



ASX ANNOUNCEMENT

LARGE MARYLEBONE EXPLORATION TARGET HIGHLIGHTS SIGNIFICANT GOLD POTENTIAL AT GIDJI JV

- **Large initial gold Exploration Target estimated for Marylebone target**
- **Marylebone target shares similarities to historic Panglo gold deposit**
- **Further work planned to facilitate maiden JORC-compliant Resource**

Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”) is pleased to announce that it has outlined an initial gold Exploration Target at the Company’s 80%-owned Gidji JV Project in the Eastern Goldfields of WA (“Gidji” or “the Project”).

An initial shallow gold Exploration Target of 1.3 to 3.1 million tonnes, at a grade of 1.2 – 1.5g/t Au, has been estimated for the Marylebone target (Table 1, Figure 1 and Appendices).

The Exploration Target was estimated from aircore, RC and diamond drilling conducted by the Company since commencing exploration at Gidji in late 2020 and is currently restricted to the shallow supergene and/or alluvial gold mineralisation encountered within the Marylebone target.

According to the parameters of the Exploration Target, the Marylebone target could conceivably contain 55,000 - 155,000 ounces of gold and appears similar to the historic Panglo gold deposit, which reportedly had a maiden supergene gold resource of approximately 117,000 ounces in 1987 (Figure 2).

Other large aircore footprints similar in size to Marylebone, including the Blackfriars and Highway targets, have not been included in the Exploration Target at this stage, due to a relative lack of drilling data when compared with Marylebone.

Miramar’s Executive Chairman, Mr Allan Kelly, said the initial Exploration Target underscored the significant gold endowment potential of the Gidji JV Project.

“Our primary aim at Gidji is to discover one or more large bedrock gold deposits, similar to the large Paddington deposit, immediately north of our project,” Mr Kelly said.

“After our first aircore drilling campaigns at Gidji, we recognised that there could also be significant shallow supergene and/or alluvial gold mineralisation which could potentially be developed in the short term, given the proximity to the Goldfields Highway and various gold processing operations,” he added.

“The amount of shallow supergene and/or alluvial gold discovered to date, along with multiple other targets, also implies a significant bedrock source nearby which is yet to be discovered,” he added.

Table 1. Marylebone Exploration Target (100% Basis)

Target	Tonnage (Mt)		Grade (g/t)	
	Lower	Upper	Lower	Upper
Marylebone	1.4	3.2	1.2	1.5

Cautionary Statement:

The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quantity and grade are conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a JORC-compliant Mineral Resource.

