



17 June 2025

ASX ANNOUNCEMENT

NEW GOLD TARGETS IDENTIFIED AT MIRIAM PROJECT

Highlights

- Litho-structural interpretation of aeromagnetic data over Miriam identified thirteen (13) new structural gold targets, individually up to 1.75km long across a 6km tenure strike
- Critically, numerous local-scale structures and faults coincide with historic drilling data for gold anomalism including the existing Forrest, Jungle, Burbanks Monarch, Blue Bell, Prospecting and Londonderry targets.
- Surface geochemical review continues, with a further 200 surface samples collected to be analysed for gold and gold pathfinders, with results expected late June.
- FBM's geological team also set to conduct further ground truthing and mapping.
- Initial RC drill program at Miriam, focused on Forrest gold targets, remains on track to commence in July 2025.
- Historical drilling of the Forrest prospect intercepted¹:
 - 12m @ 2.09 g/t Au from 60m (MRC97-15)
 - 10m @ 2.51 g/t Au from 30m (FGA002)
 - 10m @ 2.09 g/t Au from 30m and 4m @ 4.86 g/t Au from 73m (MRC97-5)
 - 5m @ 7.35 g/t Au from 70m (MRC97-25)
 - 8m @ 1.63 g/t Au from 28m (MRC97-17)
 - 9m @ 1.07 g/t Au from 51m (MRC97-12)
- FBM remains well-funded to undertake all planned exploration activities through 2025 and beyond with a strong cash balance of A\$7.4 million and zero debt (as at 31 March 2025).

Future Battery Minerals Ltd (**ASX: FBM**) (**FBM** or the **Company**) is pleased to advise that it has completed the detailed litho-structural interpretation of geophysical and geochemical data over its 100%-owned Miriam Project, located in the W.A. Goldfields region of Western Australia.

FBM Managing Director and CEO, Nick Rathjen, commented:

"The identification of 13 structural targets at Miriam evidences the significant gold prospectivity waiting to be tested there, and further demonstrates the potential across our broader Coolgardie portfolio. This successful review of magnetic geophysics marks another key milestone across the exploration workstreams, which enhances the definition of our search area for subsurface gold mineralisation. Importantly, these targets, point to the regional scale potential for new discoveries in addition to the current known gold mineralisation we have at Miriam. Geochemical soil sampling continues to advance with a further 200 surface samples submitted for analysis. Our geological team will also conduct additional ground truthing and mapping to expand our growing base of prospective gold targets. All this work complements the effective execution of an initial drill programme at Miriam's Forrest gold target, which remains set to commence in July 2025."

¹ Refer to FBM ASX announcement dated [27 May 2025](#)

New targets identified through magnetic geophysics

Following its 100% acquisition of all mineral rights for the Miriam Project in May 2025, FBM completed a review of available historical geological and drilling data. This resulted in the discovery of historical gold mineralised intercepts at Forrest and the identification of numerous other gold occurrences at Forrest South, Jungle and Goroke (refer ASX releases dated 19 May 2025 and 27 May 2025).

The Miriam Project tenure covers a region of the Coolgardie Greenstone Belt overlying a suite of mafic and ultramafic units along with felsic intrusives. Miriam also overlies formations and structural trends that host multiple nearby gold deposits, including Horizon Minerals' Burbanks (466 koz @ 2.4 g/t Au), Beacon Minerals' McPhersons Reward (132 koz @ 1.2 g/t Au) and Focus Minerals' Tindals Mining Centre (2.7 Moz @ 1.8 g/t Au)².

