining has taken place and therefore no reconciliation data is available.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Cut-off grade for reporting is 0.0% Li_2O – a whole-of-ore approach – based on preliminary economic considerations and the ability to make a saleable lithium concentrate from mining the entire pegmatite, rather than define internal lower grade components.
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.*	• The preliminary mining studies are based on open cut mining methods, using a contract mining fleet and conventional drill and blast mining methods. • These studies have been used to generate an open pit shell which has assisted in a process to limit the material in the block model to that component, which is considered to have reasonable prospects for eventual economic extraction.

Criteria	JORC Code explanation	Commentary
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.*	• In a 2017 study by ALS Metallurgy, a range of processing testwork on drill core from two drill holes, one from Main Zone and the other from West Zone, was undertaken, including comminution testwork, mineralogy using QEMSCAN, dense media separation and flotation tests. The results of this study indicated good lithium recoveries (up to 82.6%), to produce a high quality 'chemical grade' spodumene concentrate (~6.0% Li_2O). • Further testwork in 2018 is ongoing, with a metallurgical sampling program by ALS Metallurgy and NAGROM consisting of more than 10t of whole HQ diamond core from the pegmatites, focussed on areas within 40m of surface. The work includes comminution test work, mineralogy using QEMSCAN, reflux classification, heavy liquid separation, flotation and Concentrate dressing tests. Results to date have indicated that there is a reasonable expectation that commercial exploitation of the pegmatites is able to be achieved by the proposed process flowsheet.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Environmental consultant Digby Wells has been engaged to undertake a formal Environmental and Social Impact Assessment (ESIA) of the Project. • The ESIA Terms of Reference were presented to relevant governmental agencies on 13 April 2017. • Digby Wells completed biodiversity, wetlands, soils and heritage field work in early June 2017. In a preliminary report, Digby Wells advised the Company that they found no areas of significant concern that would warrant the relocation of Project infrastructure as it currently stands. • The ESIA process is continuing, with formal community consultation held during June 2018.
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 determination for unweathered material is derived from an analysis of dry density measurements of drill core from 14 diamond holes. • Whole core was used, but neither coated nor waxed. The risk of not using a method which adequately accounts for potential void spaces is considered to be low in both the pegmatites and granitic rocks. • In weathered material (including minor transported colluvium and *in-situ* laterite), bulk density was assumed, based on data from other equivalent granite-hosted deposits. • Bulk density was assigned within the block model attribute 'density' according to the weathering profiles and rock types.
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*	• Blocks have been classified as Indicated or Inferred, based on a combination of data spacing, interpolation metadata (number of composites used, conditional bias slope, kriging variance) and geological understanding. • Indicated Mineral Resources are defined nominally on 50m x 50m to 25m x 25m spaced drilling within the Main, West, Sangar I and Sangar II pegmatites.

Criteria	JORC Code explanation	Commentary
	Competent Person's view of the deposit.	• Inferred Mineral Resources are in part defined by data density greater than 50m x 50m spaced drilling, as depth extensions below the Indicated Mineral Resources within the Main, West, Sangar I and Sangar II pegmatites, and for the West II pegmatite. • The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Whilst Mr. Bampton (Competent Person) is considered to be independent of Birimian, no third-party reviews have as yet been completed on the June 2017 Mineral Resource or previous reported Mineral Resources from 2016 or 2017.
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 relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code. • The statement relates to a local estimation of tonnes and grade.

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore reserves.*	• The resource model used as the basis for this Ore Reserves update was compiled by Cube, based on the latest available drilling information. The model was estimated by LUC methods with an assumption of mining selectivity dimensions of 5mN x 5mE x 5mRL. The resource model estimation is discussed in detail in Section 3 of this Table. • The Mineral Resources reported are inclusive of the Ore Reserves reported here.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits undertaken indicate why this is the case.*	• The Competent Person has not attended a site visit and has relied on the reporting from Matt Bampton, Principal Consultant, Cube Consulting, who is the Competent Person for the Mineral Resource, following his site visit in May 2016.
Study status	• *The type and level of study undertaken to*	• This is a maiden Ore Reserve estimate for this