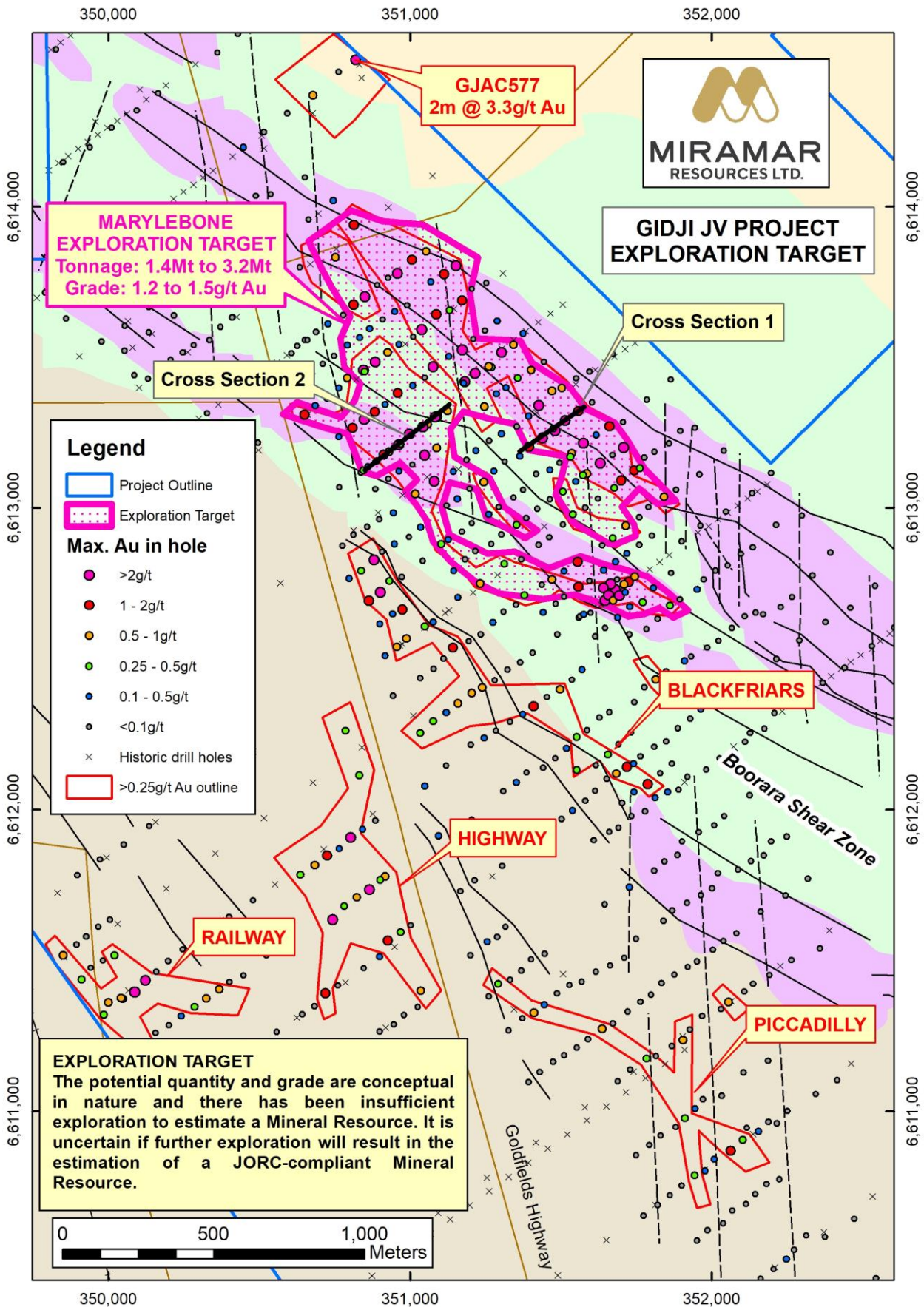
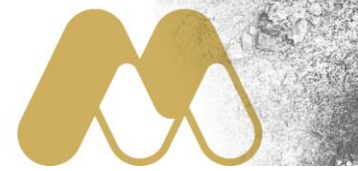
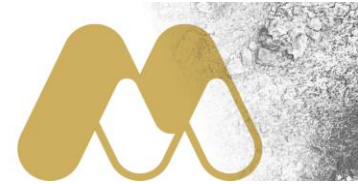


Figure 1. Gidji Project showing Exploration Target in relation to drilling.



Exploration Target Parameters

The initial Exploration Target estimate (“the Estimate”) was prepared by Miramar’s Executive Chairman, Mr Allan Kelly, who is a “Competent Person” (refer to the Competent Person Statement).

The Estimate utilised a subset of the Miramar drilling database, comprising 121 aircore holes (7,726), 26 RC holes (4,007m) and 1 diamond hole (190.75m) drilled over the Marylebone target, as well as limited historical drilling data from various previous tenement holders.

Drilling intersected supergene and/or alluvial gold mineralisation in a sub-horizontal layer within and/or beneath later paleochannel sediments. Figures 3 and 4 show examples of this mineralisation.

Drill hole spacing averages 80 x 50m but can be up to 400m x 100m in some areas.

Hole depths for vertical aircore holes drilled to “blade refusal” range from 3m to 108m, with an average depth of 52m.

The RC and diamond holes were angled and drilled to a down-hole depth of between 180 – 240m.

Aircore holes drilled at Gidji before August 2021 (approximately 400 holes) were initially sampled as 4m composites for the entire hole and assayed for low-level gold and a multi-element suite via aqua-regia digest followed by analysis by ICPMS.

Composite samples returning above 250ppb Au (i.e. 0.25g/t Au) were re-sampled as 1 metre resplits and re-assayed whilst any composite or resplit samples returning over the upper detection limit of 2,000ppb Au (i.e. 2g/t Au) were also routinely re-assayed by fire assay.

