



30 October 2024

ASX ANNOUNCEMENT

NEW GEOCHEMICAL RESULTS DEFINE LITHIUM DRILL TARGETS AT MIRIAM

Highlights

- Assays returned from wide-spaced extensional soil sampling program completed at Miriam.
- Expanded 750m-long lithium anomaly identified, extending previously identified anomaly by circa 450m.
- A further four new anomalous lithium zones identified, overlapping and coincident with established geophysical targets.
- Preparations underway for initial Miriam drill program in H1 2025, with Program of Works (PoW) submitted and Reverse Circulation (RC) hole planning in progress.
- Low-cost ground gravity surveys to commence during current quarter, further de-risking drill hole targeting.
- FBM is well-funded to pursue future exploration programs and growth opportunities across its highly prospective project portfolio (A\$4.7M cash and zero debt at 30 September 2024¹).

Future Battery Minerals Ltd (**ASX: FBM**) (**FBM** or the **Company**) advises of the receipt of assay results for the recent soil sampling program at its Miriam Lithium Project (**Miriam**) in the Western Australian Goldfields region.

The Kangaroo Hills and Miriam areas have attractive near-surface, shallow dipping, thick, spodumene bearing lithium pegmatites. The projects continue to hold significant upside potential for new discoveries and resource growth, located in one of the premier mining regions in the world and proximal to existing infrastructure including the operating hard rock lithium mine, Mount Marion.

FBM Managing Director and CEO, Nick Rathjen, commented:

"Our recent wide-spaced extensional soil sampling program at Miriam is an example of cost-effective exploration, allowing us to both systematically assess the potential of this tenure and concurrently expand the number of priority targets for drill testing. The geochemistry in combination with geophysics, enhances the definition of our search area for valuable shallow subsurface mineralised pegmatites. Importantly, these targets, point to the regional scale potential for new discoveries in addition to the significant lithium we have at the Kangaroo Hills Project."

"The results from this program, which covered the mid-section of our Miriam tenure, are extremely encouraging. The substantial extension of one existing soil anomaly, coupled with the identification of four new nearby targets demonstrating robust Li anomalism, is a strong outcome. It is also important to note that these newly identified areas of lithium soil anomalism overlap with our recently generated geophysical targets, providing layers to the targets and further enhancing the overall attractiveness of these areas for prompt drill testing."

"We continue to advance Miriam in a disciplined and pragmatic manner, with anticipation building in the lead up to our initial RC drill program in H1 2025. With a healthy cash balance to fund future work programs, we continue to exercise a systematic but energetic approach to exploration of this exciting tenure."

¹ Refer to ASX Announcement dated 23 October 2024 – "Quarterly Activities/Appendix 5B Cash Flow Report"

Extensional soil sampling program delivers suite of new high-potential targets

Soil sampling is considered a low cost and fast method of defining broad geochemical anomalies for immediate drill testing or further target refinement. Soil sampling is particularly effective in terrains such as the neighbouring Kangaroo Hills Lithium Project and Miriam, where substantial in-situ regolith and little-to-no transported alluvium produce more reliable surface geochemical datasets.

