

### ASX Release

## AGREEMENT SIGNED TO ACQUIRE MAJOR LITHIUM RESOURCE PROJECT IN NEVADA

## HIGHLIGHTS

Amani has entered into definitive transaction documentation to acquire 100% of Authium, holder of the 2.5Mt Lithium Carbonate Equivalent (LCE) Clayton Ridge Sedimentary Lithium Project in Nevada.

### **Clayton Ridge Lithium Project**

- Advanced lithium project with a substantial JORC Resource of 2.5Mt LCE 2.24Mt LCE classified as Measured and Indicated (500ppm cut-off).
- Located in the world class lithium mining region Clayton Valley,
  - Project located next to North America's only producing lithium mine Abermarle's Silver Peak.
  - Adjacent to several advanced lithium resources, Century Lithium Corp (TSXV:CYP) and Noram Lithium Corp (TSXV:NRM).
- Work to undertake a bankable feasibility study to commence in 2024.
- Two stage lithium production planned, targeting 5ktpa LCE in 2027 followed by a 25ktpa plant.
- Further Resource development to be undertaken via exploration drilling in Q1 2024.

### Authium Lithium Development Team to join Amani

- Authium technical team to join merged company:
  - Authium technical team responsible for the development of the Rincon Project which was sold to Rio Tinto for \$825M.
  - The team will be responsible for developing the resource to meet our production goals.

### **Re-Listing on the ASX**

- Amani intends to raise \$5,000,000 minimum (before costs) via a Public Offer to support the development and exploration of the Clayton Ridge Lithium Project.
- Amani to change its name to 'Authium Minerals Limited' and re-comply with Chapters 1 and 2 of the ASX Listing Rules.

Amani Gold Limited (ASX: ANL) ("Amani" or "the Company") is pleased to announce that it has entered into a binding terms sheet ("Terms Sheet") with Authium Ltd (ACN 653 683 286) ("Authium") and the major shareholder of Authium, being Annandale Street Holdings Pty Ltd (ACN 600 073 729) as trustee of the Annandale Street Holdings Trust ("Major Seller") on behalf of the shareholders of Authium (as set out in Schedule 1) ("Sellers") under which the Company will, on an 'arm's length commercial' basis and subject to satisfaction of various conditions precedent, acquire 100% of rights, and title, to all of the issued share capital of Authium ("Authium Shares").





#### About the Authium Clayton Ridge Lithium Project

Authium Ltd, which holds, through Authium LLC and Links Road, Inc. ("Authium Subsidiaries"), approximately 929 unpatented mining claims ("Tenements"), encompassing the Clayton Ridge lithium claystone property located at the Clayton Valley, western-central Nevada, United States of America ("Clayton Ridge Lithium Project") (together, with, amongst other things, including the Consolidation, Re-compliance and Public Offer and Secondary Offers, the "Proposed Transaction").

The Clayton Ridge Lithium Project is located in western Nevada in Esmerelda County's Clayton Valley. The Project is located next to Abermarle's Silver Peak Mine, being North America's only producing lithium mine, and is adjacent to several advanced lithium clay resources, including those owned by Century Lithium Corp (TSXV:CYP) and Noram Lithium Corp (TSXV:NRM).

Encompassing 729 lode claims and 138 placer claims over 60 square km. The Clayton Ridge Lithium Project has Mineral Resource estimates of 2.2Mt LCE (Measured and Indicated category) with drilling only represents a small portion of the highly prospective tenure. The estimates have been reported in accordance with the JORC Code (2012) guidelines.

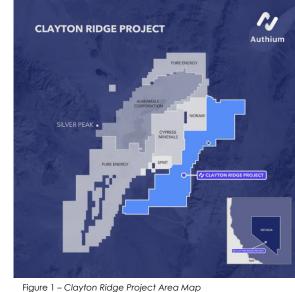




Figure 2 – Nevada Region Map

#### Mineral Resource Estimate – 2.5Mt LCE

The Clayton Ridge Lithium Project's mineralisation consists of lithium enriched hectorite clay that is a lacustrine clay deposit precipitated within an alkaline lake environment. Authium has delineated a substantial Mineral Resource Estimate (MRE) of 2.5Mt LCE (above 500ppm Li cut-off grade) based on 14 drill holes over three drilling campaigns (Table 1). The estimates are reported in accordance with the JORC Code (2012) guidelines. The ore body at Clayton Ridge is well understood and defined through previous drilling with homogenous mineralisation and a consistent mineralised horizon. Significant exploration upside exists in addition to the current Mineral Resource, with mineralisation open at depth and to the south.

		Li Cut-Off Grade:		Li Cut-Off Grade:		Li Cut-Off Grade:	
		500 ppm		750 ppm		1,000 ppm	
Classification	Metric Tons Ore	Equivalent Contained Metric Tons Li	Equivalent Contained Metric Tons Li <sub>2</sub> CO <sub>3</sub>	Equivalent Contained Metric Tons Li	Equivalent Contained Metric Tons Li <sub>2</sub> CO <sub>3</sub>	Equivalent Contained Metric Tons Li	Equivalent Contained Metric Tons Li <sub>2</sub> CO <sub>3</sub>
Measured	379,144,736	309,281	1,645,993	212,962	1,133,384	89,262	475,052
Indicated	141,325,417	113,274	602,844	78,576	418,181	22,834	121,523
Measured+ Indicated	520,470,153	422,555	2,248,838	291,537	1,551,560	112,096	596,575
Inferred	70,455,712	56,243	299,325	37,996	202,215	11,653	62,017

#### Clayton Ridge JORC2012 Mineral Resource Estimate (Dec23)

#### Notes:

1. The Mineral Resource estimates are reported on an in-situ basis at 500 ppm Lithium cut off grade.

- 2. The conversion for LCE  $(Li_2CO_3) = Li \times 5.3228$ .
- 3. Bulk density for grade-tonnage conversion = 1.7 g/cm<sup>3</sup>.

4. Tonnages are reported in metric units, grades are reported in ppm of lithium. Tonnages and grades are rounded appropriately. Rounding may result in apparent summation differences between tonnes, grade and contained mineral content. Where these differences occur, they are not considered to be material.





#### Location & Tenure

The Clayton Ridge project is in western-central Nevada in Esmerelda County's Clayton Valley, approximately 48 km (30 miles) southwest of Tonopah, Nevada (see figure 3). The property is on the eastern edge of Clayton Valley, with Angel Island to the west and Split Mountain and Clayton Ridge to the east. The yellow rectangle in Figure 3 depicts the location of the area/volume that has been estimated.

#### Geology Model

Using Leapfrog 3D modelling software, the geologic model was generated using a combination of a highresolution Hybrid Electromagnetic geophysical survey data, and lithologic logging data from 6 main categories, being gravel, sandstone, siltstone, silty clay, claystone and mudstone. To account for the likelihood of all channels containing similar gravel beds, existing channels identified via aerial photography were digitized and used to constrain the lithium model down to 200 feet below each channel.

The model was created by interpolating individual surfaces for each lithology type, according to the depositional environment, with fine-grained units dipping at four degrees towards the east-southeast, and with channels (sands and gravels) trending towards the west- northwest. These surfaces were combined into a volumetric geologic model and used to confine the resource block model.

Lithium concentrations were found to primarily be elevated only in finer grained units, so the lithium model was also limited by excluding model cells belonging to sandstone or gravel units. In general, the style of geology has a shallow dip toward the southeast, with the resource outcropping in the north.

#### Sampling and Cutoff

For the most recent drilling and sampling campaign in 2022, assays were analysed by the American Assay Laboratories located in Reno, Nevada. Measurements were determined by standard 4-acid digestion method with additional boric acid to measure lithium concentrations. Then, final analysis was conducted using an Agilent 5100 Inductively Couple Plasma Optical Emission Spectrometer. Quality control and quality assurance samples were also taken and submitted to the laboratory and the results demonstrated that accuracy and precision was acceptable for mineral resource estimation.

During the 2019 drilling campaign, for metallurgical testwork, one quarter of the split core samples was shipped to ANSTO Minerals located in Kirrawee, Australia, a commercial business unit of ANSTO providing lithium processing and development services.

Although extraction of lithium from clays has yet to be proven as economic at an industrial scale, Authium, building from the initial test work of ANSTO and AAL, has internally demonstrated a bench-scale lithium extraction from claystone samples collected both from outcrops on site and from sections of the drilled core. Based on their findings, a cut-off grade of 500ppm lithium has been used for the purposes of exploration and resource estimation.

The Competent Person has not observed Amani's lithium extraction process and, therefore, is not able to speak on the validity of the chosen cut-off grade of 500 ppm lithium. To provide a more detailed understanding of sensitivity, the resource is also presented at cut-off grades of 750 and 1,000 ppm lithium.

#### **Mineral Resource Classification**

A block model of 100 by 100 by 10 ft was created and each block was flagged with of the 6 lithology categories (domains). Interpolation was performed using Ordinary Kriging with an anisotropic variogram two structures with a total range of 1,800 ft in the major and 195 ft in the minor direction.

The MRE for the Clayton Ridge project has been classified in accordance with the JORC Code (2012). Numerous factors were taken into consideration when assigning the classification applied to the MRE.

Of these factors, it is considered that the classification has been primarily influenced by the drill coverage, geological complexity and data quality. The distances used for this resource estimation for Measured, Indicated, and Inferred were defined by 50% (900 feet), 75% (1,350 feet), and 100% (1,800 feet) of the variogram range respectively, and are measured from known values (drillholes).





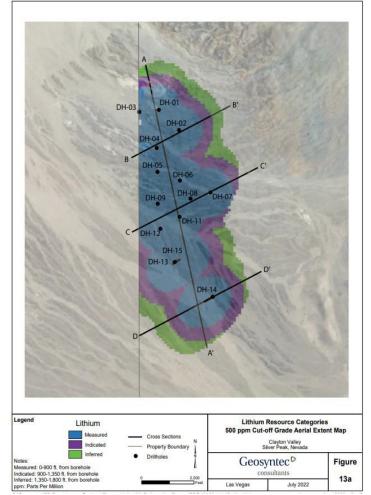


Figure 3 –Resource Extent Map (500ppm Cut-off)

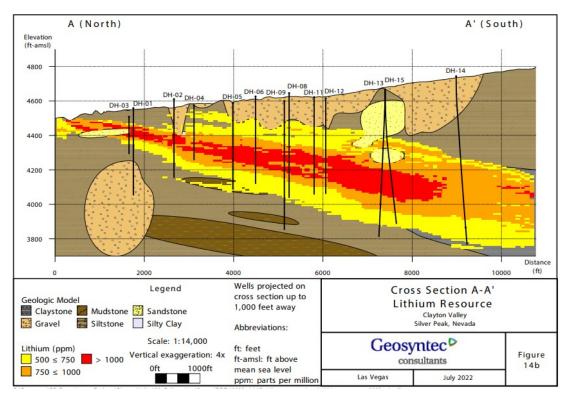


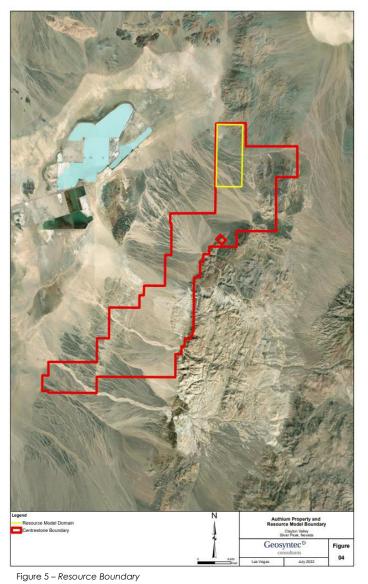
Figure 4 – Resource Cross Section A-A





### Resource expansion potential through additional exploration

Geologic units possibly containing significant Li hosted sedimentary clay identified with geophysical surveys conducted in the southern portion of Authium's title holding. Follow-up geochemistry samples of outcropping white aphanitic tuff yielding results above 500ppm Li have confirmed lithium mineralisation at surface.



## Future project development

Planned exploration and development activities following a successful ASX re-listing will be set out in the Company's Prospectus and include:

- Undertaking resource extension drilling in the southern portion of the Project Area.
- Completion of a bankable feasibility study for the commissioning of a 5ktpa LCE plant.
- The establishment of a pilot plant and design and permitting activities required to undertake construction.

### Authium Technical Team

The Authium technical team was heavily involved in the development of the direct lithium extraction (DLE) technology at Rincon Lithium. The Rincon Lithium Project – a large, lithium-brine project located in the heart of the 'lithium triangle' in Salar Del Rincón, Salta Province, Argentina. Rincon had a long-life, scalable resource capable of producing battery-grade lithium carbonate from raw brine with a total Mineral Resource Estimate of 11.8Mt LCE.