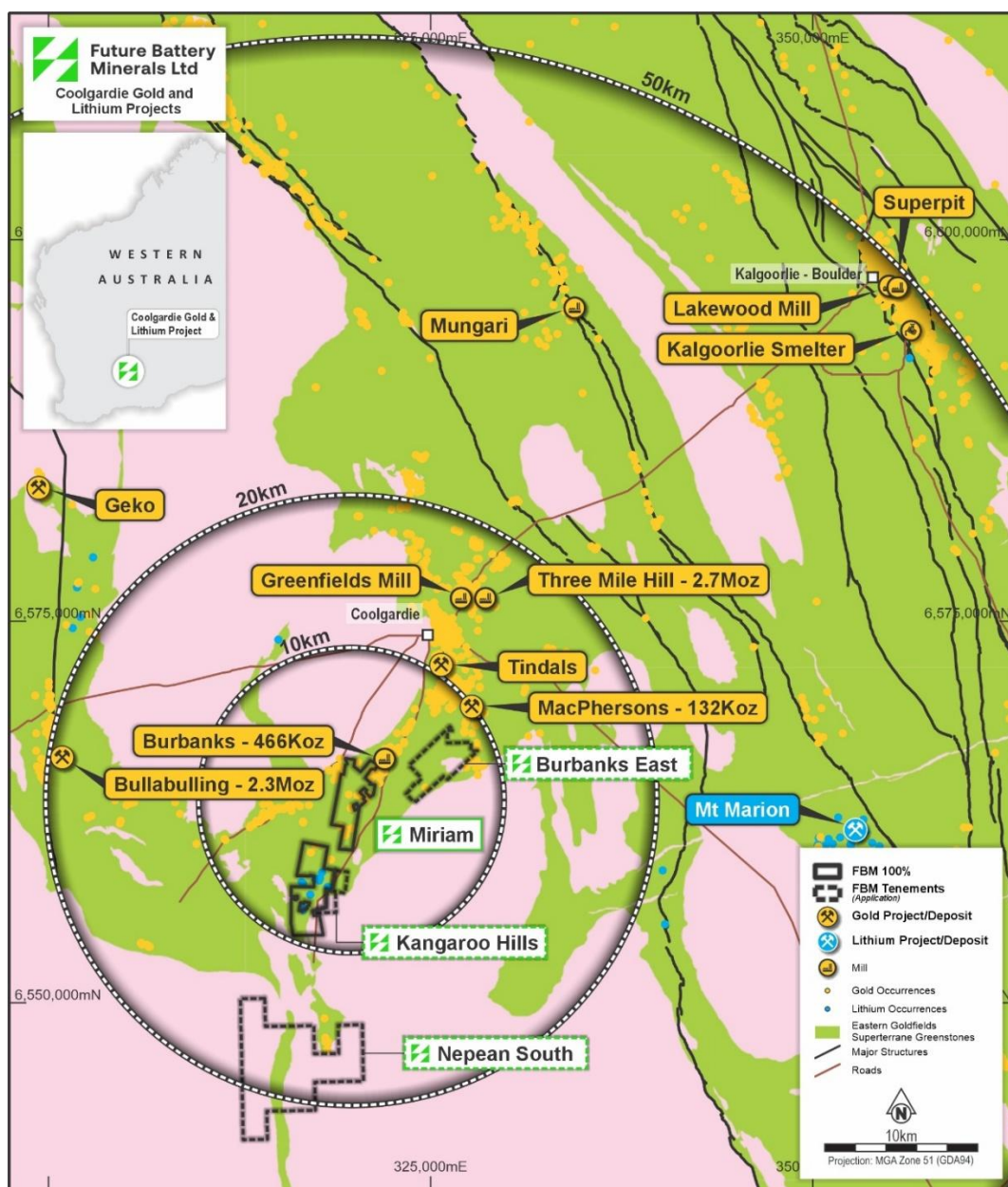


Figure 1: Regional Map of FBM's Coolgardie Projects and other nearby operations³

² MacPhersons refer to [Beacon Minerals ASX Announcement](#) dated 6th November 2024, Three Mile Hill refer to [Focus Minerals ASX Announcement](#) dated 1st December 2023. Refer to [Horizon Minerals Reserves & Resources](#)

³ Bullabulling refer to [Minerals 260 ASX Announcement](#) dated 14th January 2025

Within the Coolgardie Greenstone Belt, gold appears to be hosted in a range of bedrock lithologies, however structural or chemical deformation and intrusions are often key to gold mineralisation. Magnetic geophysics is used to help identify these critical changes and increase the potential for further exploration success.