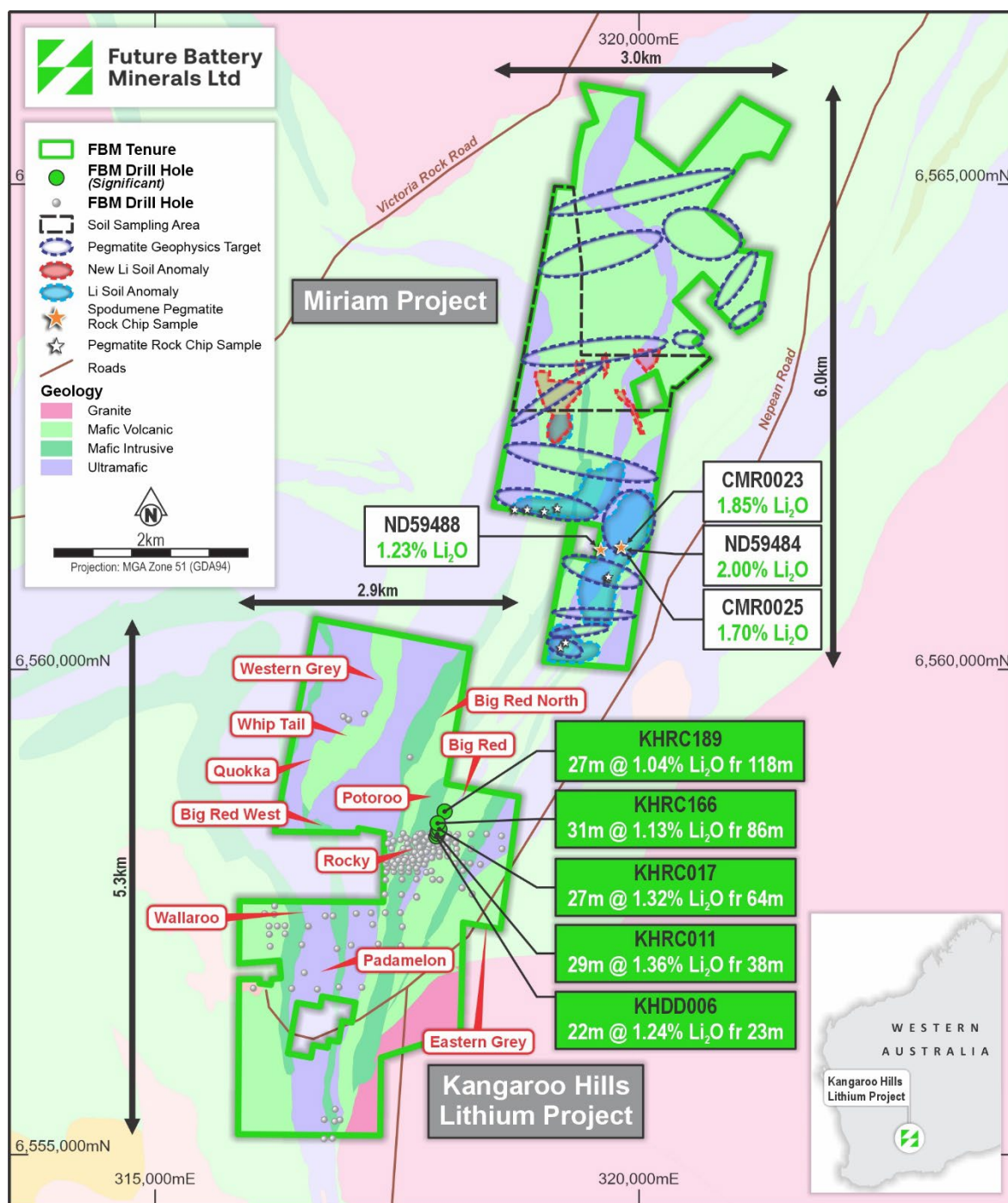


Figure 1: Location map of Kangaroo Hills and Miriam Lithium Projects

Previous soil sampling activities at Miriam were limited to only 2.6 km (north-south) of the tenure's approximately 6 km extent. **The wide-spaced extensional soil sampling program undertaken in September and October 2024 was designed to test for potential blind, subsurface pegmatites, extending further north into the tenure (refer Figures 1 and 2). It expanded the soil sampling grid at Miriam a minimum of approximately 700m further north and up to 2.3 km further north in the north-western area, all within areas now covered by heritage surveys.** The soils program follows the recent target-generative magnetic litho-structural geophysical review of Miriam, which identified 13 discrete structural targets that may serve as potential conduits or host structures for LCT pegmatites.