After August 2021, a modified sampling procedure was implemented to avoid sampling and assaying the overlying paleochannel sediments.

Once the base of alluvial material (“BOA”) is identified:

- The 4m interval containing the BOA is split into two samples: one above and one below the BOA
- A single 4-meter composite sample is taken directly above the upper BOA sample
- 4-meter samples are then taken below the lower split BOA sample to the end of hole

Quality control (QAQC) samples were inserted at a frequency of 4 QAQC samples (standards, blanks, duplicates) per 100 samples. A range of gold standards were used and no issues were identified.

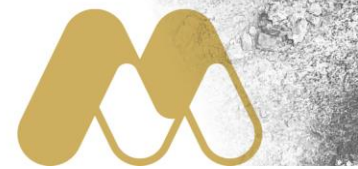
A lower cut-off grade of 0.2g/t Au was used to define the Exploration Target domains with a top cut of 7g/t Au applied to the Marylebone data.

Within the Marylebone target, a number of RC holes and 1 diamond drill hole were drilled underneath the mineralised aircore holes.

This RC drilling mostly confirmed the tenor of the aircore gold assay results and that there was no down-hole “smearing” of high-grade results evident in the aircore holes (see example cross sections).

The Estimate uses a minimum vertical thickness of 1 meter and an average thickness of 2 meters. As the mineralisation is sub-horizontal and the aircore drilling is vertical, the intersections are interpreted to represent the “true width” of the mineralisation.

At this stage, no specific gravity measurements have been taken for either the aircore or RC drilling samples. To calculate tonnages, the Company has therefore used theoretical SG values from 2.3 g/cm³ to 2.5 g/cm³, which is comparable with published data for other deposits in the area.



Mineral Resource Estimate

Further work will be required to convert the initial Exploration Target estimate to a JORC-compliant Mineral Resource, including increasing the drill density with further RC drilling and fire assay analysis, and conducting systematic specific gravity measurements across several holes.

The Company will continue exploring for bedrock gold mineralisation at Gidji, including under the Marylebone Exploration Target.

