## **ASX ANNOUNCEMENT**



### MULTIPLE HIGH-GRADE GOLD RESULTS FROM GIDJI JV

- Multiple high-grade gold results from Gidji JV aircore drilling
- Thick primary intersection in GJAC562 (5m @ 2.51g/t Au) open to northwest
- RC and Diamond drilling underway at Marylebone East target

**Miramar Resources Limited (ASX:M2R**, "Miramar" or "the Company") is pleased to announce that it has received multiple significant new results, including several high-grade gold assays, from aircore drilling at the Company's 80%-owned Gidji JV Project in the Eastern Goldfields of WA.

The new results come from resplits of aircore drill holes drilled in December 2021, mostly in and around the Marylebone West and Marylebone East targets (Figure 1).

Significant new high-grade gold results include:

- GJAC478 1m @ 5.18g/t Au
- GJAC480 2m @ 2.03g/t Au
- GJAC490 1m @ 9.55g/t Au
- GJAC559 2m @ 4.61g/t Au, including 1m @ 7.76g/t Au
- GJAC562 5m @ 2.51g/t Au and 12.3g/t Ag

All holes are shown in Figure 1 and all significant results are shown in Table 1.

Several high-grade gold results come from holes within the high priority "Marylebone East" target, where the Company recently announced that RC drilling had intersected a highly altered and sulphidised dolerite, and where follow-up RC and diamond drilling is currently underway.

The most significant new result came from the far northern end of the Marylebone East target where GJAC562 intersected 5m @ 2.51g/t Au along with 5m @ 12.29g/t Ag (including 1m @ 28.91g/t Ag, 0.1% Cu, 45ppm Mo and 8.42% S).

The mineralisation intersected in **GJAC562** remains open to the northwest and north for at least 200m. Follow-up aircore and/or RC drilling is planned following receipt of all relevant approvals.

Miramar's Executive Chairman, Mr Allan Kelly, said the new results continued to reinforce the Company's belief that the Gidji JV Project has the potential to host multiple new gold deposits.

"With each aircore drilling programme we complete at Gidji, we continue to receive multiple significant and/or high-grade gold results across several of our targets," Mr Kelly said.

"Almost without exception, these results are now coming from weathered basement beneath transported material and are supported by pathfinders, with GJAC562 a good example of this," he said.

"So far, we have outlined multiple very large aircore gold footprints. Our next challenge is to cost effectively locate the primary source of these footprints with deeper RC and/or diamond drilling," he added.

The Company advises it is currently waiting on assays for approximately 100 aircore holes completed across the Blackfriars and Highway targets in April 2022. At least one of these holes, in the previously untested Highway target, intersected fresh sulphides and quartz veining in a porphyritic intrusive unit.

Given the widespread presence and relatively consistent depth of supergene gold mineralisation at the top of the weathered basement, the Company now considers that, in addition to the very significant potential for new primary gold deposits at Gidji, there could also be potential for one or more flat-lying supergene gold deposits, including a substantial amount of high-grade material.