Incoming Managing Director Todd Vains was previously the Chief Operating Officer of Rincon Ltd and was responsible for its lithium, mining and smelting operations. Mr Vains worked closely with the engineering teams in





the delivery of the Rincon DLE Demonstration Plant. Additionally, Mr Cameron Stanton was the co-inventor of Rincon lithium's extraction process and was the former Technical Director of Rincon and led the engineering design and construction of the Commercial Demonstration Plant on the Rincon salar.

Rincon Limited sold the Rincon Lithium asset to Rio Tinto for \$825 Million in 2021 post the successful operation of the Commercial Demonstration Plant.

#### Material Information

### 1 Company background

The Company is an Australian public company limited by shares that was incorporated on 23 March 2005 as 'Mamba Resources Limited' (and, shortly thereafter, on 22 March 2006, changed its named to 'Burey Gold Limited') for the purposes of gold and uranium exploration and development at tenements located in West Africa and Western Australia and South Australia, respectively.

The Company was listed on the Official List of the ASX on 12 December 2006 and continued to operate as 'Burey Gold Limited' until 23 December 2016, where the Company was renamed to 'Amani Gold Limited', to align the Company's name with the new primary commercial focus of the Company at that time, being gold exploration and development at the 'Giro Gold Project' in the Democratic Republic of Congo.

On 17 August 2023, the Company was suspended from quotation on the Official List of the ASX after commencing the process for disposing of its main undertaking, being the 'Giro Gold Project', in early 2023 and failing to acquire a new main business undertaking within the relevant period established by the ASX under the ASX Listing Rules (see the Company's ASX Announcement titled 'Amani signs Term Sheet for sale of Giro Gold Project' dated 7 February 2023 for reference). The closing price of the Company's Shares at the date of suspension was \$0.001 per share. Since its suspension, the Company has searched for potential new commercial opportunities to benefit the Company's shareholders.

### Background to Authium

#### 2.1 General overview

On Completion, the Company will acquire the Authium Shares and, in turn, a 100% interest in Authium's Clayton Ridge Lithium Project.

### 2.2 Overview of Authium

#### General

Authium was incorporated on 14 September 2021 as an Australian proprietary company limited by shares (and later converted to a public company on 21 June 2022) for the purposes of lithium exploration and development at mining claims located in the Clayton Valley, western-central Nevada, United States of America. On the same date as its incorporation, Authium acquired Authium LLC and Links Road, Inc.

The Clayton Ridge Lithium Project's mineral deposit type is a lithium mineralised illite-smectite claystone within the Clayton Valley, which is host to multiple lithium deposits. The Clayton Ridge Lithium Project borders several mining claims owned by Cypress Development Corporation (TSXV: CYP), Noram Lithium Corporation (TSXV: NRM) and Albemarle Corporation (NYSE: ALB).

The Clayton Ridge Lithium Project's mineral deposit type is lithium mineralised clay, discovered within the interbedded claystone and mudstone formations inside of the subject property. These units occur as surface outcroppings in the north-eastern corner of the property and continue on strike in a southernly direction below a wedge of alluvial sand and gravel to a depth of roughly one hundred (100) feet below ground surface. The total thickness of the lithium mineralised claystone averages three-hundred and twenty (320) feet with an average grade of approximately one thousand and forty (1,040) ppm of lithium.

The Clayton Ridge Lithium Project encompasses approximately seven hundred and twenty-nine (729) lode claims, and 138 placer claims over 60km2. The Authium Subsidiaries have delineated a JORC Resource of 2.2Mt LCE (above 500ppm Li cut-off grade) (Measured and Indicated category) based on fourteen (14) drill holes over three drilling campaigns. The ore body at Clayton Ridge is well understood and defined through previous drilling with homogenous mineralisation and a consistent mineralised horizon. Significant exploration exists in addition to the current Mineral Resource, with mineralisation open at depth and to the south.

#### Corporate group structure

The corporate group structure of Authium is set out below. Upon Completion of the Proposed Transaction, Authium will become a wholly owned subsidiary of the Company (and, for the avoidance of doubt, the Authium Subsidiaries will remain as wholly owned subsidiaries of Authium).



2



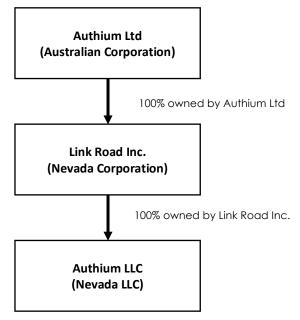


Figure 6 - Authium corporate group structure

#### About the Proposed Transaction

The Proposed Transaction will amount to a significant change to the nature and scale of the Company's activities and, as such, the Company will be required to obtain shareholder approval under ASX Listing Rule 11.1.2 at a general meeting and re-comply with Chapters 1 and 2 of the ASX Listing Rules in accordance with ASX Listing Rule 11.1.3 ("Re-compliance"). As part of this process, the Company intends, subject to shareholder approval, to consolidate its current securities on issue on a 1 to 200 basis ("Consolidation") and to undertake the Public Offer of the Public Offer Shares (see below).

Completion of the Proposed Transaction is conditional on the Company obtaining all necessary regulatory and shareholder approvals to give effect to the Proposed Transaction and satisfying all other requirements for the reinstatement of the Company's shares on the ASX (amongst other things).

On completion of the Proposed Transaction ("Completion"), the Company will be reinstated as a lithium explorer and, in line with this new direction, the Company intends to seek shareholder approval to changes its name to 'Authium Minerals Limited'.

#### **Business model**

Since its incorporation, Authium has continued to develop its mining claims through exploration drilling and geophysical surveying. Authium has also continued to acquire additional mining claims relating to the Clayton-Ridge Lithium Project.

Following Completion of the Proposed Transaction with the Company, Authium's proposed business model will be to further explore and develop the Clayton Ridge Lithium Project as per Authium's intended development program, which includes the completion of a Bankable Feasibility Study ("BFS"), further exploration of its mining claims, commencement of baseline studies required for permitting, further development of an process flowsheet to extract lithium and other valuable minerals and the completion of engineering and design for a 5,000t per annum lithium carbonate equivalent ("LCE") mine and processing plant.

If Authium is satisfied with the results of the BFS, then Authium will continue the development of the Clayton Ridge Lithium Project through the completion of engineering and design of a 5,000t per annum LCE mine and processing plant. Authium currently anticipates that, at completion of the engineering and design phase, the Company will potentially need to raise additional funding required to construct the proposed mine and processing plant. Authium plans to develop a low cost, low impact, direct extraction lithium production facility to leverage its strategic location to supply the North American electric vehicle market.

Authium currently expects to be able to complete all of this work over the first two years following the Proposed Transaction and does not require additional funding to complete this work.

Whilst Authium is completing the necessary workstreams to be construction ready for the 5,000tpa LCE mine and processing plant, it will also be investigating and progressing workstreams for a larger mine





which can be developed once the initial 5,000tpa LCE mine and processing plant is operational. The Company's business model is to initially develop the smaller 5,000tpa LCE mine and processing plant, followed by a larger 25,000tpa operation if appropriate at the time. The rationale for the two stages is the speed at which a smaller mine can be developed.

#### Key dependencies

The key dependencies influencing the viability of Authium's business model, and the Proposed Transaction include:

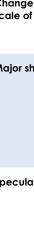
- the Company's ability to re-comply with Chapters 1 and 2 of the ASX Listing Rules to enable reinstatement of the Company's securities on the ASX;
- completion of the Proposed Transaction;
- the Company's ability to raise the Minimum Subscription amount under the Proposed Transaction:
- exploration success;
- commodity price volatility and exchange rate risks;
- maintaining title to the Clayton Ridge Lithium Project and receiving required permitting and approvals to conduct the Clayton Ridge Lithium Project;
- favourable results on the Company's proposed economic assessments to support the technical and economic feasibility of lithium direct extraction for the Clayton Ridge Lithium Project at a commercial scale, including the proposed BFS taking into account the risks of the Clayton Ridge Lithium Project;
- receiving the funding required to carry out the Company's proposed business model;
- sufficient worldwide demand for lithium chemicals; and
- the market price of lithium remaining higher than the Company's costs of any future production.

#### **Key risk factors**

Shareholders should be aware that if the Transaction Resolutions are approved, the Company will be changing the nature and scale of its activities, which will expose the Company to various risk factors. These risks are both specific to the industry in which the Company operates and also relate to the general business and economic environment in which the Company will operate. An investment in the Company is not risk free and Company shareholders should consider the risk factors described below, together with information contained elsewhere in this Explanatory Statement.

The key risks associated with Authium, and the Proposed Transaction are identified below, noting that the list should not be taken as an exhaustive list of the risk factors to which the Company and its shareholders may be exposed to.

Risk	Explanation		
Removal from suspension from trading on the Official List of the ASX	The Company's securities were suspended from trading on 17 August 2023. The Company intends to be removed from suspension from trading on the Official List of the ASX, however, this is subject to completion of the Proposed Transaction and Public Offer and satisfaction of various ASX conditions. There is a risk that the Company will not be able to complete the Proposed Transaction or Public Offer or satisfy the ASX's conditions.		
Change in the nature and scale of activities	As part of the Company's change in nature and scale of activities, the ASX will require the Company to re-comply with Chapters 1 and 2 of the Listing Rules. There is a risk that the Company may not be able to meet the requirements of ASX for removal from suspension from trading on the Official List of the ASX.		
Major shareholder risks	One of the Sellers will become a major shareholder of the Company upon completion of the Proposed Transaction and will hold approximately 50% of the Company upon completion of the Proposed Transaction (assuming Minimum Subscription under the Public Offer is achieved). If this Seller decides to sell their holding in the future, there is a risk that it may cause the price of the Company Shares to decline. As a major shareholder of the Company's decisions and matters requiring member approval such that the influence of other members is limited.		
Speculative investment	The Public Offer should be considered speculative due to the nature of Authium's business. There cannot be any assurance as to payment of dividends, return of capital or		





only	
NSG	
personal	
For	

Risk	Explanation
	the market value of shares. In particular, the price at which an investor may be able to trade shares may be above or below the price paid for those shares. Potential investors must make their own assessment of the likely risks and determine whether an investment in the Company is appropriate having regard to their own particular circumstances.
	Careful consideration should be given to all matters raised and the relative risk factors prior to considering an acquisition of Shares. Some of these risks can be mitigated by the use of appropriate safeguards and actions, but some are outside of the control of the Company and cannot be mitigated. The risks can broadly be classified as those general to investing in resource companies and risks that are specific to an investment in the Company.
Exploration, geological and development risks	Mineral exploration and development is a speculative and high-risk undertaking that may be impeded by circumstances and factors beyond the control of the Company. The Company is subject to customary risks associated with an exploration entity, such as the volatility of industrial mineral prices and exchange rates, exploration costs, native title and indigenous heritage issues and risks with respect to the holding of exploration tenure.
Funding	The funds raised under the Public Offer are considered sufficient to meet the immediate objectives of the Company. To support its ongoing operations and implementation of strategies, further funding may be required by the Company in the event that costs exceed estimates or revenues do not meet forecasts.
Commodiły price and currency exchange risks	As the Company's potential earnings will be largely derived from the sale of mineral commodities, the Company's future revenues and cash flows will be impacted by changes in the prices and available markets of these commodities. Any substantial decline in the price of those commodities or in transport or distribution costs may have a material adverse effect on the Company and the value of its shares.
	Commodity prices fluctuate and are affected by numerous factors beyond the control of the Company. These factors include current and expected future supply and demand, forward selling by producers, production cost levels in major mineral producing centres as well as macroeconomic conditions such as inflation and interest rates.
Agents and contractors	The Directors are unable to predict the risk of financial failure or default or the insolvency of any of the contractors which will be used by the Company in any of its activities or other managerial failure by any of the other service providers used by the Company for any activity. Any default or insolvency is outside the Company's control and may have an adverse effect on the Company's operations.
Environmental risks	The Company's activities are subject to the environmental laws inherent in the mining industry and those specific to Nevada, United States of America. The Company intends to conduct its activities in an environmentally responsible manner and in compliance with all applicable laws. However, the Company may be the subject of accidents or unforeseen circumstances that could subject the Company to extensive liability.
	In addition, environmental approvals may be required from relevant government or regulatory authorities before activities may be undertaken which are likely to impact the environment. Failure or delay in obtaining such approvals will prevent the Company from undertaking its planned activities. Further, the Company is unable to predict the impact of additional environmental laws and regulations that may be adopted in the future, including whether any such laws or regulations would materially increase the Company's cost of doing business or affect its operations in any area.
Contract risk	The operations of the Company will require the involvement of a number of third parties, including suppliers, contractors and customers. With respect to these third parties, and despite applying best practice in terms of pre-contracting due diligence, the Directors are unable to completely avoid the risk of:
	<ul> <li>financial failure or default by a participant in any joint venture to which the Company or its subsidiaries may become a party;</li> </ul>
	• insolvency, default on performance or delivery, or any managerial failure by any of the operators and contractors used by the Company or its subsidiaries in its exploration activities; or insolvency, default on performance or delivery, or any managerial failure by any other service providers used by the Company or its subsidiaries or operators for any activity.
	Financial failure, insolvency, default on performance or delivery, or any managerial failure by such third parties may have a material impact on the Company's operations and performance. Whilst best practice pre-contracting due diligence is undertaken for all third parties engaged by the Company, it is not possible for the Company to predict or protect itself completely against all such contract risks.