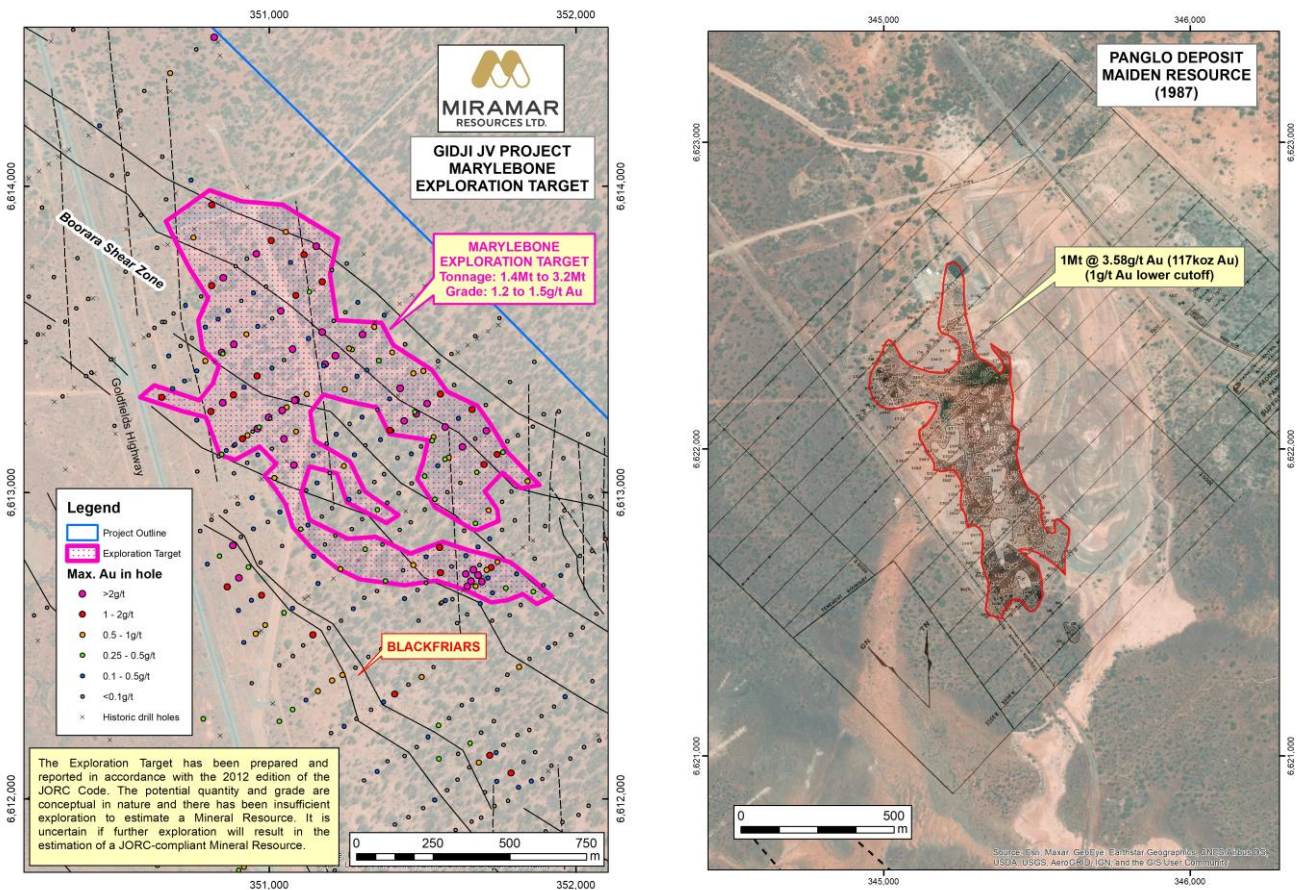


Figure 2. Comparison of the Marylebone Exploration Target with the maiden Panglo gold resource (ref WAMEX report a22899).

For more information on Miramar Resources Limited, visit the Company’s website at www.miramarresources.com.au, follow the Company on social media (Twitter @MiramarRes and LinkedIn @Miramar Resources Ltd) or contact:

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This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

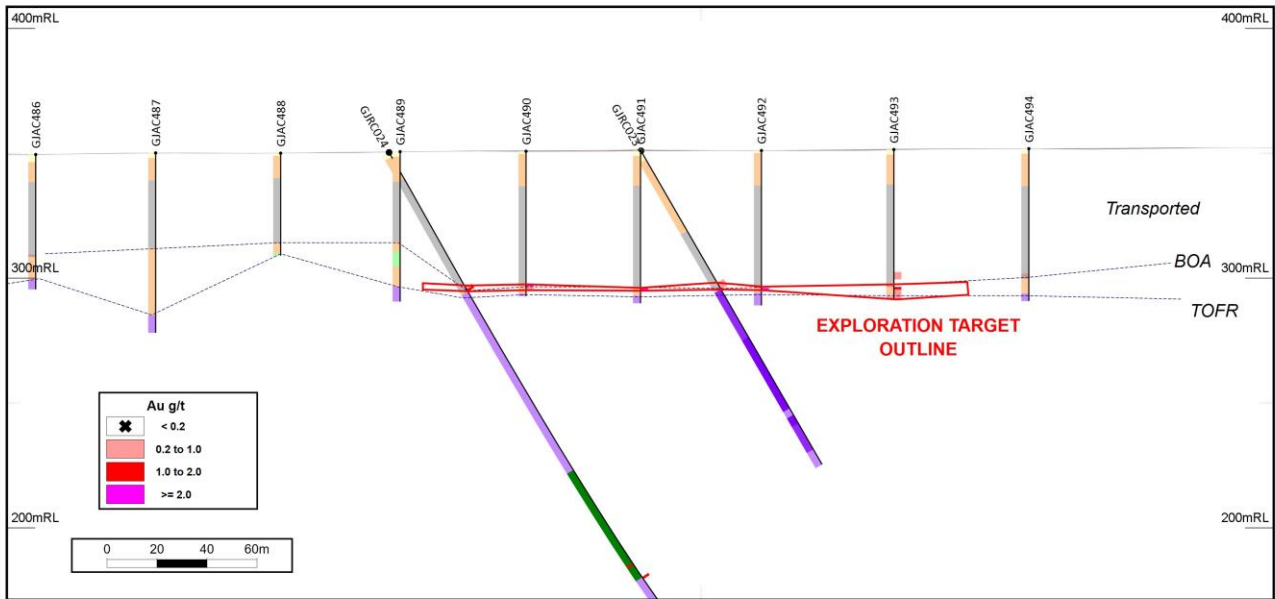


Figure 3. Cross Section 1, Marylebone Target.