The extensional soils program was completed on a 40m sample spacing by 100m line spacing grid, resulting in the retrieval of over 400 samples. The program followed on from the previous soil program conducted by Corazon Mining Ltd (CZN or **Corazon**)² in 2023, which only tested the southern portion of Miriam, where outcropping spodumene pegmatites were present. As a result, **the northern half of the Miriam tenure remains largely untested using modern LCT pegmatite exploration methods. Accordingly, FBM is utilising both geophysics and surface geochemistry across these areas for initial target generation and ranking for future drill testing.**

The prior soil program undertaken by Corazon identified a 1.6 km north-south striking lithium soil anomaly that coincided with the mapped outcropping spodumene pegmatites and numerous geophysical targets. While sampling had only tested the southern end of the tenure, it was identified that a building lithium anomaly was present on the final northern-most lines of the survey.

Assays from the recent soils program have identified a 750m north-south anomaly (an approximate 450m extension) that coincides with geophysical structural targets. The assay results also reveal four other areas of robust Li anomalism across the sampled area (refer Figure 2). Pleasingly, these areas also overlap with established geophysical targets.

² Refer to Corazon Mining (CZN) ASX Announcement dated 29th March 2023; Miriam Lithium Soil Results

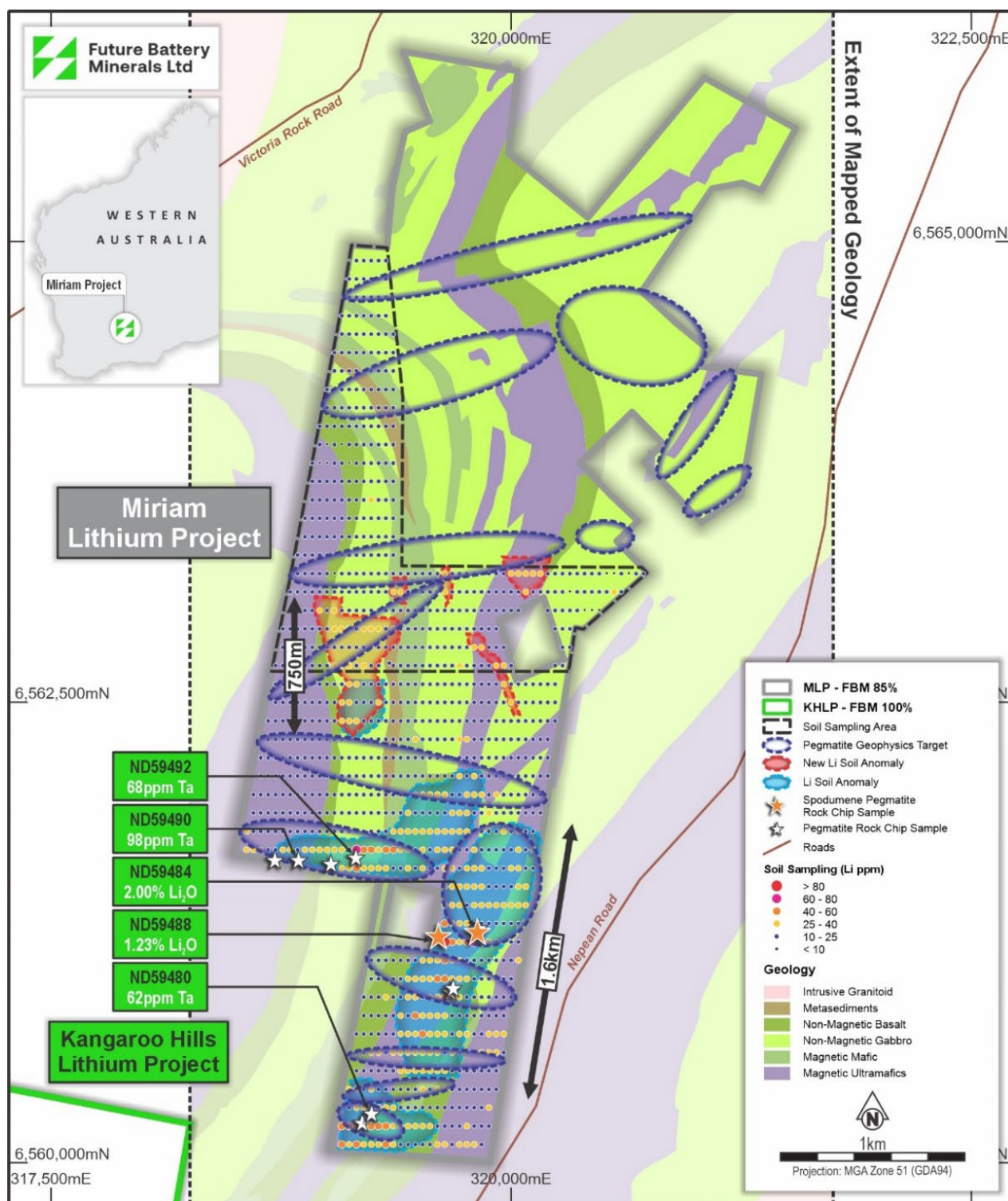


Figure 2: Key results from wide-spaced extensional soil sampling program at Miriam

Ground gravity program set to commence and first drilling in H1 2025

FBM has scheduled **ground gravity geophysical surveys to commence at Miriam over the coming month**. These surveys will test for relative density changes within the subsurface rocks, which may potentially represent changes in lithology from greenstone mafics to pegmatites, and will also collaborate the structural interpretation. This low-cost survey work can greatly improve drill hole targeting, particularly regarding planned drill hole depth and direction, further de-risking initial exploration drilling activities.