Risk	Explanation
Key management	The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. The Company may be detrimentally affected if one or more of the key management or other personnel cease their engagement with the Company.
Litigation risk	The Company may in the ordinary course of business become involved in litigation and disputes, for example with service providers, customers or third parties infringing the Company's intellectual property rights. Any such litigation or dispute could involve significant economic costs and damage to relationships with contractors, customers or other stakeholders. Such outcomes may have an adverse impact on the Company's business, reputation and financial performance.
	In particular, the Company notes that one of the Authium Subsidiaries is currently involved in litigation in relation to unpatented mining claims that a third party has located over some of the mining claims that make up a portion of the Clayton Ridge Lithium Project. See below for further information.

At the date of this announcement, one of the Authium Subsidiaries, being Authium LLC, is currently involved in litigation in relation to unpatented mining claims that a third party has located over some of the unpatented mining claims held by Authium LLC that make up part of the Clayton Ridge Lithium Project. Authium LLC has filed a complaint against the third party, requesting that the relevant Court enter a judgement for quiet title and seeking damages and injunctive relief to prevent further trespass on Authium LLC's mining claims. The third party has filed an answer denying the allegations of trespass, and it has asserted a counterclaim against Authium LLC, in which the third-party requests that title be quieted in the located ground to the third party while also seeking damages for trespass and injunctive relief against Authium LLC.

To prevail in the quiet title action, Authium LLC must demonstrate that it located and maintained its senior lode claims in compliance with all applicable laws, and that it has made, or is working to make, a discovery of valuable minerals on its claims. In order for the third party to prevail in its counterclaim, it must demonstrate that Authium LLC's claims were not located in substantial compliance with the law, and they are therefore invalid so as to leave the ground open for subsequent locations. As the junior locator, the third party must demonstrate that its junior placer claims were located in good faith, in substantial compliance with the law, and that it has made a discovery of valuable placer minerals in the junior claims. This litigation is ongoing and, at the date of this announcement, a trial date for the litigation has been set for 8 July 2024.

If the third party is successful in its counterclaim against Authium LLC, then Authium LLC could lose title to the unpatented mining claims that are subject to the litigation and the Company, upon Completion, could be prevented from conducting exploration, development and mining activities on the affected unpatented mining claims. At the date of this announcement, the quantum of potential amounts that the Company might, post-Completion, be required to pay to the third party if the litigation is unsuccessful cannot be determined, nor can the amount that the third party might be required to pay to Authium LLC should Authium LLC successfully prosecute the action be determined at this time.

The diagram below indicates the location of the third-party claims which have been 'overstaked' over the unpatented mining claims held by Authium LLC. The overstaked claims are within the black lined area.

### 3 Clayton Ridge Lithium Project

#### 3.1 General

Authium holds the Tenements described as the Clayton Ridge Lithium Project through the Authium Subsidiaries and the Project is located at the Clayton Valley, western-central Nevada, United States of America. The Clayton Ridge Lithium Project is located in the Esmerelda County, approximately 50km southwest of Tonopah, Nevada.

The Clayton Ridge Lithium Project's mineral deposit type is a lithium mineralised illite-smectite claystone within the Clayton Valley, which is host to multiple lithium deposits. The Clayton Ridge Lithium Project borders several mining claims owned by Cypress Development Corporation (TSXV: CYP), Noram Lithium Corporation (TSXV: NRM) and Albemarle Corporation (NYSE: ALB).

The Clayton Ridge Lithium Project's mineral deposit type is lithium mineralised clay, discovered within the interbedded claystone and mudstone formations inside of the subject property. These units occur as surface outcroppings in the north-eastern corner of the property and continue on strike in a southernly direction below a wedge of alluvial sand and gravel to a depth of roughly one hundred (100) feet below



ground surface. The total thickness of the lithium mineralised claystone averages three-hundred and twenty (320) feet with an average grade of approximately one thousand and forty (1,040) ppm of lithium.

The Clayton Ridge Lithium Project encompasses approximately 729 lode claims, and 138 placer claims over 60km<sup>2</sup>. The Authium Subsidiaries have delineated a JORC Resource of 2.2Mt LCE (above 500ppm Li cut-off grade) (Measured and Indicated category) based on 14 drill holes over three drilling campaigns. The ore body at Clayton Ridge is well understood and defined through previous drilling with homogenous mineralisation and a consistent mineralised horizon. Significant exploration exists in addition to the current Mineral Resource, with mineralisation open at depth and to the south.

#### 3.2 Location

Access to the Clayton Ridge Lithium Project is by means of paved roads arriving from Tonopah, the nearest support center, on United States Highway 95 South for approximately 34km and turning west for 24km onto Silver Peak Road. There are gravel and dirt access roads from Silver Peak Road that service the power lines.

The terrain consists of multiple deeply incised drainage gullies within the colluvial fan that originates from Split Mountain to the east and slopes overall toward the west. There is limited infrastructure on the Clayton Ridge Lithium Project. The local paved roads are well maintained, and there are several gravel roads, including a power line access road onto the Clayton Ridge Lithium Project.

The nearest community to the Clayton Ridge Lithium Project is the unincorporated community of Silver Peak. Much of the population is the temporary workforce for the Mineral Ridge gold mines and the Albemarle Corporation lithium brine operation. The main commercial centre with readily available resources is Tonopah, located roughly 35 miles northeast of the subject property. The community of Tonopah is a regional hub for mining, resource materials, and services, including hotels, a grocery store, restaurants, hardware stores, and government offices.

#### 3.3 Authium exploration

Only a small portion of the Clayton Ridge Lithium Project has been drilled and explored, with the potential to extend current resources with further drilling and exploration. Additionally, there has been no previous mining production on the mining claims held by Authium LLC.

That being said, to date, the Clayton Ridge Lithium Project has been developed by Authium through the drilling of fourteen (14) diamond drill holes during the period from 2018 to 2022. The Clayton Ridge Lithium Project has an initial mineral resource estimate of two million, two hundred and forty-eight thousand, eight hundred and thirty-eight (2,248,838) metric tonnes of LCE at a cut-off grade of five hundred (500) ppm. Exploration drilling campaigns have also been conducted in part of the claimed area from October 2018 to April 2022 utilising a diamond drillhole ("DDH") core drilling rig.

The 2018 drilling campaign consisting of four (4) drillholes occurred in the southern portion of the subject property. The results of the first drilling campaign were exploratory in nature. The 2019 drilling campaign consisted of four (4) drillholes just north of Silver Peak Road to test exploration targets generated from the surface sampling. Assay results from the drilled core confirmed elevated lithium concentrations near a mineralized outcrop discovered during surface sampling and reconnaissance.

In 2020, a drilling campaign consisting of seven (7) drillholes was designed to further develop the lithium mineralization south of Silver Peak Road by following the lithium-mineralized trend on strike from the second drilling campaign. The third campaign drill program was paused, as the 2020 project's targeted exploration volume goal of two hundred thousand (200,000) tons of LCE was met.

The second and third drilling campaigns consisted of fourteen (14) vertical drillholes with a total drilled footage of roughly nine thousand one hundred (9,100) feet. The borings were drilled to depths between roughly two hundred (200) and twelve hundred (1,200) feet and spaced at roughly one thousand (1,000) feet apart. Each drillhole produced a ninety-six (96) millimeter outside diameter sized core from which core samples were collected, split, and analysed. In early 2022, a resource expansion drilling project was executed by drilling at three locations. These borings were set at a 45-degree angle from vertical and meant to target both a southerly extension of the lacustrine claystone deposits and a geophysical anomaly showing to the south-east.

#### 3.4 Exploration results

Geologic units possibly containing lithium hosted sedimentary clay identified with Hybrid electromagnetic geophysical surveys ("HSAMT") conducted in the southern portion of the Clayton Ridge Lithium Project. Follow-up geochemistry samples of outcropping white aphanitic tuff yielding results above 500ppm lithium have confirmed lithium mineralisation at surface.





#### 3.5 Proposed activities at Clayton Ridge Lithium Project

Following Completion, the Company will change its activities to lithium exploration with a focus on the discovery of lithium deposits and the development of existing lithium deposits at its Clayton Ridge Lithium Project.

The proposed plan of work for the next twenty-four (24) months following the Proposed Transaction will be to complete the following activities:

- conduct an exploration drilling program within the prospective tenements. To date a geophysical and surface sampling program has been conducted on this area;
- process development. Authium has previously completed extensive work on a sulphuric acid leach process. This will be completed, and work commenced on an alternative hydrochloric acid process. A single process will be selected from this work;
- completion of a BFS during the final quarter of 2024. This is anticipated to include all the required study work inclusive of mining, process, permitting, marketing, cost and capex analysis;
- baseline permitting work was started during 2023 and this will continue into 2024 to support the permitting requirements for the 5,000tpa LCE mine and processing plant initially and then the larger 25,000tpa operation if appropriate at the time; and
- at the completion of a successful BFS, a front-end engineering and design program will commence which, subject to a successful completion of the program, will place the Company in the position to commence construction of the smaller 5,000tpa LCE mine and processing plant.

This proposed plan of work represents the current intention at the date of this announcement and is subject to change.

#### 4 Details of Proposed Transaction

#### 4.1 Terms Sheet

The Company and Authium entered into the Terms Sheet to set out the material terms and conditions of the Proposed Transaction (i.e., the sale and purchase of the Authium Shares by the Company from the Sellers), which are to be formalised in due course in a written sale and purchase agreement between the parties ("Share Purchase Agreement") and any other agreement or deed considered necessary or desirable by the parties to give effect to the Proposed Transaction ("Definitive Documentation").

The total consideration payable by the Company to the Sellers (or their nominee(s)) and/or Authium (as the context requires) as part of the Proposed Transaction is as follows:

- an exclusivity fee in the sum of \$60,000.00 (inclusive of any GST) per thirty (30) day period for each full thirty (30) day period that passes from the execution date of the Terms Sheet until the earlier of the date:
  - that is no later than one-hundred and eighty (180) calendar days from the execution date of the Terms Sheet (or such other date agreed by the parties to the Terms Sheet in writing) ("Formalisation Date"); and
  - of the general meeting of the Company's shareholders to be held to approve the Transaction Resolutions, assuming that the Company obtains effective shareholder approval for all Transaction Resolutions at that meeting ("Approval Date"),

by way of immediately available funds to the Sellers' nominee, which is capped at a total amount of \$360,000.00 (unless otherwise agreed by the Parties in writing) ("Exclusivity Fee");

subject to satisfaction (or waived, as permitted) of certain conditions set out in the Terms Sheet and approval by the ASX (as required):

- an initial approval fee in the sum of \$500,000.00 (inclusive of any GST) by way of immediately available funds payable to Authium within ten (10) business days of the Approval Date ("Initial Approval Fee"); and
- a further approval fee in the sum of \$100,000.00 (inclusive of any GST) by way of immediately available funds payable to Authium per thirty (30) day period for each full thirty (30) day period that passes from the Approval Date until the earlier of Completion and the date that is ninety (90) days from the Approval Date ("Post-Approval Period"), which is capped at a total amount of \$300,000.00 (unless otherwise agreed by the Parties in writing) ("Further Approval Fees"); and





• the issue of up to 253,125,000 consideration shares in the ordinary share capital of the Company (on a post-Consolidation basis), being an aggregate amount of shares equal to the value of \$50,625,000.00 (i.e., with a deemed issue price per share equal to the Public Offer price per Public Offer Share, being \$0.20) to the Sellers (or their nominee(s)) at Completion ("Consideration Shares"),

(together, the Exclusivity Fee, Initial Approval Fee, Further Approval Fees and Consideration Shares are the "Consideration").

The Company notes that the parties to the Terms Sheet have also agreed that, if Completion of the Proposed Transaction does not occur within the Post-Approval Period due a breach of the Terms Sheet by the Sellers or the parties to the Terms Sheet failing to satisfy certain conditions set out in the Terms Sheet, then Authium will issue the Company (or its nominee(s)) an aggregate amount of Authium Shares equal to the total value of the Initial Approval Fee and Further Approval Fees (together, as applicable, the "Approval Fees"), with a deemed issue price of \$0.16 per Authium Share) within ten (10) business days of the end of the Post-Approval Period to repay the Company for the Approval Fees ("Repayment Shares").

The parties to the Terms Sheet also intend to enter into any other agreement or deed, in addition to the Terms Sheet and Share Purchase Agreement, considered necessary or desirable to give effect to the Proposed Transaction. Otherwise, Completion of the Proposed Transaction is conditional on a number of conditions precedent being satisfied (or waived) by the parties to the Terms Sheet that are considered standard for transactions of this nature.