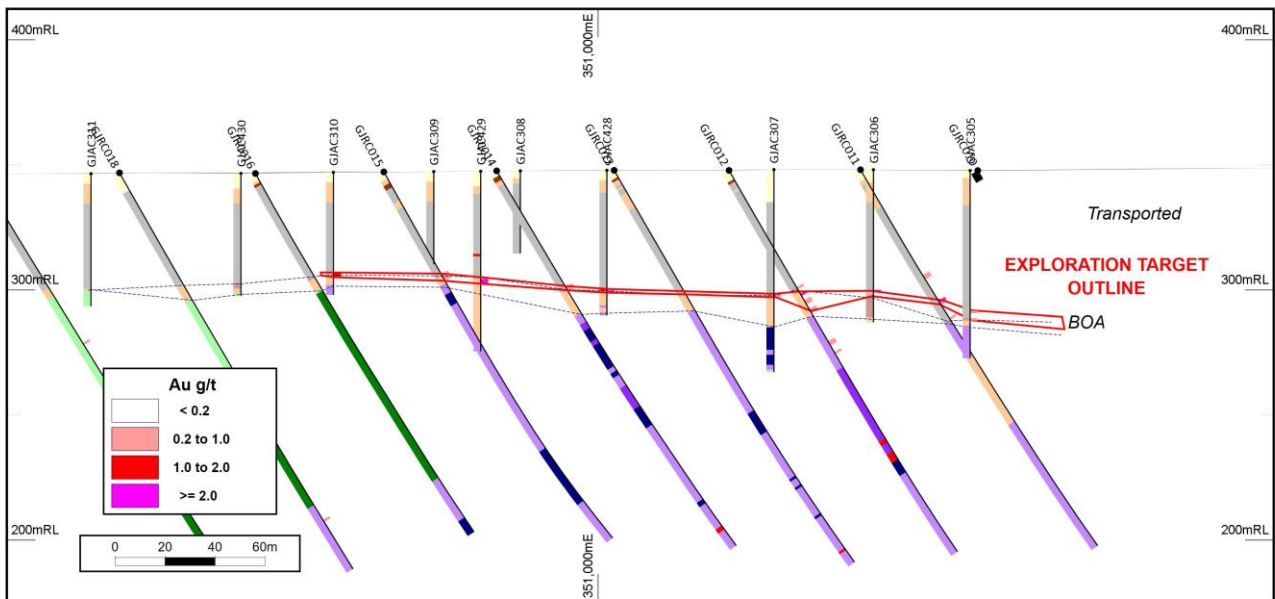


Figure 4. Cross Section 2, Marylebone Target.



COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a “Competent Person” who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits 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 Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Historical exploration results for the Gidji JV Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

JORC Table 1 and 2 information for recent exploration results at the Gidji JV Project, including hole collar information, is contained in the following ASX Announcements:

- 29/6/2022 *Gidji JV – Exploration Update*
- 26/5/2022 *Gidji JV - Exploration Update*
- 8/4/2022 *Multiple High-Grade Gold Results from Gidji JV*
- 10/3/2022 *Nickel Sulphide Targets Identified at Gidji JV*
- 1/2/2022 *RC Drilling Underway at Marylebone*
- 10/1/2022 *New Target at Gidji JV Increases Camp-Scale Potential*
- 22/12/2021 *Gidji drilling results indicate potential new gold camp*
- 25/11/2021 *Gidji JV Exploration Update*
- 7/10/2021 *Significant Gold Results from Gidji JV Drilling*
- 23/09/2021 *Multiple High-Grade Gold Results from Marylebone*
- 13/09/2021 *Gidji JV Tenements Granted*
- 2/08/2021 *Aircore Drilling Grows Marylebone*
- 29/06/2021 *New Aircore Results Upgrade Gidji Targets*
- 3/06/2021 *RC and Aircore Drilling Underway at Gidji JV*
- 11/05/2021 *Aircore Drilling Extends and Upgrades Marylebone*
- 6/05/2021 *Gidji JV Project Exploration Update*
- 15/04/2021 *Gidji Diamond Drilling - Additional Information*
- 12/04/2021 *Gidji Drilling Extends Runway and Hits Visible Gold*
- 16/03/2021 *Drilling Underway at Gidji*
- 11/02/2021 *High-grade gold at Gidji upgrades targets*
- 1/02/2021 *Gidji drilling intersects visible gold and outlines multiple targets*