In May 2024, FBM engaged geophysical consultants Southern Geoscience to undertake a detailed review and reinterpretation of existing airborne magnetic and radiometric data over the Miriam Project for lithium targets. The review enabled the development of a new litho-structural interpretation of the bedrock geology at a detailed 1:10,000 scale, including the identification of major, secondary and minor faulting within the bedrock units.

FBM has reviewed the same geophysical magnetic data sets with a focus on identifying structures and targets prospective for gold deposition. This now completed review of the geophysical data has resulted in the identification of 13 prospective targets which include both broad and discrete structures of interest. The targets include a combination of lithological changes, localised demagnetisation, faulting and offsetting, which may all be significant for gold mineralisation. Many targets show analogous geophysical characteristics of known mineralisation at the Forrest prospect where gold mineralisation sits on the boundary to a small magnetic high feature. This is interpreted to represent a faulted or sheared contact between mafic and ultramafic units which is likely to extend to the north and south.

Importantly, FBM has identified a similar feature which is present in a 1.75km strike length target to the south of Forrest which incorporates the artisanal surface mining of the Londonderry prospect (not held by FBM). FBM believes this structural feature could be an important conduit for gold mineralisation within the Forrest-Londonderry Trend.

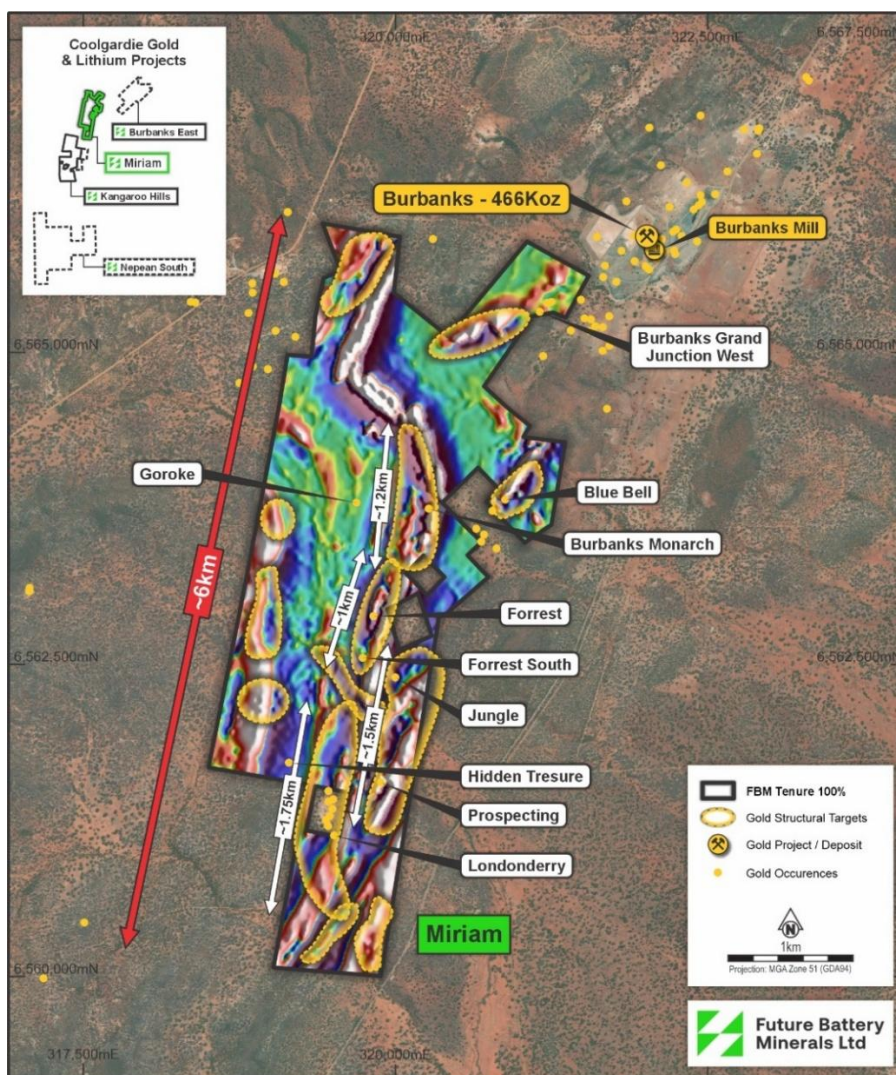


Figure 2: Miriam Key Targets Geophysical Map

Upcoming work programmes

The targets identified through this litho-structural interpretation of geophysics will be further considered against FBM's ongoing review of gold prospectivity at Miriam, which includes surface geochemistry. FBM has recently collected a further 200 soil samples from Miriam, which will be analysed by LabWest Minerals Analysis utilising Ultrafine+™, an Ultra Fine Fraction process which tests clay particle size fraction soils for gold and gold pathfinder elements.

An initial RC drill programme at Miriam remains scheduled to commence in July 2025. This program is set to focus on initial targets within the Forrest prospect, which boasts historical gold intercepts.