#### 4.2 Material items for Proposed Transaction

Subject to Company shareholders approving the resolutions necessary to effect the Proposed Transaction at a general meeting of shareholders to be held in due course, the Company will, as part of the Proposed Transaction:

- conduct the Consolidation;
- acquire the Authium Shares;
- issue the Consideration Shares to the Sellers (or their nominee(s));
- as applicable, pay the Consideration (other than the Consideration Shares) to the Sellers and/or the Company;
- issue the Public Offer Shares to raise at least \$5,000,000.00 (before costs) and up to \$10,000,000.00 (before costs) under the Public Offer pursuant to the Prospectus;
- issue the Lead Manager Options to the Joint Lead Managers (or their nominee(s));
- issue the Director Options to the proposed Directors (or their nominee(s)) upon Completion of the Proposed Transaction;
- issue the Operations Manager Options to the proposed Operations Manager (or his nominee(s)) upon Completion of the Proposed Transaction;
- vest all existing Performance Rights on issue by the Company immediately prior to completion of the Proposed Transaction (i.e., after the Consolidation) and convert them to Shares as part of the Proposed Transaction pursuant to their respective terms of issue;
- change the nature and scale of the Company's activities to lithium exploration and development in western-central Nevada, United States of America;
- restructure its Board, with:
  - Mr Conrad Karageorge transitioning to a non-executive Director and Mr Todd Vains replacing him as Managing Director;
  - Mr Peter Huljich retiring as a Director and Mr Peter Secker replacing him as non-executive Chairman; and
  - Mr Cameron Stanton becoming an executive Director,

effective on, and from, Completion of the Proposed Transaction; and

- enter into with, or amend existing versions of, the employment agreements and/or consultancy agreements of the incoming Directors and, as applicable, key management personnel; and
- re-comply with Chapters 1 and 2 of the Listing Rules to allow for the Company's securities to recommence trading on the Official List of the ASX.





The Company also proposes to change its name from Amani Gold Limited to "Authium Minerals Limited". However, it is possible that the Proposed Transaction may still proceed without this change of name if the necessary resolution to approve the change of company name is not passed by Company shareholders.

#### 4.3 Share Purchase Agreement

The parties to the Terms Sheet intend to enter into the Share Purchase Agreement (and any other Definitive Documentation) considered necessary or desirable to give effect to the Proposed Transaction. Otherwise, Completion of the Proposed Transaction is conditional on a number of conditions precedent being satisfied (or waived) by the parties to the Terms Sheet that are considered standard for transactions of this nature, including approval of Company shareholders (as required).

#### 4.4 Proposed director and key management personnel matters

The Company proposes to enter into with, or amend the current version of, the employment agreements and/or consultancy agreements of the proposed Directors upon Completion of the Proposed Transaction. Additionally, Mr Sam Pigram will be engaged, effective from Completion of the Proposed Transaction, as the operations manager of the Company. The proposed terms of the various agreements will be disclosed in the Notice of Meeting and/or Prospectus, as required.

#### 4.5 Conversion of Performance Rights

The Company advises that, as previously approved by shareholders, it currently has 10,750,000 performance rights (post-Consolidation basis) on issue to three (3) of the Company's current Directors, being Conrad Karageorge, John Campbell Smyth and Peter Huljich (and/or their respective nominee(s)) and to a nominee of the Company's current Company Secretary ("Performance Rights"). Specifically, each of the persons identified above have been issued the Performance Rights identified in the table below:

Performance Rights holder	No. of Performance Rights held			
	Pre-Consolidation basis	Post-Consolidation basis		
Mr Conrad Karageorge (and/or his nominee(s))	650,000,000	3,250,000		
Mr Peter Huljich (and/or his nominee(s))	650,000,000	3,250,000		
Mr John Campbell Smyth (and/or his nominee(s))	650,000,000	3,250,000		
Mr James Bahen (and/or his nominee(s))	200,000,000	1,000,000		
Total	2,150,000,000	10,750,000		

As per the respective terms of the various Performance Rights and the Company's employee incentive securities plan, the Board of the Company has sole discretion in determining if all, or a percentage of, the Performance Rights will vest and become exercisable upon the occurrence of a change of control event (or similar event, as permitted in the context of the various Performance Rights). Accordingly, the Company's board has determined that all Performance Rights currently on issue will automatically vest and convert into Shares upon completion of the Proposed Transaction (which will occur after the Performance Rights are consolidated as part of the Consolidation). The Company will undertake all actions necessary to ensure that, to the extent necessary, the Performance Rights are cleansed as part of the Proposed Transaction.

#### 4.6 Expiry of Existing Options

The Company advises that, as at the date of this announcement, it currently has 47,400,913 options (on a post-Consolidation basis) on issue ("Existing Options"). However, based on the Existing Options expiry date being 15 January 2024, the Company anticipates that the Existing Options will expire before the Consolidation based on the indicative timetable provided at section 10 of this announcement. The Company has included these Existing Options in the 'existing' column of the capital structure table at section 6 of this announcement for transparency but does not consider the Existing Options relevant for the purposes of the Proposed Transaction.



### 4.7 Advantages of the Proposed Transaction

The Company is of the view that the following is a non-exhaustive list of advantages of the Proposed Transaction:

- by completing the Proposed Transaction, the Company will create a portfolio of assets, comprising the Clayton Ridge Lithium Project;
- as a result of the Public Offer, the Company will be well capitalised with an additional ten million dollars (\$10,000,000) in capital (before costs, assuming Maximum Subscription). These funds will primarily be used to fund exploration and other work on the Clayton Ridge Lithium Project with a view to achieving capital growth for shareholders;
- the injection of capital via the Public Offer will significantly strengthen the Company's balance sheet. This will make the Company more attractive to investors which may improve the Company's ability to raise further funds as, and when, required via equity and debt markets;
- a larger market capitalisation and enhanced shareholder base resulting from the Proposed Transaction may provide a more liquid market for the Company's Shares than that which has existed previously;
- the change in nature of the Company's activities could attract new investors and may allow the Company to raise additional working capital (if required) and, as such, the Company may increase its ability to acquire further projects; and
- by completing the Proposed Transaction, the Company's securities will, subject to, among other things, satisfying ASX's conditions, be removed from suspension from quotation on the ASX, which will give shareholders an opportunity to trade their Shares for value.

#### 4.8 Disadvantages of the Proposed Transaction

The Company is of the view that the following is a non-exhaustive list of disadvantages of the Proposed Transaction:

- assuming that the Public Offer is fully subscribed, all Shares are issued to the Sellers and all existing Options are not exercised, the Proposed Transaction will result in Shareholders' interests in the Company being diluted by approximately sixty-seven percent point zero-eight (67.08%) based on the Company's post-Consolidation capital structure. This will in turn reduce the respective Voting Power of each existing shareholder;
- upon completion of the Proposed Transaction, the Company will be changing the nature of its activities to lithium exploration and development in western-central Nevada, United States of America, which may not be consistent with the objectives of shareholders; and
- the Company and its shareholders will be exposed to the risks associated with Authium and its business;
- the Major Seller will acquire voting power in the Company, which may deter a takeover offer for the Company as the Major Seller will be able to block a compulsory acquisition of Shares under the Corporations. A takeover offer may be attractive to Shareholders as they are often made at a premium to the market price of Shares; and
- Shareholders may believe that there is a possibility for a superior proposal to emerge in the foreseeable future to recapitalise the Company. As at the date of this announcement, no superior proposal has been received by the Company. While it is possible that a superior proposal would emerge, at the date of this announcement, there is no reason to believe that a superior proposal is likely to be forthcoming.

### 5 Offers under Prospectus

#### 5.1 Public Offer

As part of the Proposed Transaction, subject to Shareholder approval, the Company intends to raise up to \$10,000,000 (before costs) ("Maximum Subscription") through the issue of up to 50,000,000 Company Shares (on a post-Consolidation basis) ("Public Offer Shares") at an issue price of \$0.20 per Public Offer Share ("Public Offer"). The minimum subscription amount for the Public Offer to proceed is \$5,000,000.00 (before costs) ("Minimum Subscription"). The Public Offer will not be underwritten.

The Public Offer will be made pursuant to a prospectus to satisfy the Company's re-compliance with Chapter 1 and 2 of the ASX Listing Rules ("Prospectus"). Subject to foreign investor restrictions, the Public Offer will be open to members of the general public.





The Company advises that the terms of the Public Offer are indicative only at this stage and may be subject to variation at the absolute discretion of the Company to account for various factors and market conditions.

#### 5.2 Secondary Offers

#### **Consideration Offer**

The Company proposes to issue the 253,120,000 Considerations Shares to the Sellers (and/or their nominee(s)) under the Prospectus ("Consideration Offer"). See section 4.1 for further information on the Consideration Offer.

#### Lead Manager Offer

The Company has entered into the Joint Lead Manager Engagement Letter with the joint lead managers of the Public Offer (the "Joint Lead Managers") to govern the terms on which the Joint Lead Managers will provide lead manager and bookrunner services to the Company in relation to the Public Offer (noting that the Joint Lead Managers will not underwrite the Public Offer).

As consideration for the services provided by the Joint Lead Managers, the Company will pay in their respective proportions, being 50% each of the following ("Respective Proportions"):

- a management fee equal to 2.0% of the gross amount raised under the Public Offer, regardless
  of which investors the funds are received from and whether the funds are received or arranged
  by the Company, the Lead Managers or a third party ("Proceeds"); and
- a selling fee equal to 4.0% of the Proceeds.

The Company will also pay to the Lead Managers (or nominee(s)) a lead manager option fee in their Respective Proportions, comprising the number of options equal to 2.0% of the Company's fully diluted Shares on issue following Completion of the Public Offer ("Lead Manager Options"). The Lead Manager Options are to be issued in two tranches:

- 1. tranche 1: the number of Lead Manager Options equal to 1.0% of the Company's fully diluted Shares on issue following completion of the Public Offer and exercisable at a 50% premium to the issue price of the Public Offer on or before the date that is 36 months from the date of issue; and
- 2. tranche 2: The number of Lead Manager Options equal to 1.0% of the Company's fully diluted Shares on issue following completion of the Offer and exercisable at a 100% premium to the issue price of the Offer on or before the date that is 36 months from the date of issue.

The Lead Manager Options are to be issued at the time that the last Public Offer Shares are issued under the Public Offer. If required, the Company must seek shareholder approval for the issue of the Lead Manager Options.

The Company will also pay a fixed fee of A\$50,000 for work previously undertaken with respect to preparation of the prospectus, due diligence process and investor engagement to one of the Joint Lead Managers ("Work Fee").

#### Director Offer

The Company proposes to issue up to 15,719,932 options ("Director Options") under the Prospectus to the proposed Directors of the Company upon Completion of the Proposed Transaction with an exercise price of \$0.25 per option and an expiry date of 30 June 2028 ("Director Offer"). The Director Offer will be subject to shareholder approval (as applicable) and will otherwise occur on standard terms and conditions for issues of similar securities to directors.

#### **Operations Manager Offer**

The Company proposes to issue up to 1,612,301 options ("Operations Manager Options") under the Prospectus to the proposed Operations Manager of the Company upon Completion of the Proposed Transaction with an exercise price of \$0.25 per option and an expiry date of 30 June 2028 ("Operations Manager Offer"). The Operations Manager Offer will be subject to shareholder approval (as applicable) and will otherwise occur on standard terms and conditions for issues of similar securities to similar consultants/employees.

Together, the Consideration Offer, Lead Manager Offer, Director Offer and Operations Manager Offer are referred to as the "**Secondary Offers**". The Company also advises that it will take all actions necessary to issue and cleanse the Shares converting from the vesting existing Performance Rights (under the Prospectus or otherwise, as required).





#### 6 Pro-forma capital structure

The pro forma capital structure of the Company, assuming the Transaction Resolutions required to effect the Proposed Transaction are passed, and the Proposed Transaction completes, is set out in the table below:

		Completion of Proposed Transaction		
Indicative Capital structure <sup>1</sup>	Existing		Maximum Subscription	
Existing Shares (post-Consolidation basis) <sup>2</sup>	125,717,206	125,717,206	125,717,206	
Consideration Shares <sup>3</sup>	-	253,125,000	253,125,000	
Public Offer <sup>4</sup>	-	25,000,000	50,000,000	
Shares issued upon conversion of existing Performance Rights (post-Consolidation) $^{\rm 5}$	-	10,750,000	10,750,000	
Total (undiluted)	125,717,206	414,592,206	439,592,206	
Existing Options (post-Consolidation basis) <sup>6</sup>	47,400,913	47,400,913	47,400,913	
Existing Performance Rights (post-Consolidation basis) <sup>5</sup>	10,750,000	-	-	
Lead Manager Options <sup>7</sup>	-	8,811,844	9,321,844	
Director Options <sup>8</sup>	-	15,719,932	15,719,932	
Operations Manager Options <sup>9</sup>		1,612,301	1,612,301	
Fully Diluted Share Capital (excluding existing Options)	136,467,206	440,739,283	466,246,283	
Fully Diluted Share Capital (including existing Options)	183,868,119	488,137,196	513,647,196	

#### Notes:

1.