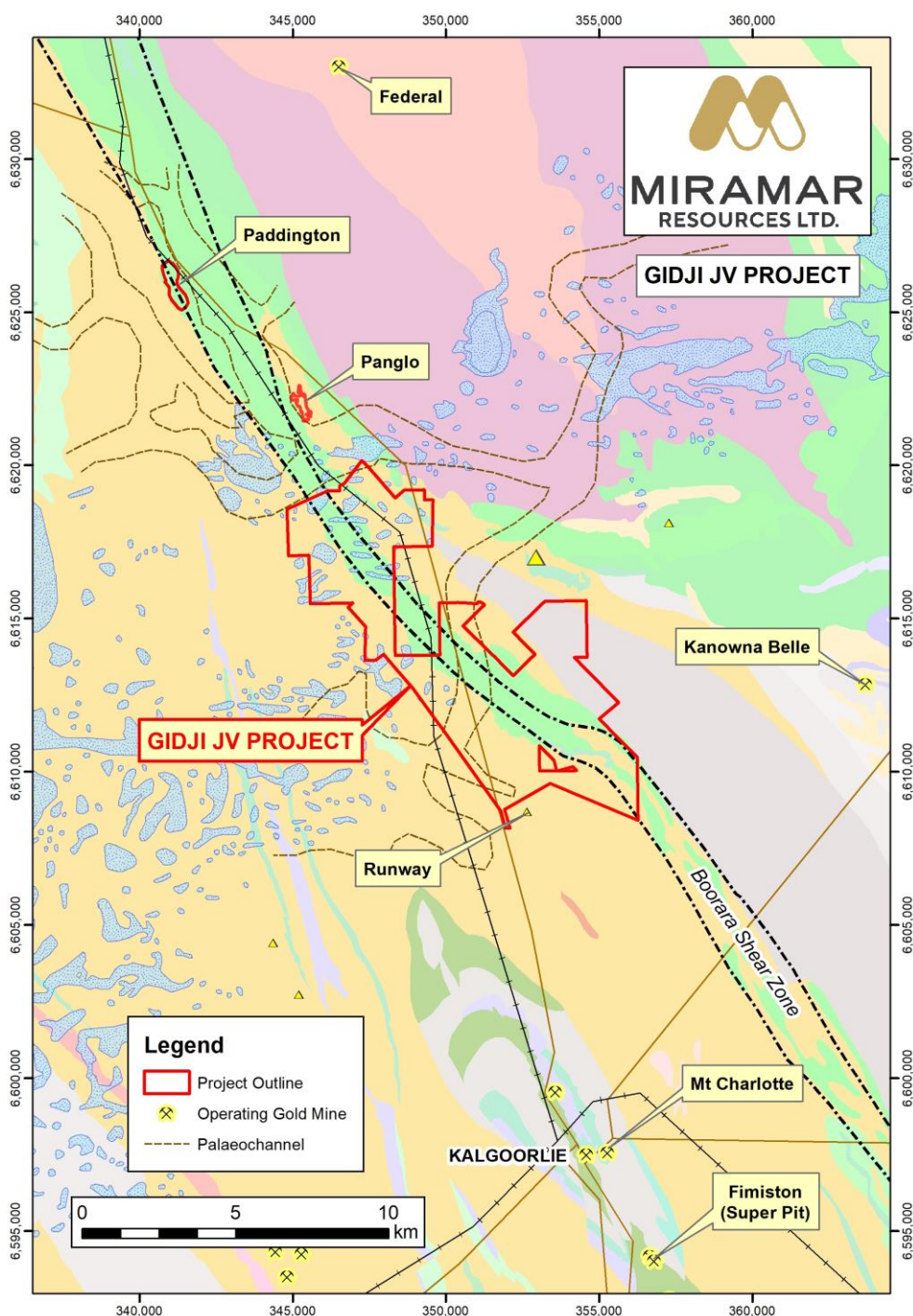


About the Gidji JV Project

The Gidji JV Project is located approximately 15km north of Kalgoorlie and in proximity to several gold mining and processing operations. Miramar purchased an 80% interest in several tenements along the Boorara Shear Zone, as part of the October 2020 IPO.

The Project is underexplored due to transported material, including a paleochannel, covering the most prospective geology.

The Company has been actively exploring the project since listing on the ASX resulting in the discovery of several new targets including “Marylebone” which has the same geological sequence as the nearby 4-million-ounce Paddington gold deposit.

