



2 October 2024

ASX ANNOUNCEMENT

EXPLORATION ADVANCES AT MIRIAM LITHIUM PROJECT

Highlights

- Initial soil sampling programme at Miriam completed with assays expected late October.
- Exploration Incentive Scheme (EIS) application and Program of Work (POW) for initial Miriam drill programme submitted; drilling targeted to commence in H1 2025.
- Option agreement executed to acquire existing 2% Net Smelter Return (NSR) royalty over Miriam – covering gold, lithium and all other minerals.
- Ongoing field exploration activities progressing across newly staked WA Goldfields land package, focussed on both lithium and gold mineralisation.
- Strong cash balance to support cost-efficient exploration and growth opportunities.

Future Battery Minerals Ltd (ASX: FBM) (FBM or the **Company**) advises of an update on current activities for its Miriam Lithium Project (**Miriam**) in the Western Australian Goldfields region.

FBM Managing Director and CEO, Nick Rathjen, commented:

“We continue to advance our key target generation and refinement activities at the Miriam Lithium Project in a cost-effective manner. Recent completion of a wide-spaced soil sampling programme is another important milestone in systematically assessing the potential of this tenure, particularly for shallow, subsurface mineralised pegmatites. Commencement of drilling at Miriam is planned for H1 2025 and can be brought forward should market conditions improve.”

“We are also pleased to execute the option agreement to acquire the existing net smelter royalty at Miriam. We believe that the option agreement we have negotiated presents an attractively priced opportunity in the current market to increase our overall exposure to the prospectivity of the Miriam tenure. We continue to remain vigilant and active in evaluating new opportunities and capitalise on them when appropriate.”

“We maintain a constructive outlook on medium and long-term lithium market fundamentals. Our strong cash position allows us to systematically advance both the Miriam and Kangaroo Hills Projects through efficient, cost-effective exploration activities. Additionally, we are progressing initial low-cost target generation work on the newly staked tenure in the WA Goldfields which provides us with further discovery potential in this prospective lithium and gold province.”

Extensional soil sampling completed

Previous soil sampling activities undertaken at Miriam were limited to only 2.6 km (north-south) of the tenure’s approximate 6 km extent. A wide-spaced extensional soil sampling programme has now been completed to test for potential subsurface pegmatites, extending into the northern area of the tenure (refer Figure 1) that has been cleared by previous heritage surveys. Over 400 samples have been collected during September and assays from this programme are expected to be received by late October.

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 there is substantial in-situ regolith and little-to-no transported alluvium, producing more dependable surface geochemical data sets.

Results of the soil sampling programme are to be used to guide planned geophysical surveys and drilling programs, allowing for better allocation of survey costs and target refinement. The soils programme follows on

from the recent target-generative magnetic litho-structural geophysical review of Miriam, which identified 13 discrete structural targets that may act as potential conduits or host structures for LCT pegmatites.

Following the receipt of assay results from the soil sampling, FBM has scheduled targeted ground gravity geophysical surveys to commence at Miriam. Ground gravity will improve drill hole planning, further derisking exploration. The gravity survey is scheduled to commence following receipt of the soil sample programme results and be completed in the December 2024 quarter.