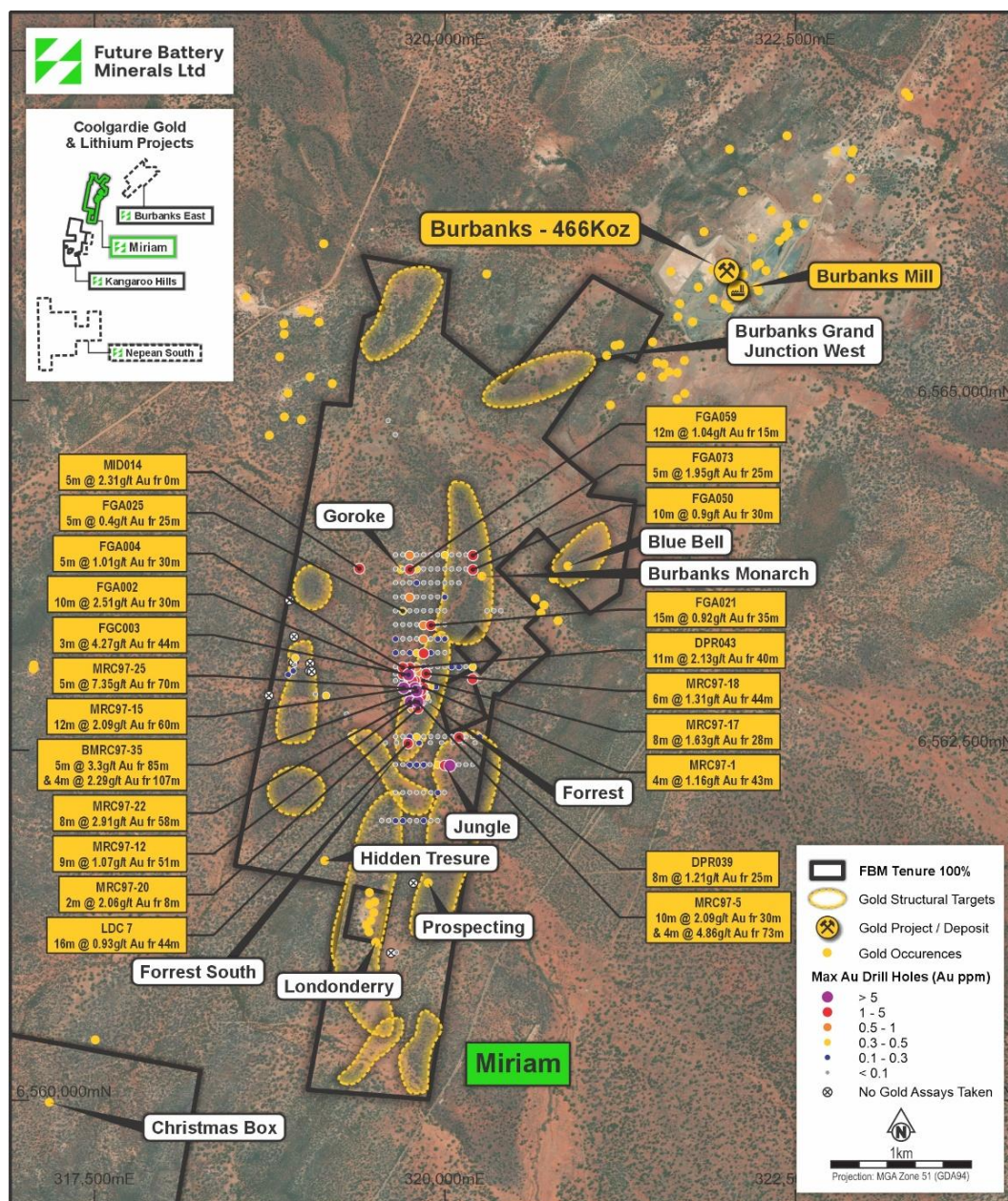


Figure 3: Miriam Project Drill Hole Location Map

FBM remains fully permitted to conduct exploration and drilling activities over the Miriam Project tenure, with an approved Conservation Management Plan and granted drilling Program of Work in place. Most of the Miriam tenure has already been surveyed by the relevant Native Title Party representative, meaning FBM can rapidly advance towards drill testing of priority drill targets.

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
CEO & Managing Director
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.

The information in this announcement that relates to Geophysical Results is based on and fairly represents information compiled by Mr Matthew Hutchens (BSc. Hons. (Geophysics) Principal Geophysicist at Southern Geoscience, a Competent Person, who is a Member of the Australian Society of Economic Geophysicists (ASEG). Mr Hutchens is a consultant to the company 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 Hutchens 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)

THE BUSINESS: Gold and lithium exploration and development

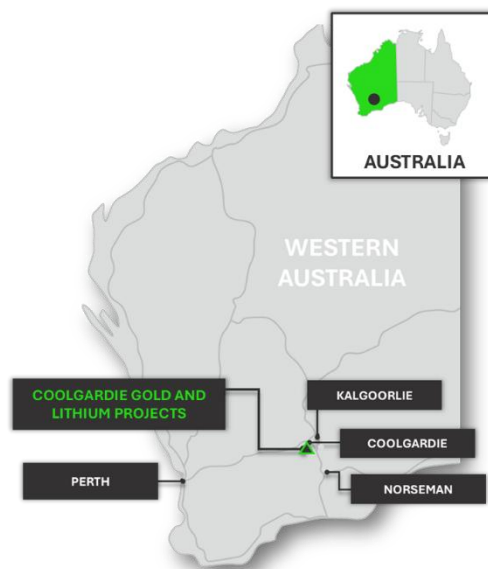
Future Battery Minerals (ASX: FBM) is an exploration and development company focused on rapidly advancing its world-class gold and lithium projects in the Eastern Goldfields of Western Australia.

THE LOCATION: Infrastructure-rich project setting

The Eastern W.A. Goldfields is an outstanding location in which to explore for, build, and operate gold and lithium mines. It is a long-established mining province with all the accompanying benefits, including all-year land access, skilled labour, mining services and infrastructure.

We are positioned just 15km south of the mining hub of Coolgardie (via sealed road), approximately 370km to the port of Esperance and approximately 550km to Perth via road and rail. We are proximal to multiple gold and lithium mining and processing operations and development projects of substantial scale.

This available range of potential commercialisation options, including standalone development, positions us well to monetise current and future success.



THE TEAM: Proven value generators

Our carefully assembled team has an extensive track record of exploration success, project stewardship, development expertise and operating excellence that has repeatedly resulted in the delivery of substantial shareholder value: Nick Rathjen (MD), Robin Cox (Technical Director), Nev Power (Chairman), Rob Waugh (NED).