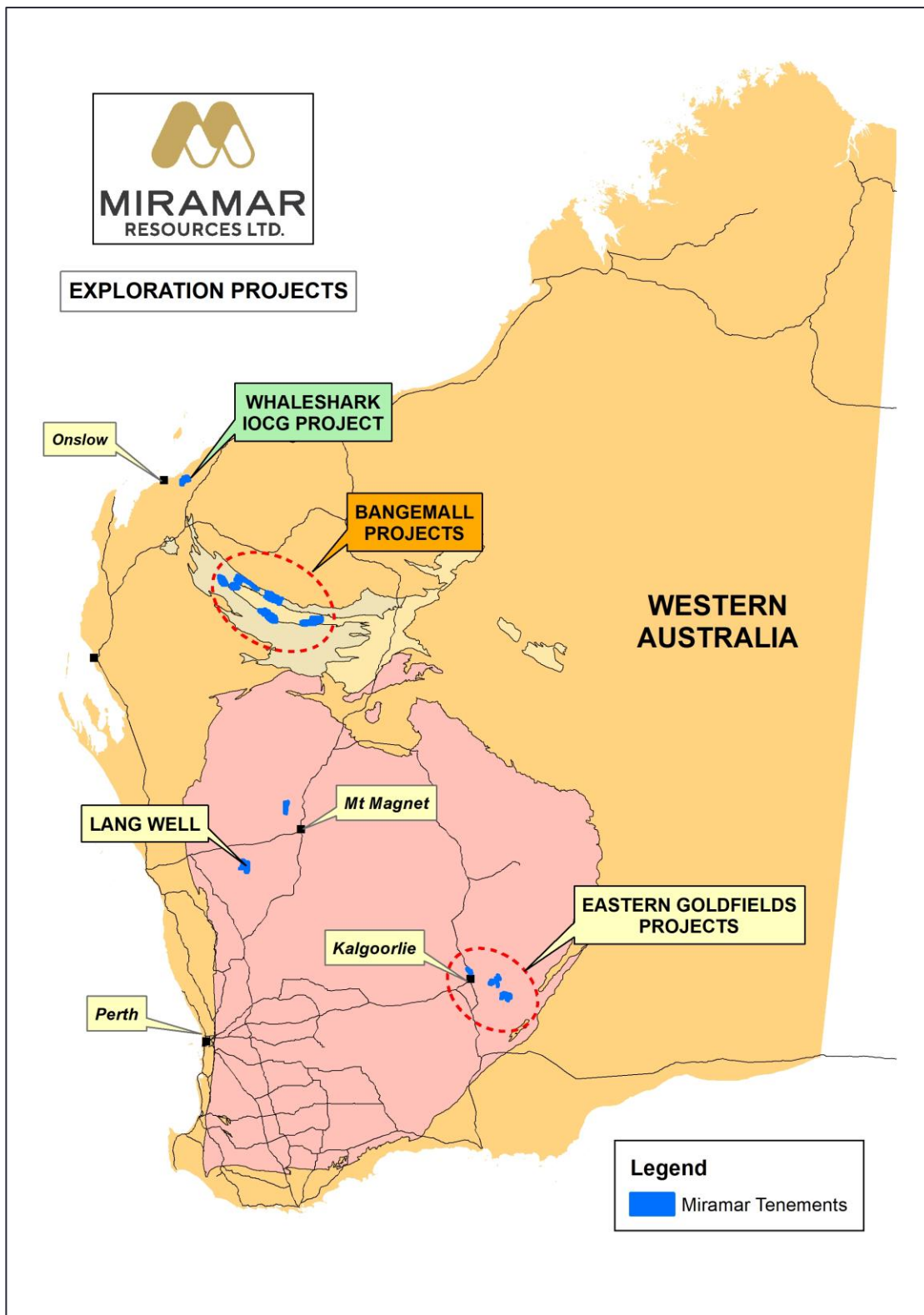




About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, IOCG, Ni-Cu-PGE and REE deposits in the Eastern Goldfields, Murchison and Gascoyne regions of WA.

Miramar’s Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.



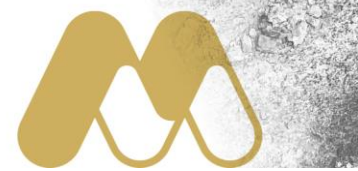


JORC 2012 Table 1 – Gidji JV Exploration Target

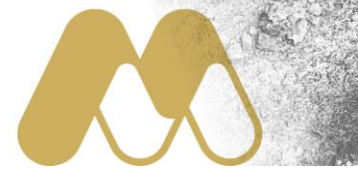
Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘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 (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> A mixture of 4meter composite samples and 1 meter resplit samples with approximately 2.5-3kg sample collected Samples intervals are split across the uniformity between the paleochannel sediments and underlying basement where possible
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Aircore drilling to blade refusal All aircore holes drilled vertically RC holes drilled at 60 degree dip to various depths
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> Sample recovery was recorded where applicable.
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the</i> 	<ul style="list-style-type: none"> Samples were logged for colour, weathering, grain size, geology, alteration and mineralisation where possible



Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Samples collected for each meter and composited to 4m intervals • Samples split across unconformity between paleochannel and basement where possible
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • Samples were assayed for gold and multi-element by aqua-regia digest followed by reading by ICPMS • Samples with Au>2000ppb are re-assayed by fire assay analysis • Analytical technique is suitable for this style of exploration with the caveat that the sample size is relatively small if coarse gold is encountered
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • No verification undertaken at this stage
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Hole collar locations were recorded with a handheld GPS in MGA Zone 51S • RL was also recorded with handheld GPS but accuracy is variable
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been</i> 	<ul style="list-style-type: none"> • Drilling is limited and not suitable for resource estimation