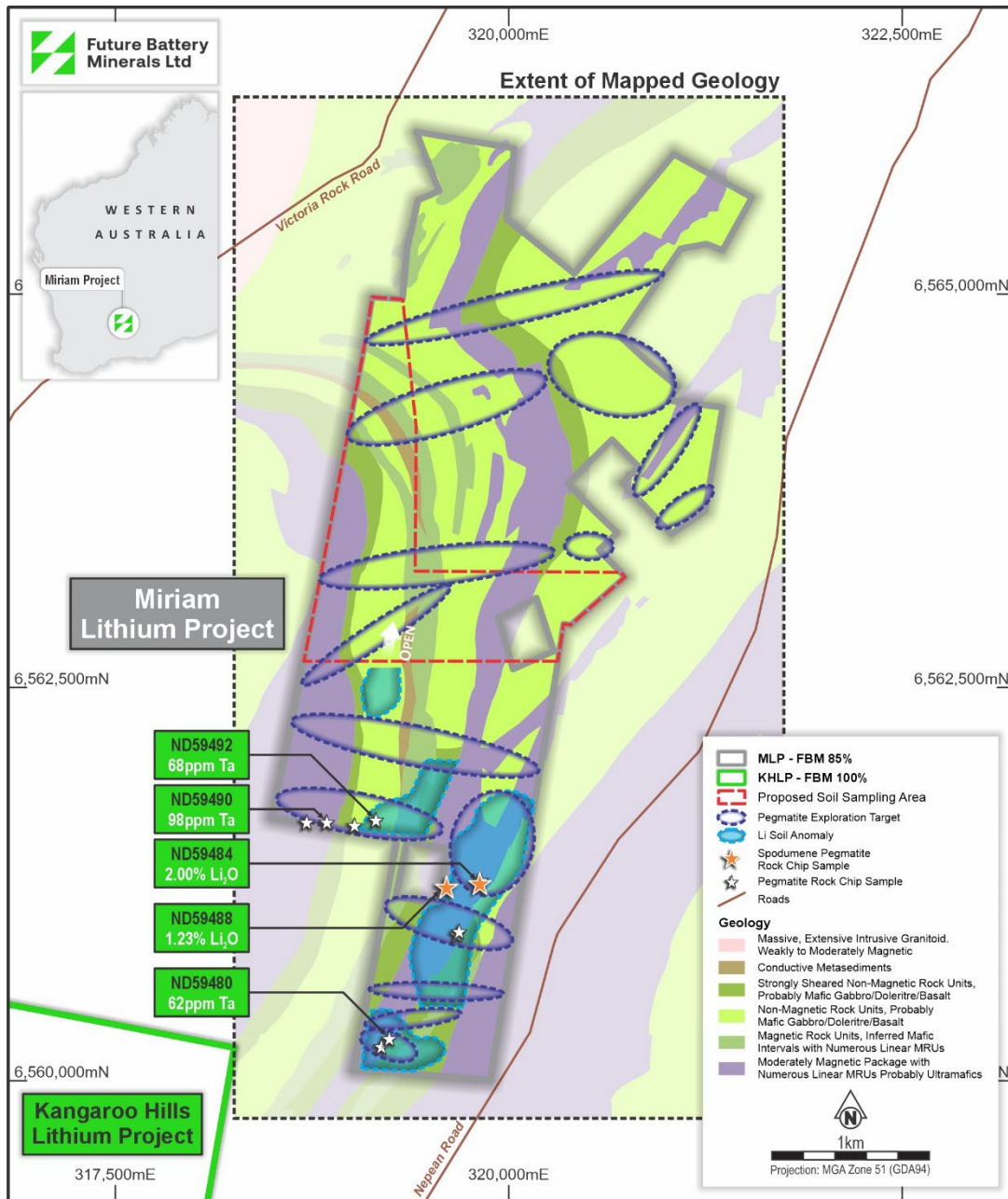


Figure 1: Recently completed wide-spaced soil sampling program at Miriam

EIS application and POW submitted; initial drilling on track for H1 2025

FBM has submitted an EIS application for the initial drill programme at Miriam, which offers up to a 50% refund for innovative exploration drilling projects. The EIS aims to stimulate greenfield resource exploration to increase knowledge of Western Australia’s geology and resources, boost employment opportunities, and generate new mineral and energy discoveries to meet the demand for critical minerals. The Company is expecting to receive feedback on its application by the end of October. The program of works (POW) for the initial Miriam drill programme has also been submitted.

Option agreement executed to acquire existing NSR

FBM has executed an option agreement to acquire the existing 2% NSR royalty over Miriam (which covers all mineral rights/products). In exchange for the payment of an option fee of A\$60,000, the agreement grants FBM a 12-month period in which it can exercise the option to acquire the NSR royalty via the payment of a further A\$65,000.

Field exploration activities across broader W.A. Goldfields tenure

The Company continues to assess its recently staked broader W.A. Goldfields tenure at KHLP West, KHLP North and Kal North – through both targeted desktop studies and low-impact ground investigations. Lithium and gold soil anomalies have been previously identified at both KHLP North and Kal North, with ground truthing exploration consisting of mapping and rock chip sampling currently underway. The tenure is being progressed to approval through negotiations with stakeholders and relevant Native Title Parties (NTP).¹