THE CAPACITY: Balance sheet strength and runway

We are a business and team that is resolutely focussed on the stewardship of our shareholders' capital and the astute application of this capital for maximal return. With a cash balance of A\$7.4 million and zero debt (as at 31 March 2025), we are well-funded to undertake our planned exploration and evaluation work programs across our projects over the next 18-24 months.

JORC Code, 2012 Edition, Table 1

Section 1: Sampling Techniques and Data

CRITERIA	EXPLANATION	COMMENTARY
Sampling techniques	- 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.	- Reverse Circulation drilling collects a 1m bulk sample. Sampling is then composited into 4m composites for fire assay purpose. Anomalous intercepts are then sub assayed to their 1m sample. - Air Core drilling collects a 1m bulk sample. Sampling is then composited into 4m composites for fire assay purpose. Anomalous intercepts are then sub assayed to their 1m sample. - Rotary Air Blast Drilling collects a 1m bulk sample. Sampling is then composited into 4m composites for fire assay purpose.
Drilling techniques	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).	- Historic results reported include drilling by Reverse Circulation (RC), Air Core (AC) and Rotary Air Blast (RAB). - The drill type has been specified in the appropriate collar table.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	- Results reported are historic and FBM has relied upon public domain data reported by previous project holders. - Recovery was measured/commented in sample logs. - No sample bias relationship has been identified.
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	- Results reported are historic and FBM has relied upon public domain data reported by previous project holders. - Drill holes have been lithologically logged by geologists in the field by respective historic explorers - Lithological data has been compiled. Logging is a qualitative nature.

	The total length and percentage of the relevant intersections logged.	At Forrest Gold prospect primary lithology has been recorded. Not all drill logs include data such as oxidation, texture and structure.
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or 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.	- Sampling of drill chips included compositing by spear sample on 4m composites. - Single metre samples were riffle split to obtain an approximate 3kg sample.
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The Historic data represented in this announcement was culminated from the exploration work conducted the following parties. - Mt Kersey Mining conducted Reverse Circulation drilling in 1996 consisting of 9 holes. Samples were assayed via Fire Assay for gold and aqua regia digest for other elements at AAL Kalgoorlie - Crest Mining conducted Reverse Circulation drilling in 1996 and 1997 consisting of 38 holes. Samples were assayed via PM203 at ALS laboratories - Barminto conducted Reverse Circulation drilling in 1997 consisting of 6 holes. Samples were assayed via Fire Assay FA1 at Amdel laboratories. - Spinifex Resources conducted 3 diamond core holes targeting the Miriam Nickel prospect in 2000. Samples containing gold were assayed via fire assay at Analabs - Berkeley Resources conducted 3 diamond core and 1 RC hole targeting the Miriam Nickel prospect in 2004. Samples containing gold were assayed via fire assay at Analabs. - Sipa Resources conducted Air Core (73 holes), RAB (63 holes) and RC (8 holes) drilling between 2005 and 2007. Samples were assayed by Ultratrace laboratories utilising methods, ICP101, ICP102, ICP302 and fire assay FA002 and FA003

Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- No independent verification has been conducted - Field data is imported to the FBM geochemistry database. - No adjustments are made to assay data
Location of data points	- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used. - Quality and adequacy of topographic control.	- Drill Holes were located utilising a hand held GPS with a accuracy +/-5m and via local gridding - All drill hole collar information has been transformed to UTM MGA 94 Zone 51 - Holes were field checked by FBM utilising a hand held gps to validate the grid transformation of the historic data. Field checks found the holes to be within the error range of the hand held gps. - Geospatial grid information is represented in UTM MGA 94 Zone 51
Data spacing and distribution	- Data spacing for reporting of Exploration Results. - Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. - Whether sample compositing has been applied.	- At Forrest, holes were drilled on a 40m spacing, 60m line spacing. - Regional targets were drilled on greater than 80m hole spacing and greater than 80m line spacing - This data spacing is appropriate for identifying continuous and non-continuous geochemical anomalies
Orientation of data in relation to geological structure	- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. - If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling has mostly been conducted on E-W grid lines. Geological units in the region have a dominantly N-S to NE-SW strike. As such the E-W drilling provides relative oblique interceptions.
Sample security	The measures taken to ensure sample security.	- Results reported are historic and FBM has relied upon public domain data reported by previous project holders. - FBM has not located historic data relating to sample security
Audits or reviews	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	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 Miriam Project consists of 5 prospecting leases. - 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 100% subsidiary of Future Battery Minerals Ltd. P15/6135 is held by