2

7

Assumes no additional Shares are issued between the date of the announcement and completion of the Proposed Transaction. That being said, the table may be subject to variation due to unresolved commercial matters involving Authium that may impact the capital structure.

The existing Shares figure does not include the Shares converting from the existing Performance Rights as set out at section 4.5.

3. See section 4.1 for further information on the Consideration Shares.

4. See section 5.1 for further information on the Public Offer Shares.

5. See section 4.5 for further information on conversion of the existing Performance Rights.

See section 4.6 for further information on the expiry of the existing Options. 6. 7.

See section 4.1 for further information on the Lead Manager Options. 8.

See section 5.2 for further information on the Director Options.

See section 5.2 for further information on the Operations Manager Options.

#### Persons to acquire control, or voting power, of 20% or more in the Company as a result of Proposed Transaction

The Major Seller will, and/or the Sellers (and/or their nominee(s)) may, acquire control, or voting power, of 20% or more in the Company as a result of the issue of the Consideration Shares as part of the Proposed Transaction. The Company's position with respect to the potential control and/or voting power related issues will be set out in the applicable notice of meeting. However, at this stage, the Company anticipates that it will seek shareholder approval for the purposes of item 7 of section 611 of the Corporations Act with respect to the Major Seller and/or the Sellers (and/or their nominee(s)). Accordingly, an independent expert report, opining on whether the Proposed Transaction is fair and reasonable to shareholders, will be included in the notice of meeting.





#### 8 Board and key management personnel

#### 8.1 Overview of changes to Board and key management personnel

The Company will restructure its Board and key management personnel to reflect the Company's shift to lithium exploration specifically. The following changes will be made effective on, and from, Completion of the Proposed Transaction:

- Mr Conrad Karageorge will transition to a non-executive Director and Mr Todd Vains will replace him as Managing Director;
- Mr Peter Huljich will retire as a Director and Mr Peter Secker with replace him as non-executive Chairman; and
- Mr Cameron Stanton will become an executive Director.

#### 8.2 Proposed Board and key management personnel upon Completion of Proposed Transaction

Upon Completion of the Proposed Transaction, the Board and key management personnel will be as follows:

Board	Position
Mr Todd Vains	Managing Director
Mr Peter Secker	Non-Executive Chairman
Mr Cameron Stanton	Executive Director
Mr Conrad Karageorge	Non-Executive Director
Mr John Campbell Smyth	Non-Executive Director
Ms Anna Nahajski-Staples	Non-Executive Director
Mr James Bahen	Company Secretary

The Company proposes to enter into with, or amend the current version of, the employment agreements and/or consultancy agreements of the proposed Directors. Additionally, Mr Sam Pigram will be engaged, effective from completion of the Proposed Transaction, as the Technical and Operations Manager of the Company.

#### Details of Proposed Board members

Brief background information for each proposed Director upon Completion of the Proposed Transaction is set out as follows:

#### Mr Todd Vains - Managing Director

Mr Vains is an experienced mining executive having worked in the mining, smelting and associated trading activities of the industry for the past 20+ years. Mr Vains holds a Bachelor of Economics from Monash University.

Recently, Mr Vains co-founded and established the operations of PTR Holdings Pty Ltd trading as 'Nexus Recycling', an Australian based battery recycling company. Mr Vains has been supporting the development of Authium Ltd as a corporate advisor since 2020.

From 2012 to 2019, Mr Vains was the Chief Operating Officer of Rincon Ltd (wholly owned subsidiary of Rincon Corporation), responsible for lithium, sodium bicarbonate and lead mining operations. Mr Vains was also responsible for all secondary lead smelting and wholesale sales operations in Australia. Mr Vains led the successful re-start and operation of the Magellan lead carbonate deposit in Western Australia and also oversaw the Argentinian lithium operations including the operation and production of lithium carbonate at site.

Prior to joining Rincon Ltd, Mr Vains spent thirteen years at Nyrstar B.V. in a variety of operational and commercial roles.

Mr Vains will be an independent Director.

#### Mr Peter Secker – Non-Executive Chairman

9





Mr Secker is a mining engineer with over 40 years of project development, site operations and corporate experience in the global mining and resources industry. Mr Secker has acquired, built, commissioned and operated projects in Mexico, Australia, China, Africa and Canada.

Mr Secker 's operating experience encompasses underground, open-pit hard rock and dredging operations over a number of commodities including gold, iron ore, copper, lithium, titanium and coal.

Over the past 20 years, Mr Secker has been the chief executive officer of public companies operating in Australia, China, Mexico, UK and Canada and has raised over \$2B from the debt and equity markets for new mine developments.

Mr Secker has developed five greenfield mining projects in the past 30 years and is the Chairman of Sonora Lithium Ltd, which is developing the 'Sonora Lithium Project' in northern Mexico.

Mr Secker holds a Bachelor of Science (Honours) from Newcastle University, an Executive Management Diploma from Mt Eliza Business School and a 1st Class Mine Managers Certificate in both Australia and South Africa.

Mr Secker will be an independent Director.

The Company also advises Shareholders that, In 2011, one of the companies that Mr Secker was a director of, Canada Lithium Corporation, was subject to disciplinary action by the Ontario Securities Commission for defaults of its continuous disclosure obligations under Ontario securities law while Mr Secker was a director. As a result, Mr Secker was also subject to a management cease trade order issued by the Ontario Securities Commission until the matter was resolved. Additionally, in 2014 another company that Mr Secker was a director of, RB Energy Inc, sought creditor protection and was delisted from the Toronto Stock Exchange while Mr Secker was a director. The other current and proposed Directors do not believe that the above matters are material to, or indicative of, either Mr Secker's future performance in respect of his duties as a Director or of the future performance and prospects of the Company.

#### Mr Cameron Stanton – Executive Director

Mr Stanton is the founder of Authium, personally investing in the initial drilling campaigns and feasibility study works.

Mr Stanton is an industrial engineer whose professional focus has been in mineral commercialisation, plant design, engineering, construction, maintenance and operation. Mr Stanton has managed the engineering and construction of over ten manufacturing and mining facilities in Australia and the Americas. Mr Stanton has experience in commercialising novel technologies and is the co-inventor of Rincon Corporation's lithium extraction process (Patent WO2018027266), which is the world's first chemical process to extract lithium from an unconcentrated brine.

Mr Stanton is the owner of Turnkey Industrial Engineering Pty Ltd, a multi-discipline industrial engineering services business, which offers industrial engineering, construction and maintenance services employing over 100 professionals in Sydney, Australia. Mr Stanton is also a co-founder of PTR Holdings Pty Ltd trading as 'Nexus Recycling', an Australian based battery recycling company.

Mr Stanton holds a Bachelor of Engineering (Honours) from Sydney University.

Mr Stanton will be a non-independent Director.

#### Mr Conrad Karageorge – Non-Executive Director

Mr Karageorge is a corporate adviser and resources executive with experience in precious and base metals in Australia and Africa.

Mr Karageorge has a Bachelor of Laws and a Bachelor of Commerce from University of Notre Dame. Mr Karageorge was admitted to practice law in Western Australia in 2018, however, is currently not practising.

Mr Karageorge has undertaken strategy consulting roles with Argent Minerals Limited (ASX: ARD), MinRex Resources Limited (ASX: MRR), Bassari Resources Limited (ASX: BSR), and Nkwe Platinum Limited (ASX: NKP).

Mr Karageorge is, and will be, an independent Director.

#### Mr John Campbell Smyth - Non-Executive Director

Mr Smyth has over 25 years of experience in the fund management, capital markets and corporate finance of the venture capital and resource sectors.



Mr Smyth holds a Bachelor of Commerce from the University of Western Australia and a Postgraduate from Pembroke College, Oxford. Mr Smyth is currently non-executive director of Nubian Resources Ltd (TSXV: NBR), Allup Silica (ASX: APS), Macro Metals Ltd (ASX: M4M)) and non-executive chairman of Norseman Silver Inc (TSXV: NOC) and Orange Minerals (ASX: OMX).

Mr Smyth is, and will be, an independent Director.

#### Ms Anna Nahajski-Staples – Non-Executive Director

Ms Nahajski-Staples is a company director specialising in global financial markets and the resources sector.

In 2011, Ms Nahajski-Staples independently obtained an Australian Financial Services Licence to establish corporate advisory firm Paloma Investments Pty Ltd and continues to provide strategic advice and offshore funds to public and private companies. Commencing her career in the United States of America, Ms Nahajski-Staples has 30 years' experience in global financial markets, representing over half a billion dollars in transactions and fifteen years specialising in natural resources and ASX equities.

Ms Nahajski-Staples has held executive and non-executive board roles over the past 10 years, while managing her boutique corporate advisory firm. Ms Nahajski-Staples' is currently the Executive Chair of Moneghetti Minerals Limited, a Non-Executive director of Larvotto Resources (ASX: LRV) and was previously Chair of AuKing Mining (ASX: AKN) and a founding director of Siren Gold (ASX: SRN). Ms Nahajski-Staples has also held company secretary roles and acted as corporate advisor to a variety of junior to mid-cap ASX-listed resource companies in addition to consulting to large companies, such as BHP Billiton Ltd.

Ms Nahajski-Staples is a Fellow of FINSIA, a graduate of the Governance Institute of Australia (2009) and the Australian Institute of Company Directors (2007) and studied accounting at Harvard University (1993) before receiving a Bachelor of Business Administration from the University of Washington.

Ms Nahajski-Staples is, and will be, an independent Director.

#### Indicative timetable

The indicative timetable for the Proposed Transaction is set out in the table below:

Event	Date
Notice of Meeting lodged with ASIC and the ASX	22 December 2023
Notice of Meeting sent to shareholders	15 January 2024
Prospectus lodged with ASIC	5 February 2024
Public Offer opens	12 February 2024
Public Offer closes	26 February 2024
General Meeting to approve Transaction Resolutions	15 February 2024
Completion of the Consolidation Completion of the Proposed Transaction and the Share Purchase Agreement Change of nature and scale of the Company activities to take effect Cancellation of all Options on issue by Company Change of Company name to take effect Board restructure to take effect Issue of Shares under the Public Offer Issue of Consideration Shares to the Sellers Issue of Lead Manager Options to Joint Lead Managers Issue of Operations Manager Options to Proposed Directors Issue of Operations Manager Options to Proposed Operations Manager Re-compliance with Chapters 1 and 2 of the Listing Rules to take effect	1 March 2024
Expected date for Shares to be reinstated on trading on the ASX	8 March 2024

**Note:** The dates shown in the table above are indicative only and may vary subject to the Corporations Act, the Listing Rules, other applicable laws and otherwise at the absolute discretion of the Company.



10



## 11 Regulatory approvals and waivers

## 11.1 Transaction Resolutions

The Company will dispatch a notice of meeting to convene a meeting of shareholders expected to be held in accordance with the indicative timetable at section 10 of this announcement.

In order to give effect to the Proposed Transaction, shareholder approval will be sought for the following (amongst any other necessary approvals), with each resolution being inter-conditional (i.e., they will only take effect if all are approved at the meeting) ("Transaction Resolutions"):

- (a) Consolidation of the Company's securities;
- (b) change to the nature and scale of the Company's activities;
- (c) issue of the Consideration Shares to the Major Seller and/or Sellers (as applicable);
- (d) issue of the Public Offer Shares, including to Directors (as applicable);
- (e) issue of the Lead Manager Options to the Joint Lead Managers;
- (f) issue of the Director Options to the proposed Directors upon Completion of the Proposed Transaction;
- (g) issue of the Operations Manager Options to the proposed Operations Manager upon Completion of the Proposed Transaction;
- (h) appointment of Mr Todd Vains, Mr Peter Secker and Mr Cameron Stanton as Directors of the Company (effective from completion of the Proposed Transaction); and
- (i) the increase of the total aggregate amount of non-executive director fees.

The Company will also pass a resolution to approve the change of company name, which will be dependent on the Transaction Resolutions, which means that the change of name contemplated will not proceed if any of the Transaction Resolutions is not passed by Shareholders. However, the Proposed Transaction may still proceed if the resolution is not passed by Company shareholders (provided that all of the Transaction Resolutions are passed and all of the conditions precedent to the Proposed Transaction are duly satisfied or waived).

## 11.2 Escrow arrangements

Under the Listing Rules, ASX may determine that securities issued to promoters, seed capital investors and vendors of classified assets have escrow restrictions placed on them. Such securities may be required to be held in escrow for up to twenty-four (24) months from quotation of the Company's Shares, during which time they must not be transferred, assigned or otherwise disposed of.

The Company expects that certain Shares to be issued to the Sellers (and/or their nominees) will be subject to escrow. Prior to removal from suspension from the Official List of ASX, the Company will enter into escrow agreements with the relevant holders in relation to the securities subject to escrow in accordance with the Listing Rules.

The Company will announce final escrow arrangements to ASX prior to re-quotation of its Shares. However, the Company has lodged escrow submissions to the ASX in advance of this Notice and the preliminary view of the ASX on proposed required escrow arrangements is set out below.