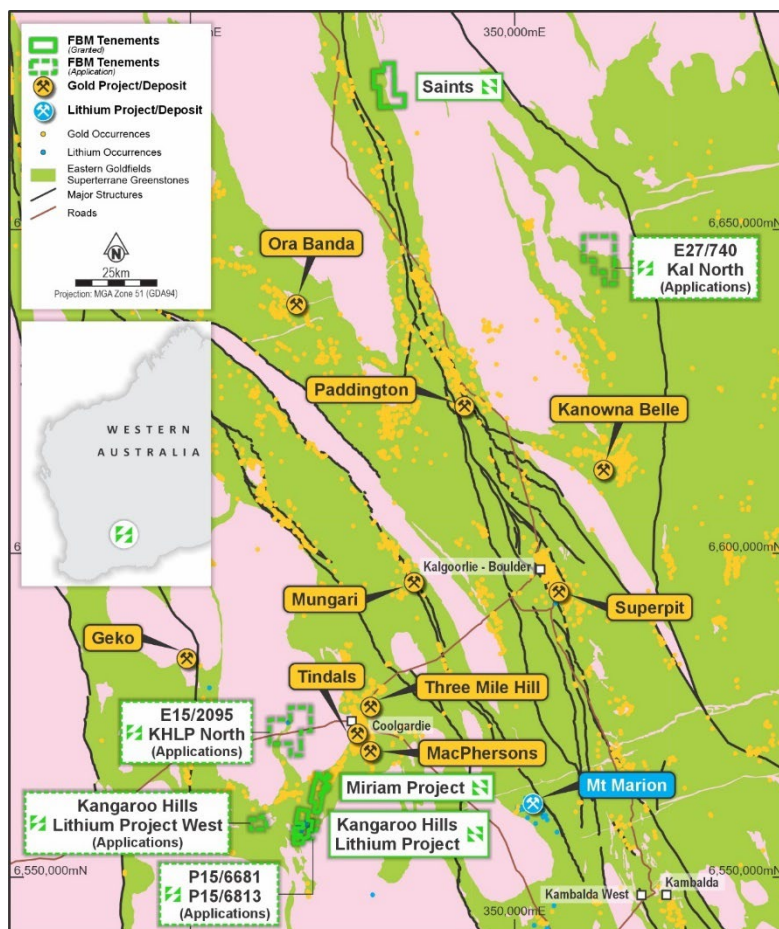


Figure 2 FBM W.A. Goldfields tenure; granted and application status

¹ Refer to FBM ASX announcement dated 5 August 2024; *FBM Significantly Expands Footprint in the Goldfields*

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

-END-

For further information visit www.futurebatteryminerals.com or contact:

Nicholas Rathjen

Managing Director & CEO

E: nrathjen@futurebatteryminerals.com.au

Robin Cox

Technical Director

E: rcox@futurebatteryminerals.com.au

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 programme 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.



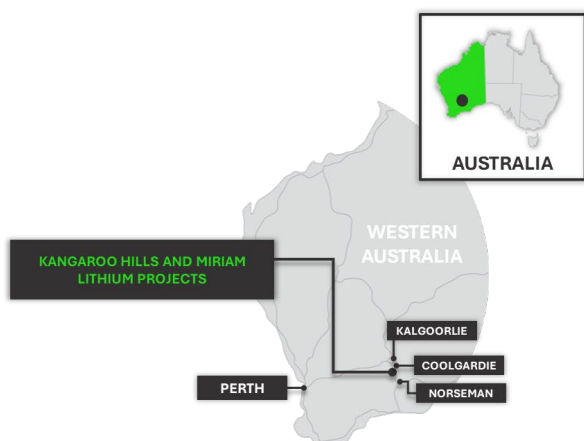
About Future Battery Minerals (ASX: FBM)

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 west of the Mt Murrumbidgee 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 maiden 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.

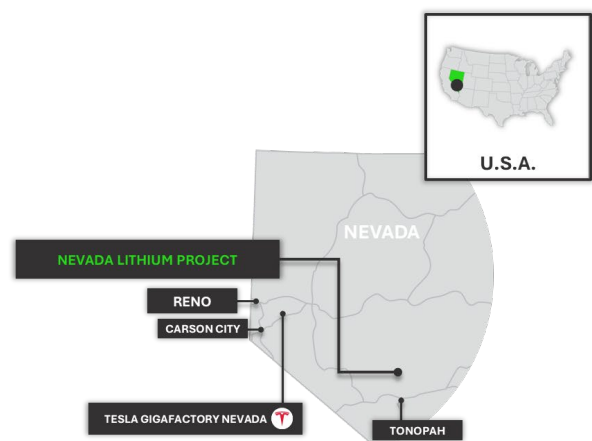


KANGAROO HILLS AND MIRIAM LITHIUM PROJECTS

High-grade LCT pegmatite discovery

31m at 1.13% Li₂O, including 20m at 1.43% Li₂O

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.