Preparations are also underway for FBM's initial drill program at Miriam, scheduled for H1 2025. The PoW for drilling approval has been submitted, and initial drill hole locations are being finalised.

The initial drilling is set to target the +1.5km soil anomaly at the southern end of the Miriam tenure, which correlates with both spodumene outcrops and key geophysical targets. An initial program of RC drilling is being designed to test this high-priority target, providing key information on the thickness and orientation of the mineralised system, and paving the way for targeted follow-up programs to accurately delineate the expanding system.

This announcement has been authorised for release by the Board of Directors of the Company.

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Competent Persons Statement

The information in this announcement that relates to exploration results is based on and fairly represents information compiled by Mr Robin Cox BSc (E.Geol), a Competent Person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Cox is the Company's Chief Geologist and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cox consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Future Battery Minerals Limited's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential", "should," and similar expressions are forward-looking statements. Although Future Battery Minerals Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Previously Reported Results

The information in this announcement that relates to Exploration Results is extracted from the ASX announcements (Original Announcements), as referenced, which are available at www.futurebatteryminerals.com.au. FBM confirms that it is not aware of any new information or data that materially affects the information included in the Original Announcements and, that all material assumptions and technical parameters underpinning the estimates in the Original Announcements continue to apply and have not materially changed. FBM confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original announcement.



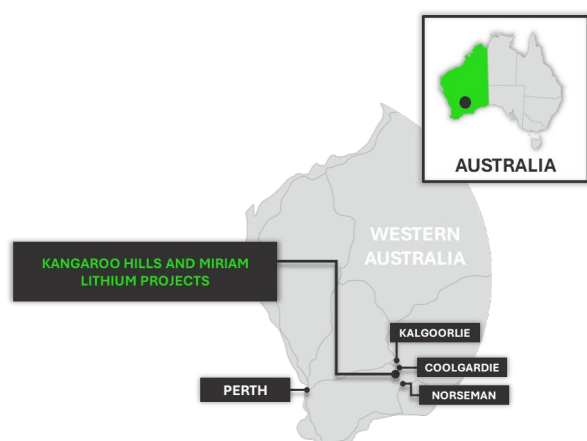
About Future Battery Minerals (ASX: FBM)

Future Battery Minerals (ASX: FBM) is a future-facing minerals exploration and development company focused on rapidly advancing its two new world-class lithium discoveries.