## 12 Taxation

The Proposed Transaction and/or the passing of the Resolutions may give rise to income tax implications for the Company and Shareholders. Shareholders are advised to seek their own taxation advice on the effect of the Transaction Resolutions on their personal position and neither the Company, nor any Director or advisor to the Company accepts any responsibility for any individual Shareholder's taxation consequences on any aspect of the Proposed Transaction or the Transaction Resolutions.

## 13 Fees paid or payable in relation to finders, arrangers or facilitators of the Proposed Transaction

The Proposed Transaction was introduced to the Company by one of its non-executive Directors, being Anna Nahajski-Staples. Following preliminary discussions, the Company formalised the facilitation engagement with Ms Nahajski-Staples under a corporate advisory mandate with an entity controlled by Ms Nahajski-Staples, being Paloma Investments Pty Ltd (ACN 147 613 125) ("Paloma Investments"), under which the Company has agreed to pay a transaction facilitation fee of \$200,000 upon the successful Completion of the Proposed Transaction introduced by Ms Nahajski-Staples ("Facilitation Fee"). Further,





to assist the Company facilitate the Proposed Transaction, the Board recently appointed Ms Nahajski-Staples as a Director of the Company.

Chapter 2E of the Corporations Act 2001 (requires that a public company that intends to give a financial benefit to a related party of a public company must:

- (i) obtain the approval of the public company's members in the manner set out in sections 217 to 227 of the Corporations Act; and
- (ii) give the benefit within fifteen (15) months following such approval, unless the giving of the financial benefit falls within an exception set out in sections 210 to 216 of the Corporations Act.

The payment of the Facilitation Fee (should the obligation arise) by the Company to Paloma Investments will constitute giving a financial benefit to the Proposed Director as it will be considered a related party of the Proposed Director (by virtue of that entity being controlled by the Proposed Director). However, the Company considers that shareholder approval under section 208 of the Corporations Act is not required for the payment of the Facilitation Fee due to the "arm's length terms" exception in section 210 of the Corporations Act.

The "arm's length terms" exception provides that member approval is not needed to provide a financial benefit to a related party if the financial benefit given is reasonable in the circumstances if the public company and the related party were dealing at arm's length.

The Company has considered the terms of the arrangement with Paloma Investments, including the payment of the Facilitation Fee, and considers that it is on "arm's length terms" having regarding to current market and industry standards, and the quantum of consideration payable by the Company to the Sellers under the Proposed Transaction should it proceed.

Accordingly, the Board of Directors of the Company consider that shareholder approval for the payment of the Facilitation Fee (should such an obligation arise) does not require approval of members pursuant to section 208 of the Corporations Act.

### 14 Appropriate enquiries

The Company has undertaken appropriate enquiries into the prospects of the Clayton Ridge Lithium Project to be satisfied that the Proposed Transaction is in the interests of the Company and its security holders.

As at the date of this announcement, the Company is in the process of completing legal and technical due diligence on Authium and the Clayton Ridge Lithium Project. The Company intends to complete due diligence prior to lodging the Prospectus and seeking reinstatement of its shares to the Official List of the ASX. Due diligence conducted by the Company prior to the date of this announcement has not identified any matters that are materially adverse to the Company.

Further information will be outlined in the Notice of Meeting and Prospectus to follow in due course.

#### 15 Competent Person Statement

The information contained in this announcement that relates to exploration activities and Mineral Resource estimates is based on, and fairly, represents, information and supporting documentation compiled by Mr Paul J Dockweiler, a Certified Professional Geologist of the American Institute of Professional Geologists who holds a degree of Bachelor of Science in Geology. Mr Dockweiler is an independent consultant of Geosyntec Inc, and is not employed by Amani, or any related party of Amani and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which they are 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 ("JORC Code"). Mr Dockweiler has consented to the inclusion in the report of the matters based on their information in the form and context in which it appears and has not withdrawn his consent before lodgement of this announcement.

Mr Dockweiler has verified and takes responsibility for the information contained within this announcement relating to exploration results and Mineral Resource estimates and agrees to its inclusion in the form and context in which it appears. The exploration results and Mineral Resource estimates in this announcement are reported in accordance with the JORC Code.

9



Mr Dockweiler confirms that he is not aware of any new information or data that materially affects the information included in this market announcement. Mr Dockweiler also confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### 16 Shareholder approval requirement

Given that Listing Rule 11.1.2 applies to the Proposed Transaction, the Company notes that:

- the Proposed Transaction requires shareholder approval under the Listing Rules and, therefore, may not proceed if that approval is not forthcoming;
- the Company is required to re-comply with ASX's requirements for admission and quotation and therefore the Proposed Transaction may not proceed if those requirements are not met;
- the ASX has an absolute discretion in deciding whether or not to re-admit the entity to the Official List of the ASX and to quote its securities and therefore the Proposed Transaction may not proceed if ASX exercises that discretion; and
- investors should take account of these uncertainties in deciding whether or not to buy or sell the Company's securities.

#### 17 ASX responsibility

The ASX takes no responsibility for the contents of this announcement.

#### 18 ASX continuous disclosure obligations compliance

The Company is in compliance with its continuous disclosure obligations under Listing Rule 3.1 and all material and accessible information available to the directors of the Company have been included in this announcement.

This announcement has been approved by the board of Amani Gold Limited.

#### -ENDS-

For more information contact: Mr Conrad Karageorge Managing Director +61 8 8186 3002 <u>conrad@amanigold.com</u> Website: <u>www.amanigold.com</u>



## Schedule 1: Details of Sellers

The table below provides a list of the Sellers, their shareholdings in Authium and the number of Consideration Shares to be allocated to each of the Sellers.

	Entity	Authium Shares	Company Shares to be issued (subject to rounding)
	Annandale Street Holdings Pty Ltd	196,875,000	210,230,199.10
	Elianaelysia Pty Ltd ATF Angus Investment Trust	18,750,000	20,021,923.72
	Benn Skender	625,000	667,397.46
	DACLM Pty Ltd ATF DACLM Investment Trust ABN 25 510 573 889	3,125,000	3,336,987.29
	Gian Pandit and Kirsten Thomson as trustees for Pandit Family Trust	625,000	667,397.46
5	Edwards Bay Capital ATF The Balmoral Trust ACN 623 120 641	968,750	1,034,466.06
	J&J Capital Management Pty Ltd	312,500	333,698.73
)	David Lloyd	312,500	333,698.73
)	RJ&A Investments Pty Ltd ATF the Muller Morvan Family Trust	562,500	600,657.71
)	Aralad Management Pty Ltd	562,500	600,657.71
)	Tengirri Pty Ltd CAN 627 104 107 ATF RHCGS Family Trust	312,500	333,698.73
	Second Chance Holdings Pty Ltd	718,750	767,507.08
-	PRST Investments Pty Ltd	625,000	667,397.46
	Todd Vains	625,000	667,397.46
	Pacific Road Capital	333,410	356,027.18
	Pacific Road Capital Conversion of Con Note	11,711,432	12,505,888.13
	Total Investors	237,044,842	253,125,000.00

#### 1. Pacific Road Capital to convert their convertible notes prior to listing, value of the convertible notes has been calculated on the below basis:

	Pacific Road Convertible Note Conve	acific Road Convertible Note Conversion assuming end Dec 2023						
		Conversion Date	Entry Date	Days Outstanding	Amount	Rate	Total Interest	Total Conversion Amt
	Note 1	31/12/2023	20/4/2023	255	\$1,000,000	0.000219178	\$ 55,890.41	\$1,055,890.41
	Note 2	31/12/2023	7/7/2023	177	\$500,000	0.000219178	\$19,397.26	\$519,397.26
	Note 3	31/12/2023	1/8/2023	152	\$500,000	0.000219178	\$16,657.53	\$516,657.53
	TOTAL				\$2,000,000			\$2,091,945.21
5	Conversion Basis							\$40,250,000.00
	Share Price implied							0.1786242
)	Shares to be Issued							11,711,432

## Schedule 2: JORC Tables

# 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Prior to drilling, Authium field staff conducted surface sampling events between the summer of 2018 and the spring of 2022. The surface samples were field screened using a portable, handheld XRF to evaluate the elemental composition. Samples that reported higher lithium composition via the portable XRF were sent to MDS's laboratory in San Diego, California, to give preliminary determination of the lithium concentration as a quick turn-around guide for exploration.</li> <li>During drilling campaigns, diamond core drilling was used to obtain between 1 ft (for every 10 ft) or 10 ft continuous core sampling that were later quartered by a rock saw from which 300 g was pulverised to produce a 75-µg charge for multiple acid digestion ICP say.</li> </ul>
Drilling techniques	<ul> <li>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.).</li> </ul>	<ul> <li>Drilling type was diamond using HQ core, triple tube, non-oriented, but down-hole surveyed every ~30m.</li> <li>Surveys DHs were limited to within 4 degrees of variation from the target at depth. If the diamond hole (DH) was past limit, the DH would be restarted.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Drilling on the property demonstrated excellent core recoveries. Core recovery was recorded on the lithologic drill log by the logging geologist.</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	• All drilled core was logged by a number of contracted geologists in a qualitative and quantitative manner and later reviewed by a Senior Geologist (Geosyntec). The drill logs were of high quality and detail was sufficient to support active 3D geologic modelling. After geologic logging was completed, all the drilled core was photographed within their core boxes with the photographs saved on electronic hard drives.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Core was selected for analysis by the logging geologist based on geologic formation intercepts. Core intervals designated for processing and analysis were reviewed by a Senior Geologist. Selected core was split into quarters using a bench-mounted rock saw. Drilling in 2019 included core processing onsite, utilising a bench-mounted rock splitter instead of a powered saw.</li> <li>Core selected for further studies, including rock mechanics, moisture and density, were wrapped in cellophane and bonded with duct tape.</li> <li>"Reject" <sup>3</sup>/<sub>4</sub> core was placed back within the core box and stacked back onto pallets for long-term storage, suitable for future studies.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>In 2019, for metallurgical testwork, one quarter of the split core samples was shipped to ANSTO Minerals located in Kirrawee, Australia, a commercial business unit of ANSTO providing lithium processing and development services.</li> <li>During the 2022 drilling campaign, American Assay Laboratories (AAL) was selected to prepare the drilled core and provide assay analysis. Core from DH-13, DH-14, and DH-15 was transferred into wax-impregnated cardboard core boxes, palletised, and shipped directly to AAL facilities in Reno, Nevada. Upon arrival, the core was geologically logged by contract geologist while sections of core were selected by the geologist to be submitted to AAL for core splitting, sample processing, and assay analysis.</li> <li>The core was split in halves, one of which remained in the box for the advance of the a</li></ul>

 The core was split in halves, one of which remained in the box for storage. The other half was split again to produce two quartered core samples. One quarter-core was assayed by AAL, and the second quarter-core was placed into core storage at the AAL facilities.

Criteria	JORC Code explanation	Commentary
only		<ul> <li>Sample preparation at AAL consisted of three steps: crushing; Jones splitting; and pulverizing. First, samples were crushed until greater than 70% of the sample was a uniform grain size of 2 mm. A Jones Riffle Splitter was used to attain a representative 300 grams of sample. Finally, the sample was pulverized to a uniform grain size of 75 micrograms.</li> <li>AAL utilised the standard 4-acid digestion method with additional boric acid to measure lithium concentrations. Analysis was conducted using an Agilent 5100 Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). The double determines the broakdown of elements in a sample.</li> </ul>
Φ		device determines the breakdown of elements in a sample solution by superheating it to 9,000°C using an argon gas plasma, and then measuring the specific wavelength and brightness of the heated molecules to establish the precise concentration of lithium.
SN		<ul> <li>The inserted QC samples consist of three types:</li> </ul>
		<ul> <li>Standards: A verified sample of fixed lithium concentration. The standard samples used in 2022 included:</li> </ul>
g		<ul> <li>Li.10.11 (CRM-1), purchased from Shea Clark Smith of MEG, Inc. in Reno, NV.</li> </ul>
		<ul> <li>Li.10.15 (CRM-2), purchased from Shea Clark Smith of MEG, Inc. in Reno, NV.</li> </ul>
rsonal		<ul> <li>AMIS0342, provided by American Assay Laboratories in Reno, NV.</li> </ul>
bel		<ul> <li>AMIS0621, provided by American Assay Laboratories in Reno, NV.</li> </ul>
		<ul> <li>OREAS 147, provided by American Assay Laboratories in Reno, NV.</li> </ul>
OL		<ul> <li>OREAS 905, provided by American Assay Laboratories in Reno, NV.</li> </ul>
Ĩ		<ul> <li>Blanks: Silica sand (purchased from a local hardware store).</li> </ul>
		<ul> <li>Duplicates: A split from an original submitted sample was taken to generate a duplicate sample.</li> </ul>
		<ul> <li>A minimum of 15% QC samples were inserted into each sample batch shipped to the laboratory. The location and insertion were randomly selected, and not simply inserted, into every 10 samples.</li> </ul>