Criteria	JORC Code explanation	Commentary
	enable Mineral Resources to be converted to Ore Reserves. • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered*.	Project and is based on an updated Pre-feasibility Study, the completion of which coincides with this release. The study demonstrated that the Project is economically viable, taking into account all relevant modifying factors.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Central to the estimation of these Ore Reserves is that a "whole-of-ore" mining assumption has been made, which means mining at a zero cut-off grade within the pegmatite ore zones, thereby reducing the reliance on selective mining practices within the ore zones and visually controlled mining at the edges.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method (s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimization (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	Mining factors and assumptions are based on the recently completed PFS update (June 2018), summarised as follows: • An open pit optimisation was completed. Slope design criteria, processing recoveries were applied in the pit optimisation process, together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for pit designs and subsequent mining and processing schedules. • Mining is to take place using conventional open pit mining methods of truck and excavator in back-hoe configuration. • A small-scale mining fleet, utilising 100t excavators matched with 90t rear dump trucks, was selected using contract mining services. • Open pit wall slope angles were based on a geotechnical assessment. A ramp width of 25m based on the selected truck size. The resulting overall slope angles on the final pit approximate 46° in fresh rock and 36° in weathered material, depending on ramp location. • The shell selection for pit design from the open pit optimisation was based on key assumptions including; 70.4% recovery of Li_2O as a 6% spodumene concentrate; An average spodumene concentrate selling price of $666/t concentrate, with a planned feed throughput of 2 Mtpa. • Mine design criteria, used for detailed pit design, include: o 5m blast bench height mined in 2 x 2.5m flitches; o Pit stages are large enough to negate any minimum mining width issues; o ramp width of 25m and 10% gradient. o Mining infrastructure was limited to ROM pad, haul roads, workshops and other buildings for a contract mining operation. • No mining dilution has been added to the Ore Reserve model due to it being a recoverable estimate and the fact that whole-of-ore mining concept applied intrinsically includes internal dilution. A mining loss of 2% was applied to

Criteria	JORC Code explanation	Commentary
		account for anticipated losses at the edges of the ore lodes. • The amount of inferred material included within the open pit is negligible and has been treated as waste material throughout the planning and economic valuation process.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements*. • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The metallurgical process proposed for Goulamina is a proven contemporary process for the beneficiation of spodumene-containing ores to saleable spodumene Concentrates. • The process is standard practice and involves crushing, reflux classification, Dense Media Separation (DMS), grinding, flotation, magnetic separation, Concentrate (DMS and flotation) filtration and bulk transport to consumer. • Metallurgical testwork has been conducted on 32 composite samples. These composites were developed to represent the potential spatial variability of the ore across the three known ore zones (Main, West and Sangar) and biased toward the first three years of anticipated ore supply. They were tested against the flowsheet developed for the PFS released by the Company (*BGS, September 4 2017*) and described above. The average metallurgical recovery for each of the ore zones was applied to the total ore inventory on a weighted basis (based on years 1 to 3 ore mining), and then this weighted recovery was applied uniformly to all ore treated in the financial model. Metallurgical performance of the ore and process flowsheet were not optimised during the testing program and optimisation of both remains a task for future work. • No bulk or pilot testing has been undertaken for the PFS. • The metallurgical testwork conducted to date has indicated that the Goulamina Ore Reserve may be processed, using the process referred to above, to produce a spodumene concentrate of saleable grade. Testwork conducted on the samples described above has demonstrated that a spodumene concentrate with average Li_2O grade of 5.9% and average Fe_2O_3 grade of 1.34% may be produced at an average overall process recovery of 70.4%. 1.34% Fe_2O_3 is above the typical penalty specification for iron in spodumene concentrate in the target markets for Goulamina. In future studies, work to properly characterise this issue is envisaged and at this stage it is assumed that concentrate within typical specifications will be able to be produced.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterization and the consideration of potential sites, status of design options*	• Environmental consultant Digby Wells has been engaged to undertake a formal ESIA of the Project. • The ESIA Terms of Reference were presented to relevant governmental agencies on 13 April

Criteria	JORC Code explanation	Commentary
	considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	2017 and have been approved. • Digby Wells completed biodiversity, wetlands, soils and heritage field work in early June 2017. In a preliminary report, Digby Wells advised the Company that they found no areas of significant concern that would warrant the relocation of Project infrastructure as it currently stands. • Formal public consultation meetings for the ESIA have been completed successfully. • The ESIA process is continuing and the Company is confident that all relevant government approvals and permits will be obtained without material delay to the Project, or materially adverse conditions imposed.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• No appropriate infrastructure is available at the Project site, but there is sufficient available land to develop such required infrastructure on the permit held by Timbuktu Ressources SARL. An existing major highway within 20 km of the identified Ore Reserve is suitable for the transport needs of the Project. The establishment costs of all other infrastructure required for the Project (including an access road to the highway described above) have been included in the capital cost estimate and no material obstructions to their development have been identified.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.*	• Capital cost estimates for the PFS have been developed based on supplier quotations for major equipment items and factored estimates using in-house databases.
	• *The methodology used to estimate operating costs.*	• Operating costs have been estimated based on established rates for reagents and consumables; derived local rates for labour costs and their on-costs; a derived power cost based on contracted fuel price and equipment supplier quoted consumption rates; budget estimate of unit rates from an internationally recognised freight logistics management company for concentrate transport and logistics; mining costs have been developed from first principles and local rates, assuming contract mining. LOM C1 cash operating cost for the mine is US$281/t of concentrate, including transport to port and loading to ship.
	• *Allowances made for the content of deleterious elements*	• No allowances have been made for deleterious elements as indicated above.
	• *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.*	• The price deck used for the FOB (Abidjan) spodumene concentrate price was developed by an independent consultant The forecast prices have been based on: o An assessment of the current and near to mid-term primary lithium supply/demand dynamics; o Pricing structure of non-transfer priced sales agreements; and o Pricing outlook by peer lithium development companies.
	• *The source of exchange rates used in the study*	• Exchange rates used in the study are based on current typical rates to the US dollar as follows:

Criteria	JORC Code explanation	Commentary
		o A$: 1.333 o Euro: 0.83 o CNY: 6.429 o CAD: 1.279 o JPY: 111.111 o ZAR: 11.765 o XAF: 555.556 o XOF: 555.556
	• *Derivation of transportation charges.*	• Transportation charges are based on an estimate "for budget purposes" from an internationally recognised transport and logistics management service provider.
	• *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• No penalties have been assumed for failure to meet product specification. • Allowances made for royalties payable to the Government of Mali are based on an independent legal review of the statutory and regulatory environment in Mali.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Factors impacting revenue include: • A planned average head grade of 1.56 % Li_2O with quarterly fluctuations ranging from 1.32 % to 1.76 % Li_2O • An average concentrate price of $666/t (FOB Abidjan) • Concentrate transport costs of $82/wmt concentrate, inclusive of port charges • Royalties of 4.3% of gross revenue, or 6% of royalty price base.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*	• The demand, supply and stock situation for spodumene concentrate, consumption trends and factors likely to affect supply and demand into the future were assessed based upon: o The current and near to mid-term primary lithium supply/demand dynamics; o Pricing structure of non-transfer priced sales agreements; and o Pricing outlook by peer lithium development companies.
	• *A customer and competitor analysis along with the identification of likely market windows for the product.*	• A customer and competitor analysis was not formally undertaken, however the identification of likely market windows for spodumene concentrate was undertaken based upon: o An assessment of the current and near to mid-term primary lithium supply/demand dynamics; o Pricing structure of non-transfer priced sales agreements; and o Pricing outlook by peer lithium development companies.
	• *Price and volume forecasts and the basis for these forecasts.*	• Price forecasts were developed as described above and volume forecasts were developed based upon the forecast monthly ore treatment rate, lithia grade and derived metallurgical

Criteria	JORC Code explanation	Commentary
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	recovery. • The assumed customer specification assumed for spodumene concentrate is 6% Li_2O, with a reject limit of 5% Li_2O.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Results of the PFS update study were analysed by an independent financial modeler, taking into account relevant inflation and discount rates. • The financial analysis returned a robust result on all key valuation metrics. • Sensitivity analyses were carried out within this financial model across seven key categories in 10% increments, up to 40% on each category, with concentrate price proving to be the most sensitive, but still returning a positive NPV at a 40% decrease of the base price.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• The ESIA process is continuing, with formal community consultation held during June 2018
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• None identified to date. • None identified to date. • No marketing agreements have as yet been established for the project. • The reported results are from an area within the Torakoro Permit, which is held 100% by Timbuktu Ressources SARL, a member of the Birimian Limited group of companies. Tenure is in good standing. The ESIA process is continuing, with formal community consultation held during June 2018 and submission of the final ESIA report to government expected to occur later in the year.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Probable Ore Reserves were determined from Indicated Resource material as per the guidelines. • These results reflect the Competent Person's view of the deposit. • No Measured Mineral Resources have been established and consequently are not present in the Probable Ore Reserves.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No third-party reviews or audits have as yet been completed on the June 2018 Maiden Ore Reserve estimate.
Discussion of relative accuracy/confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical*	• The Ore Reserve estimate is the outcome of an updated Mineral Resource estimate and subsequent PFS update study completed in June 2018. That has taken into account geological, metallurgical, geotechnical, process engineering and mining engineering

Criteria	JORC Code explanation	Commentary
	procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognized that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	considerations • The Project has a robust NPV which remains positive up to 40% sensitivity for concentrate selling price, being the most sensitive high-level item. • The study was undertaken in USD with exchange rates applied as discussed above where applicable. • There are no known undisclosed areas of uncertainty. • There has been no production to date, so no comparison or reconciliation of data can be made. Standard industry practices have been used in the estimation process • In the opinion of the Competent Person, the material costs and modifying factors used in the generation of the Ore Reserves are reasonable.