	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.	Limelight Industries Pty Ltd until time of grant - 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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Historic data represented in this announcement was culminated from the exploration work conducted the following parties. - Mt Kersey Mining conducted Reverse Circulation drilling in 1996 consisting of 9 holes. Samples were assayed via Fire Assay for gold and aqua regia digest for other elements at AAL Kalgoorlie - Crest Mining conducted Reverse Circulation drilling in 1996 and 1997 consisting of 38 holes. Samples were assayed via PM203 at ALS laboratories - Barminto conducted Reverse Circulation drilling in 1997 consisting of 6 holes. Samples were assayed via Fire Assay FA1 at Amdel laboratories. - Spinifex Resources conducted 3 diamond core holes targeting the Miriam Nickel prospect in 2000. Samples containing gold were assayed via fire assay at Analabs - Berkeley Resources conducted 3 diamond core and 1 RC hole targeting the Miriam Nickel prospect in 2004. Samples containing gold were assayed via fire assay at Analabs. - Sipa Resources conducted Air Core (73 holes), RAB (63 holes) and RC (8 holes) drilling between 2005 and 2007. Samples were assayed by Ultratrace laboratories utilising methods, ICP101, ICP102, ICP302 and fire assay FA002 and FA003
Geology	Deposit type, geological setting and style of mineralisation.	- 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	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:	Drill Hole collar tables including location, height and drill direction have been included. (Table 2).

	- 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.	- Maximum Au assay has been represented in the maps. This data is included in the collar table - Significant intercept assay data has been tabled. (Table1)
Data aggregation methods	- 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. - 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.	- Maximum down hole gold assays have been included in maps. Cutoff ranges are shown in legends - Significant intercepts are considered as intercepts >0.1g/t Au and include up to 1m internal dilution. This is considered a significant intercept for first pass drilling technique such as RAB and AC.
Relationship between mineralisation widths and intercept lengths	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	All results are reported as down hole length only. Mineralisation is interpreted as flat lying lodes however geological understanding is still insufficient and further drilling planned by FBM aims to address the uncertainty.
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.	Assay data has been represented for all holes drilled in the project area.
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;	airborne magnetic survey flown in 1996 by UTS Geophysics for Gold Mines of Coolgardie on 30m spaced east-west lines at ground clearance of 22m. Survey used magnetic base station for magnetic diurnal removal, GPS for location control and tie lines for

	potential deleterious or contaminating substances.	magnetic levelling. • Geophysical data from Bouchers airborne magnetic and radiometric survey flown in 2000 by TAG for Spinifex Nickel Pty Ltd on 40m spaced east-west lines at a ground clearance of 35m. Survey used magnetic base station for magnetic diurnal removal, GPS for location control and tie lines for magnetic levelling, calibrated spectrometer and standard windows for radioelement ground concentrations. • Lithostructural interpretation of geophysical data by Southern Geoscience Consultants is qualitative in nature and based primarily on magnetic and radiometric survey data with input from various other supporting datasets including geological mapping and soil sampling. The interpretation has been performed at a scale of 1:10 000 Geophysical targets are qualitative in nature and are generated based on the following criteria: interpretation of structural disruption from magnetic survey data, muted local magnetic field strength from magnetic survey data, mapped pegmatite outcrop from geological mapping, soil anomalism from soil sampling, potassium anomalism from radiometric survey data
Further work	• 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.	• FBM plans to conduct further target generative exploration including geophysical review and surface sampling. • FBM will schedule drill testing of the Miriam project which is scheduled for July 2025. • Refer to figures/diagrams in the main body of text.