Our flagship asset is the 100%-owned Kangaroo Hills Lithium Project (KHLP). The KHLP is located in the Goldfields of Western Australia, approximately 17km south of the major township of Coolgardie, and hosts the exciting Big Red, Rocky and Potoroo hard rock lithium discoveries. Immediately north and contiguous to the KHLP is the Miriam Project, the recent acquisition of which doubled our regional footprint. Miriam is located immediately along strike from the KHLP and holds a large historic lithium soil anomaly extending from an outcropping spodumene-rich pegmatite, providing a significant opportunity for future discovery success. These project areas are being rapidly advanced in parallel by FBM's experienced team, focusing on resource growth, metallurgical testwork and development readiness.

The Goldfields are a lithium endowed province of Western Australia, with numerous operating and developing Lithium projects. Notably, the KHLP is only 30km's directly west and 45km's via sealed road to the Mt Marriion Lithium Mine operated by Mineral Resources Ltd (ASX: MIN). KHLP and Miriam are accessible via a sealed road leading south from Coolgardie, ensuring the Company has continuous access all year-round.

Our other key portfolio asset is the Nevada Lithium Project (NLP). A large-scale, high-grade initial lithium claystone Mineral Resource Estimate (MRE) was recently declared for the Lone Mountain deposit within the NLP, with this MRE being delivered less than 12 months from discovery. The business is evaluating a range of potential commercialisation routes for the NLP.

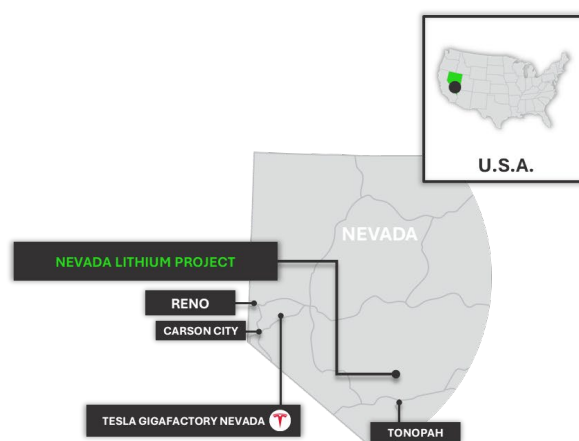


KANGAROO HILLS AND MIRIAM LITHIUM PROJECTS

High-grade LCT pegmatite discovery

31m at 1.13% Li_2O , including 20m at 1.43% Li_2O

Refer to FBM ASX announcements on 15 May 2024 and 15 April 2024



NEVADA LITHIUM PROJECT

Large-scale initial Mineral Resource Estimate

1.5 Bt at 783 ppm Li for 6.2 Mt LCE

About Lithium

Lithium is a soft silvery-white metal which is highly reactive and does not occur in nature in its elemental form. In nature it occurs as compounds within hard rock deposits, salt brines and claystone. Lithium and its chemical compounds have a wide range of industrial applications resulting in numerous chemical and technical uses. Lithium has the highest electrochemical potential of all metals, a key property in its role in lithium-ion batteries.

JORC Code, 2012 Edition, Table 1

Section 1: Sampling Techniques and Data

CRITERIA	EXPLANATION	COMMENTARY
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Soils Sampling was conducted on a planned grid consisting of 40m sample spacing and 100m line spacing which is consistent with the previous sampling grid conducted by Corazon Mining. Samples were collected with hand tools, removing the top 10-20cm of soil in order to remove organic matter, before digging a further 10cm of soil for sieving. Approximately 200g of sieved soil was collected at each site, utilising a -0.18mm mesh. A total of 405 samples were collected <p>Corazon Rock and Soil Sampling – A total of 636 soil samples were collected Soil sampling was conducted on a 100mx40m grid. Results of the Corazon soil programme were announced by Corazon Mining on 29th of March 2023 Results of the Corazon rock chips were announced on the 17th of January 2023</p>
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	No Drilling results reported
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	No Drilling reported
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	No logging results reported