5

L

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	• The analytical results from ALS for the Authium-inserted blind standard samples indicated that lithium concentrations were within 10% of the upper and lower 95% confidence limits for each standard.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Beginning in 2021, all DH were surveyed for each 100 ft of depth using a downhole gyroscopic survey tool that was calibrated before use.</li> <li>A Garmin Montana handheld GPS was used to locate and survey the locations using the default coordinate system WGS 84 map datum.</li> <li>According to Garmin's Website: "Garmin GPS receivers are accurate to within 15 meters 95% of the time. Generally, users will see accuracy within 5 to 10 meters under normal conditions"</li> <li>When compared to Google Earth, we found the accuracy to be within the 5-meter range. The site has excellent satellite coverage within the open desert basin.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill hole spacing was set at or near ~900ft and proved to be efficient spacing for the sedimentary formations.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The deposit is relatively flat lying with an average SE dip of 4 degrees.</li> <li>The southern 1/3 of the deposit is influenced from regional half-graben, normal faulting. Down drop displacement is typically less than ~200ft.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Drilled core was placed in wax impregnated corrugated cardboard HQ core boxes and taken from the drill pad and stored within a locked facility with 24-hr armed guard or trucked directly to the laboratory for analysis.</li> </ul>

Criteria	JORC Code explanation	Commentary		
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>The results and sampling techniques have been reviewed by Sonny Consulting Services Pty Ltd, and the data is of a precise and accurate level to be used for Mineral Resource estimates.</li> </ul>		

### Section 2 Reporting of Exploration Results

## (Criteria in this section apply to all succeeding sections.)

	Criteria	JORC Code explanation	Commentary
•	Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	• On 3 November 2020, Authium provided a claim status updating their ownership to 752 active lode claims. Geosyntec's independent internet search of the BLMs Legacy Rehost System (LR2000) conducted on 3 November 2020 verified 729 active lode claims belonging to Authium 2022, 23 claims were added to the overall land package, to bring the total number of lode claims to 752. These claims are positioned in the Mount Diablo Base and Meridian (MDB&M) townships, ranges, and sections.
	Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	According to Silver Peak local knowledge, the first known clay exploration on the property was completed by the United States Geological Survey (USGS) in 1977 in the form of a roughly 3-foot- diameter shaft bored approximately 200 feet below grade. Although a USGS reference of this effort was not found, the shaft remains present on the southern end of the Amani property. More recent lithium clay exploration has been ongoing in the surrounding areas primarily to the northwest, west, and southwest of the project boundaries. Outside of this exploration effort, there has been no known clay exploration activity on the subject property.
	Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The physiography of Clayton Valley is typical of the Basin and Range terrain throughout Nevada. The Clayton Valley playa is a closed basin playa bounded by normal and lateral faults, which have resulted in the formation of the Silver Peak Range to the west, Clayton Ridge to the east, Palmetto Mountains to the south, and Weepah Hill to the north.</li> <li>Clayton Valley is an immature, clastic salt flat composed of Quaternary alluvial deposits. The source of the alluvial material is erosional and mass wasting deposition of the surrounding mountains. These erosional clastic sedimentary deposits form thick sequences in the valley. Paymaster and Clayton Ridges</li> </ul>

Criteria	JORC Code explanation	Commentary	/			
		sedimenta The norther with Mioc and rewor and silt un described (1990). The from coal- the base to upper stro- for much e Lithium mi and muds units occu of the pro- below a w roughly 90 undulating angle. The grey-color sand and	ary, Tertiary vo ern and easter ene to Pliocer rked volcanic its of the Esme l by Turner (190 e Esmeralda Fo earing siltston to fine-grained tigraphic sect of the subject neralisation ha tone formatio ur as surface o perty and cor vedge of alluv m. Each obse g dip to the eac e mineralised s ured mudston gravel, follow	east are comprision leanic, and gro in edges of Cla be sediments co ash deposits with eralda Formation 20) and later by ormation is a se les, sandstones, d, tuffaceous la ion. The Esmerco property's surfor as been discover in sinside of the utcroppings in fatinue along stri ial sand and gro erved formation ast/southeast a sections within the e/claystone dir ed by greenish zon above blace	anitic intrusive yton Valley of ontaining mu- ithin fine-gra on. These unit y Stewart and edimentary u and conglo custrine sedi- alda Formati- ace geology ered within the subject prop the northeas ke in a south avel to a de shows a gen t a roughly 4 he core inclu- ectly below blue claysto	e formations. are bordered ultiple primary ined clay ts were first d Diamond onit grading omerates at ments in the on accounts the claystone perty. These thern corner herly direction opth of ntle, -degree ude a tan- to the alluvium one, until
Drill hole	A summary of all information material to the understanding of the	Hole-ID	Easting (ft)	Northing (ft)	RL (ff)	Length (ft)
Information exploration results including a tabulation of the following information for all Material drill holes:	DH-11	2,944,433	14,227,753	4,622	554.5	
	<ul><li>information for all Material drill holes:</li><li>easting and northing of the drill hole collar</li></ul>	DH-05	2,943,567	14,229,422	4,587	496.5
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in</li> </ul>	DH-01	2,943,620	14,231,721	4,558	389.0
	metres) of the drill hole collar	DH-08	2,944,861	14,228,426	4,645	589.0
	dip and azimuth of the hole	DH-03	2,942,854	14,231,645	4,495	197.5
	<ul> <li>down hole length and interception depth</li> </ul>	DH-09	2,943,578	14,228,241	4,600	730.0
	hole length.	DH-13	2,944,245	14,226,077	4,666	795.7
	If the exclusion of this information is justified on the basis that the information is not Autorial and this avaluate does not detract from	DH-07	2,945,642	14,228,660	4,677	481.0
	information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should	DH-14	2,945,727	14,224,786	4,743	753.3
	clearly explain why this is the case.	DH-06	2,944,446	14,229,102	4,626	468.5
		DH-04	2,943,539	14,230,308	4,573	283.0
		DH-02	2,944,411	14,230,969	4,610	451.0
		DH-12	2,943,682	14,227,313	4,615	554.5

	Criteria	JORC Code explanation	Commen	ary			
			DH-15	2,944,815	14,226,337	4,666	778.4
	Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	-	ition results have um value.	not been aggr	egated nor lir	nited by
	Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	origin o thickne dimen: long. T	ium resources ar and have a tabul ass averaging arc ions are estimate ne mineralised fo ed from drill core	lar, horizontal o ound 300ft. In 20 ed at roughly 12 rmation has an	rientation with 22, the resour 200ft wide and average SE c	n true rce d 7000ft
	Diagrams	<ul> <li>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.</li> </ul>		priate maps and at sections of this			nin the
_	Balanced reporting	<ul> <li>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.</li> </ul>		illing results within ad within this repo		e declared re	esource are
	Other substantive exploration data	<ul> <li>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.</li> </ul>	geoph Ridge March • The pu use inc detect overlyi clay au conce	echnical Consult ysical evaluation ithium Clay Pros 2022. rposes of Atlas's irect measurement the approximate ng clay and geo nd evaluate an contration ranges co ole sampling and	services pertai pect project fro geophysical HS ents of subsurfa e thickness of a logic units possi approximate rel obtained from p	ning to Aman m 20 January AMT evaluation ce resistivity vo luvium overbi bly containing ationship betv revious explo	i's Clayton through 9 on were to alues to urden g significant ween lithium ration

	Criteria	JORC Code explanation	Commentary
			<ul> <li>HSAMT data were acquired using a Geometrics Geode EM3D HSAMT system manufactured by Geometrics, Inc.</li> </ul>
			<ul> <li>HSAMT is a hybrid electromagnetic (EM) geophysical method, commonly used in groundwater exploration and fault location studies. It evaluates the earth's subsurface electrical resistivity distribution by measuring time dependent variations of the earth's natural electric (E) and magnetic (H) fields (MT method), as well as the electric and magnetic fields resulting from high frequency induced waves sourced from a man-made transmitter. The HSAMT method is typically used to evaluate depths of approximately 50 to 2,500 feet (approximately 15 to 760 meters) bgs or greater.</li> </ul>
)))			• The data analysis compilation in conjunction with the various depth and elevation sections, the horizontal depth slices plots and movies, and the rotated 3D depth sections movies show that average resistivities less than 30.3 or 20.5 ohm-meters at depths less than about 300 meters, that are interpreted as clay and similar geologic units, are primarily concentrated in the southern portion of the project area evaluated with our HSAMT geophysics.
	Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• The Clayton Ridge resource is a roughly tabular shaped claystone body outcropping on the northern end of the lode claims and dipping gently to the south at around 4 degrees. Although still open to the south and southwest, the deposit's dip angle to the south and with the topography gaining elevation to the south, the stripping ratio will also increase to the south past the defined resource.
)			• The geophysical survey has demonstrated the claystone maybe rising closer to the surface within 5 km of the current resource, and near the center of the property. The shallow alluvial cover extends from the center of the claims and continues southwest into the southern half of the property. This area is highly prospective for future exploration drilling.

#### Section 3 Estimation and Reporting of Mineral Resources

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

Citization         Commentary           Deltabase integrity         • Messures taken to ensure that data has not been completed by, concerning or example, inconscription or keying errors, belween its initial collection and its use for Mineral Resource estimation purposes.         • All data used in the resource estimate underwent thorough manual quality checks and were verified as matching the source data.           Sile visits         • Comment on any site visits undertaken by the Competent Person and the outcome of those visits.         • The resource estimate Competent Person (CP) for the Clayton and the outcome of those visits.           Sile visits         • Confidence in [or conversely, the uncertainty of] the geological integretation         • The resource estimate conducted site visits on the project property in October 2018, in April July, and August of 2019, and feb. March, and April 2022. While portension in the ord estimation           Geological integretation         • Confidence in [or conversely, the uncertainty of] the geological integretation on an water on institute of the mineral Resource estimation.         • We did not include sandstone or conglometrate in our mineral Resource estimation.           • The toctors affecting continuity both of grade and geology.         • The toctors affecting continuity both of grade and geology.           • Dimensions         • The nature and oppropriateness of the estimation technique(s) appled and key assumptions, including treatment of expressed os length (along stike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource         • We did not include sandstone or conglometrate in our mineral resource model.				
integrity       for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.       manual quality checks and were verified as matching the source edata.         Site visits       Comment on any site visits undertaken by the Competent Person and the outcome of those visits.       The resource estimation composition of the visits and the project property in Coched site visits on the site of mineral deposit.         Geological interpretation       Confidence in (or conversely, the uncertainty of) the geological interpretation.       Nature of the data used and of any assumptions made.         Nature of the data used and farmy assumptions made.       The effect is (monulo and providen site) contained with and deptih providen as anderid and conales and grave assumpting since or denvise.<		Criteria	JORC Code explanation	Commentary
and the outcome of those visits.       If no site visits have been undertaken indicate why this is the case.       Ridge Project is Mr. Poul Dockweiler, Senior Geologist for Geosyntec.         March, and April 2022. Mr. Dockweiler conducted site visits on the project property in October 2018, in April, July, and August of 2019, and Feb. March, and April 2022. Mr. Dockweiler respirate in the style of mineralization and type of deposit, a professional member of the Society for Mining. Metallurgy & Exploration (SME), and holds certification as an American Institute of Professional Geologist (DFG).         Geological interpretation <ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of altemative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimations.</li> <li>The extent and variability of the Mineral Resource expressed as length (along stike or otherwise), plan width, and depth below surface to the upper and lower limits of the Alineral Resource.</li> <li>The norther end appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, including treatment</li></ul>			for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	manual quality checks and were verified as matching the
Interpretationinterpretation of the mineral deposit.resource estimation due to the nature of the mineralisation being primarily within the claystone and mudstone formations.InterpretationNature of the data used and of any assumptions made.Outwash channels and gravel beds were given a conservative uniform depth in the resource modelling to account for deleterious paleo-erosion of the mineralised formations from alluvial tan drainages.DimensionsThe extent and variability of the Mineral Resource estimation and uriability 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.Average dimensions are 10,000 ff L x 2,500 ff W x 330 ff. Thicknesses vary from XX ff in the north where part of the southern edge of the resource is at surface while the southern edge is roughly 350 ff below surface.Estimation and modelling techniquesThe 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 poroprist. If a computer assisted estimation and parameters used.The computer assisted escince model used grad of the vertical direction.		Site visits	and the outcome of those visits.	<ul> <li>Ridge Project is Mr. Paul Dockweiler, Senior Geologist for Geosyntec.</li> <li>Mr. Dockweiler conducted site visits on the project property in October 2018, in April, July, and August of 2019, and Feb, March, and April 2022. Mr. Dockweiler's requisite qualifications include at least five years relevant experience in the style of mineralization and type of deposit, a professional member of the Society for Mining, Metallurgy &amp; Exploration (SME), and holds certification as an American Institute of Professional Geologist</li> </ul>
length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.Thicknesses vary from XX ft in the north where part of the sequence has been eroded, to xx ft in the southThe northern edge of the resource is at surface while the southern edge is roughly 350 ft below surface.The northern edge of the resource is at surface while the southern edge is roughly 350 ft below surface.Estimation and modelling techniquesThe nature and appropriateness of the estimation technique(s) 	_		<ul> <li>interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul> <li>resource estimation due to the nature of the mineralisation being primarily within the claystone and mudstone formations.</li> <li>Outwash channels and gravel beds were given a conservative uniform depth in the resource modelling to account for deleterious paleo-erosion of the mineralised formations from alluvial fan drainages.</li> <li>The observed average tilt to the SE at 4° was applied to the</li> </ul>
modelling 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. modelling software, Leapfrog Works (Leapfrog, 2019). The resource model was generated using the data from 14 drillholes, including surveyed collar coordinates, lithology, and assay data. The model used a grid of 100- by 100-foot cells in the horizontal direction and 10-foot cells in the vertical direction.		Dimensions	length (along strike or otherwise), plan width, and depth below	<ul><li>Thicknesses vary from XX ft in the north where part of the sequence has been eroded, to xx ft in the south</li><li>The northern edge of the resource is at surface while the</li></ul>
		modelling	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	modelling software, Leapfrog Works (Leapfrog, 2019). The resource model was generated using the data from 14 drillholes, including surveyed collar coordinates, lithology, and assay data. The model used a grid of 100- by 100-foot cells in the horizontal direction and 10-foot cells in the vertical direction.