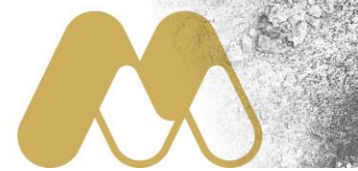


Criteria	JORC Code explanation	Commentary
	<i>applied.</i>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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"> Drill holes were designed at right angles to the prevailing strike of the local geology The dip of prospective geology and/or mineralisation is unknown at this stage
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were transported from site directly to the laboratory by Miramar staff
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits have been undertaken

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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. 	<ul style="list-style-type: none"> The exploration was conducted on E26/214, P26/4221, P26/4222 and E26/225 which are owned 80% by Miramar Goldfields Pty Ltd and 20% by Thunder Metals Pty Ltd Miramar Goldfields Pty Ltd is a wholly owned subsidiary of Miramar Resources Limited Miramar has an exploration JV with Thunder Metals Pty Ltd
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Exploration has been previously completed by other companies including Goldfields and KCGM, and included auger drilling, RAB, aircore and limited RC drilling.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The target is Archaean greenstone-hosted mesothermal gold mineralisation.
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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See Figure 1 for all hole locations used in the Exploration Target estimate



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Intervals reported over 0.25g/t Au with maximum of 1 sample of internal dilution
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> No assumptions about true width or orientation of mineralisation can be made from the current programme
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Figure 1 shows all drill holes used in the Exploration target estimate
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All holes shown
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No other relevant data
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Further RC and/or Diamond drilling planned Systematic SG measurements Initial metallurgy test work