	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Soil was sieved using a –0.18mm nylon mesh Soil sampling is considered a sufficient first pass geochemical assessment of the ground where appropriate regolith exists. Geochemical anomalies are relative to the surrounding geochemistry Sampling grids are designed to cover large area's in order to allow identification of anomalous zones 200g samples are appropriate
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Samples were submitted to ALS laboratories All samples were assayed for multi element geochemistry utilising a 4 Acid digest with mass spectrometry finish (ME-MS61) Duplicate samples are inserted at 1:25 ratio
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No independent verification has been conducted Duplicate samples are inserted at 1:25 Field sample sheets are maintained Field data is imported to the FBM geochemistry database. No adjustments are made to assay data
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Samples are located utilising a hand held GPS with a accuracy +/-5m. Which is suitable for this form of sampling Geospatial grid information is represented in UTM MGA 94 Zone 51
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation 	<ul style="list-style-type: none"> Sample spacing was conducted on a 40mx100m grid This data spacing is appropriate for identifying continuous and non-continuous geochemical anomalies

	<p>procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> Whether sample compositing has been applied. 	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Sampling was conducted on a series of east-west lines, spaced at 100m intervals The east west lines run near perpendicular to the underlying lithology strike providing unbiased sampling
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples are collected daily in the field by company staff and contractors Samples are delivered to ALS laboratories – Kalgoorlie depot in marked pollyweave bags at the end of each shift or completion of significant area.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	No independent audit or review has been undertaken.

Section 2: Reporting of Exploration Results

CRITERIA	EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>The Miriam Project consists of 5 prospecting leases.</p> <ul style="list-style-type: none"> Granted leases are P15/6136, P15/6137, P15/6138 and P15/6139. P15/6135 remains in application Leases P15/6136-6139 are held by Coolgardie Nickel Pty Ltd, now an 85% subsidiary of Future Battery Minerals Ltd. P15/6135 is held by Limelight Industries Pty Ltd until time of grant A 2% NSR is held by Limelight Industries Pty Ltd over all Miriam tenure. FBM have exercised an option to acquire the royalty. The tenements are located in the Kangaroo Hills Timber Reserve, an approved Conservation Management Plan provides conditional access to the tenure. The tenements are in good standing and no known impediments exist. <p>The Kangaroo Hill Lithium Project consists of 8 prospecting leases.</p> <ul style="list-style-type: none"> P15/5740, P15/5741, P15/5742, P15/5743, P15/5749, P15/5750, P15/5963, P15/5965, M15/1887 (in application), M15/1905 (in application), P15/6681 (in application), P15/6813 (in application) All leases are held by Eastern Coolgardie Goldfields Pty Ltd (ECG), a subsidiary of Future Battery Minerals Ltd Tenements P15/5741, P15/5963 and P15/5965 overlap the

		<p>Kangaroo Hills Timber Reserve, a C class multi-purpose reserve</p> <ul style="list-style-type: none"> • FBM operates under an approved Conservation Management Plan within the reserve. • No known royalties exist on the KHLP leases. • There are no material issues with regard to access. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>Corazon Miriam Soil Sampling</p> <ul style="list-style-type: none"> • Sampling conducted by Corazon Mining Ltd (asx;CZN), announced to asx on 29th of March 2023 • Sampling conducted on a 40m x 100m grid sieving soil 10cm below surface • All samples were assayed for multi element geochemistry utilising a 4 Acid digest with mass spectrometry finish (ME-MS61) • .
Geology	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> • The Miriam project is prospective for Lithium, Caesium, Tantalum (LCT) enriched pegmatites which intrudes older Archean aged greenstone lithologies. • The tenements are prospective for lode and structurally hosted gold mineralisation hosted within Archean aged greenstone lithologies.
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	No drill holes are reported.
Data aggregation methods	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 	<ul style="list-style-type: none"> • Soil results are grouped and reported in the following ranges of Li ppm; (0-10, 10-25, 25-40, 40-60, 60-80, 80-Max) • Samples reporting >25ppm Li are relatively anomalous for the area

	<ul style="list-style-type: none"> Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	N/A
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Relevant diagrams have been included within the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	N/A
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No other substantive data exists.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> FBM plans to conduct further target generative exploration including Gravity geophysics. FBM will schedule drill testing of the Miriam project post geophysical surveys Refer to figures/diagrams in the main body of text.