Criteria	JORC Code explanation	Commentary
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>model from USGS (NED n39w118 1/3 arc-second 2013 1 x 1- degree ArcGrid) and was used to constrain the upper limit of the model. Locations of the drillholes are shown in Figure 4. The model was constrained to the west by the claim boundaries, also shown in Figure 4.</li> <li>The lithium resource estimate calculated in Leapfrog used a Kriging algorithm for interpolation. The Leapfrog model was validated against an earlier lithium resource model that relied on the use of C Tech's Earth Volumetric Studio (EVS) software. Though EVS was designed to handle geologic and resource modelling and remains a standard software, the software's Kriging algorithm resulted in concentrations which decreased significantly from sample. The Kriging algorithm in Leapfrog does not decrease significantly as a function of distance from sample locations and results in a model that still fits the data.</li> <li>The geologic model was generated using Authium's lithologic logging data from 14 drillholes, with lithologies grouped into six main categories: gravel; sandstone; siltstone; silty clay; claystone; and mudstone. One drillhole (DH-07) was purposely drilled directly into an incised drainage channel, encountering gravel down to 200 feet bgs. To account for the likelihood of all channels containing similar gravel beds, existing channels identified via aerial photography were digitized and used to constrain the lithium model down to 200 feet below each channel.</li> <li>The model was created by interpolating individual surfaces for each lithology type, according to the depositional environment, with fine-grained units dipping at four degrees towards the east-southeast, and with channels (sands and</li> </ul>

gravels) trending towards the west- northwest. These surfaces were combined into a volumetric geologic model and used to confine the resource models. Lithium concentrations were found to primarily be elevated only in finer grained units, so the

lithium model was also limited by excluding model cells

 The dataset used for the resource model includes data from ANSTO, and ALS, as provided in their 2019 assay reports in addition to the recently collected 2022 assay reports by AAL. The dataset includes lithium as elemental lithium from 14 drill

belonging to sandstone or gravel units.

holes.

	Criteria	JORC Code explanation	Commentary
			<ul> <li>Data were preprocessed and compiled in the following procedures. All data with units of percent were converted to ppm by multiplying by 10,000.</li> </ul>
			<ul> <li>The lithium dataset is composed of 667 assays, ranging from 30 to 2,080 ppm.</li> </ul>
lly			<ul> <li>Model parameters were derived using the method below and reflect the local geology and are used with the Kriging spatial model algorithm, executed in 3D, in Leapfrog, to estimate the lithium, Al2O3, and MgO resources.</li> </ul>
only			<ul> <li>The variogram model for lithium uses two spheroidal models with a total range of 1,800 feet in the major and minor directions, with a range of 195 feet in the minor direction.</li> </ul>
I USE			• The Leapfrog lithium resource was calculated using ordinary kriging and a spheroidal model type. Block values were calculated using 5x5x2 discretization and a range of 4 to 20 samples to evaluate each search neighbourhood. A horizontal to vertical anisotropic ratio of 36:1 was determined from a modelled semivariogram and used in the interpolation model.
-or personal			<ul> <li>Due to the early termination of DH-07, the drillhole did not penetrate the eastward dipping resource. Lithium assay results in DH-07 were below the 750-ppm lithium threshold, and the lithologies encountered in this drillhole were predominantly gravels and sandstone, consistent with east-west trending channel cuts found in various locations across the model domain. The resource model exceeds 750-ppm lithium below and surrounding the total depth of DH-07 and is extrapolated from locations that penetrated the resource to the west. Because.</li> </ul>
For			• The LC equivalent was calculated by applying a factor of 5.322, as lithium carbonate (LC, Li2CO3) contains roughly 18.8% lithium; therefore, one ton of lithium is equivalent to 5.322 tons of LC (Gordon, 2015). The sum of the Measured and Indicated lithium resource above 500 ppm is calculated to be 422,555 metric tons of lithium or 2,248,838 metric tons of Li2CO3 equivalent, as shown in Table 5.
			• The depths to each resource cut-off grade are generally as follows: for 500 ppm, depths range from less than ground surface to more than 774 feet bgs; for 750 ppm, depths range from ground surface to more than 875 feet bgs; and for 1,000 ppm, depths range from 7 to 865 feet bgs. Generally, the

	Criteria	JORC Code explanation	Commentary
			resource is shallowest to the north and west and deepest to the east and south. The shallow-most lithium resource is found north of DH-01, while the deepest resource is to the southeast of DH- 14, as shown in Figure 14b.
	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	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>Although extraction of lithium from clays has yet to be proven as economic at an industrial scale, Authium, building from the initial test work of ANSTO and AAL, has internally demonstrated a bench-scale lithium extraction from claystone samples collected both from outcrops on site and from sections of the drilled core. Based on their findings, a cut-off grade of 500ppm lithium has been used for the purposes of exploration and resource estimation.</li> <li>The CP has not observed Amani's lithium extraction process and, therefore, is not able to speak on the validity of the chosen cut-off grade of 500 ppm lithium. To provide a more detailed understanding, the resource is presented at cut-off grades of 500, 750 and 1,000 ppm lithium.</li> </ul>
_	Mining factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>Mining Methods have not yet been established but it is likely given the softness of the mineralised horizons, that it will be free- dig with low stripping ratios.</li> </ul>
	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.	<ul> <li>In 2019, for metallurgical testwork, one quarter of the split core samples was shipped to ANSTO Minerals located in Kirrawee, Australia, a commercial business unit of ANSTO providing lithium processing and development services.</li> <li>The quantitative x-ray diffraction (XRD) analysis was run on an Empyrean Panalytical X-ray diffractometer using CuKa radiation at 40 kV and 40 mA. Step scans were undertaken from 2 to 90°20, with a step interval of 0.02°20. Mineral identification was performed using the Bruker Eva search/match software with quantification of the crystalline phases undertaken by SIROQUANT<sup>M</sup>.</li> </ul>

	Criteria	JORC Code explanation	Commentary
			<ul> <li>QEMSCAN particle mineralogical analysis (PMA) was carried out using a Quanta 650 electron microscope with dual Bruker XFlash 5030 energy dispersive detectors, controlled by iDiscover and iMeasure image analysis hardware/software. The scanning electron microscope (SEM) was operated at an accelerating voltage of 15 keV with a working distance of 13 mm and using a beam current of approximately 10 nA.</li> </ul>
			<ul> <li>ANSTO initiated a process testing program to include elemental analysis of the MDS-supplied leached liquor NF / RO samples and to analyze impurity removal and lithium carbonate precipitation. In late 2019, ANSTO completed a cyclone test demonstrating the ability to remove 93.3% of the carbonate gangue materials that would otherwise digest the acid used in the separation process. This process, if implemented, could potentially, and significantly, reduce the amount of acid required to dissolve the lithium into solution (ANSTO, 2019).</li> <li>The composition of the leached liquor after processing via ANSTO's conceptual flowsheet was reportedly compatible with the production of a high purity, primary lithium carbonate (LC) (&gt;99.5% LC). According to ANSTO, the process product may be suitable for direct sale, and is, in their opinion, "definitely suitable for refining and production of an increased purity electric</li> </ul>
	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 have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>vehicle battery-grade LC."</li> <li>In the United States, land is either owned privately (Private Property) or publicly under the controls of the Bureau of Land Management (BLM). The State of Nevada holds the highest amount of BLM land at 81% of its area being public. Amani's project site is 100% over BLM lands while Authium's rights are controlled by unpatented lode and placer claims.</li> <li>The project site is not within protected species including Sage Grouse nor the Desert Tortoise habitat region.</li> <li>Exploration and drilling disturbance activities will be pre-seeded using a pre-determined seed mixture in accordance with local flora.</li> <li>Each drill site and access road are reclaimed immediately after use while additional seed mixture is spread and raked into the ground to promote new vegetation growth.</li> </ul>

• To date, Amani has successfully reclaimed 94% of their disturbed lands from exploration.

	Criteria	JORC Code explanation	Commentary			
			<ul> <li>If found during construction, protected plants will be relocated within a nursery or equivalent facility near the site.</li> <li>Environmental factors will be further assessed during the Plan of Operations permitting process.</li> </ul>			
	Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>During process testing, ANSTO measured for specific gravity of the Clayton Ridge clay material by drying the clay at 100 °C. The resultant pulp was submerged in Exxsol D60 solvent and placed into a pycnometer to prevent the swelling of the clay. ANSTO determined the specific gravity of the Clayton Ridge clay sample to be 2.5267 grams per cubic centimeter (g/cm3). ANSTO observed a typical moisture content of the clay material around 20% from core samples wrapped in plastic wrap and shipped from the site. This estimate would place the specific gravity of the original wet solids around 1.94 g/cm3.</li> <li>For the purposes of this resource estimate, the clay resource density was given a conservative estimate of 1.7 g/cm3, a value consistent with adjacent clay deposits as reported in the 2018 Cypress Preliminary Economic Assessment Technical Report. The CP recommends an appropriate number of randomized core samples are analyzed for density for use in future feasibility studies.</li> <li>Bulk density for the clay materials has not yet been measured at the writing of this report. The bulk density will be important for future feasibility studies, as it directly relates to the tonnage of potentially minable materials; however, it is not a prerequisite for the purposes of this resource estimate</li> </ul>			
)	Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Mineral resource estimations are defined as Measured, Indicated, and Inferred Resources, using factors of the variogram range and limiting the distance of the resource from known values (in this case, drillhole assays). Both the major and semi-major range of best fit to the drillhole assays were calculated at 1,800 feet. The distances used for this resource estimation for Measured, Indicated, and Inferred were defined by 50% (900 feet), 75% (1,350 feet), and 100% (1,800 feet) of the variogram range respectively, and are measured from known values (drillholes).</li> <li>Due to the early termination of DH-07, the drillhole did not penetrate the eastward dipping resource. Lithium assay results</li> </ul>			

 Due to the early termination of DH-07, the animole ald not penetrate the eastward dipping resource. Lithium assay results in DH-07 were below the 500-ppm lithium threshold, and the lithologies encountered in this drillhole were predominantly

	Criteria	JORC Code explanation	Commentary
×			gravels and sandstone, consistent with east-west trending channel cuts found in various locations across the model domain. The resource model exceeds 500-ppm lithium below and surrounding the total depth of DH-07 and is extrapolated from locations that penetrated the resource to the west. Because DH-07 did not penetrate the resource, it was not used as a measuring point for Measured and Indicated resource categories
only	Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>This is a maiden mineral resource estimate for the Clayton Ridge valley lithium clay project. The exploration data underpinning this mineral resource estimate has been independently checked and verified by Dr Cunningham of Sonny Consulting.</li> </ul>
For personal use	Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The CP has not observed Amani's lithium extraction process and, therefore, is not able to speak on the validity of the chosen cut-off grade of 500 ppm lithium. To provide a more detailed understanding, the resource is presented at cut-off grades of 500, 750 and 1,000 ppm lithium.</li> <li>Drill Spacing was set around 1,000ft and is suitable for a sedimentary deposit if this nature. However, there remains the possibility for unknown or unseen past weathering or structural factors that could negatively affect this estimate.</li> <li>Although the drilled spacing is suitable for the resource estimate, possible paleo-channels</li> <li>below modern drainage channels would be deleterious to the claystone resource.</li> <li>Lastly, Bulk density for the clay materials has not yet been measured at the writing of this report. The bulk density will be important for future feasibility studies, as it directly relates to the tonnage of potentially minable materials.</li> <li>Although the density estimated for the resource should be a close approximate, any changes higher or lower will have an impact on the resource tonnage.</li> </ul>