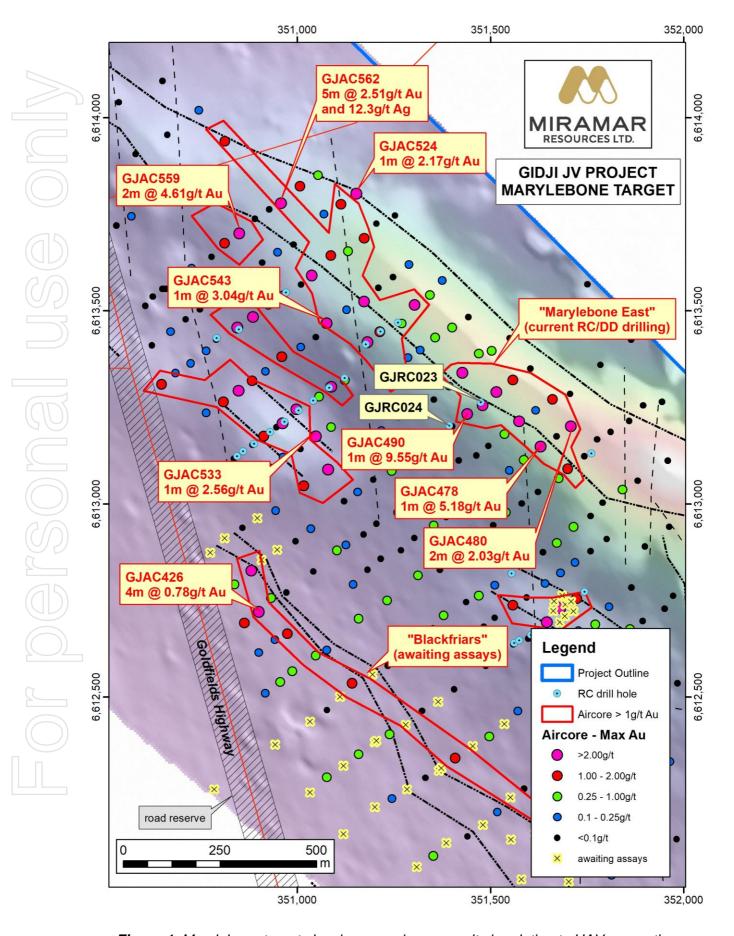


Figure 1. Marylebone target showing new aircore results in relation to UAV magnetics.



### **Current and upcoming work programmes**

The Company advises that several exploration programmes at Gidji are underway and/or planned.

In addition to the current RC/DD drilling programme at Marylebone East, upcoming work at Gidji includes the following:

- 10,000m Boorara North aircore drilling awaiting final heritage approval and site preparation
- awaiting assays from Blackfriars and Highway aircore drilling with follow-up planned
- interpretation of recently completed 3D IP survey over the 8-Mile target to help target potential diamond drilling
- awaiting final soil sampling results from "The Jog" target

Parallel to the substantial work programmes at Gidji, the Company is also:

- awaiting a suitable lake rig to complete diamond drilling at Glandore East
- preparing for gravity and heritage surveys at Whaleshark IOCG Project
- planning geochemical sampling of the late-time EM anomalies identified at Mt Vernon and a reconnaissance visit to the Blue Bar prospect, both within the Bangemall Ni-Cu-PGE project

For more information on Miramar Resources Limited, please visit the company's website at www.miramarresources.com.au or contact:

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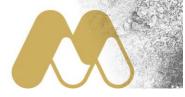
This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.



Table 1. Significant aircore assay results >0.25g/t Au

Hole ID	From	То	Interval	Au g/t	Comments
GJAC426	45	49	4	0.78	North end of Blackfriars target
			1	2.19	
GJAC459	55	56	1	0.35	
GJAC478	54	55	1	5.18	
GJAC480	54	56	2	2.03	
GJAC484	49	51	2	0.37	
GJAC485	42	43	1	0.69	
GJAC490	53	54	1	9.55	
GJAC493	56	57	1	0.33	6.19g/t Ag
GJAC509	53	54	1	0.87	
GJAC510	53	54	1	0.31	
GJAC524	43	44	1	2.17	Open to NE
GJAC526	47	51	4	0.69	
			1	1.39	
GJAC533	49	50	1	2.56	4.03g/t Ag
GJAC534	45	47	2	0.56	Incl. 1m @ 5.97g/t Ag
GJAC536	40	41	1	1.71	
GJAC538	50	51	1	1.60	
GJAC540	46	48	2	0.46	7.38g/t Ag
GJAC543	56	57	1	3.04	
GJAC559	53	54	2	4.61	
			1	7.76	
GJAC562	49	54	5	2.51	4m @ 12.27g/t Ag
					Incl. 1m @ 28.91g/t Ag, 0.1% Cu, 8.42% S
GJAC577	43	44	1	0.37	
GJAC619	49	50	1	0.74	3.19g/t Ag
GJAC620	50	51	1	0.55	
GJAC624	41	43	2	0.95	
GJAC629	46	47	1	1.60	
GJAC632	46	47	1	1.50	

Note: All holes shown in Figure 1 with hole collar information provided in ASX Release dated 8 April 2022.



#### **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

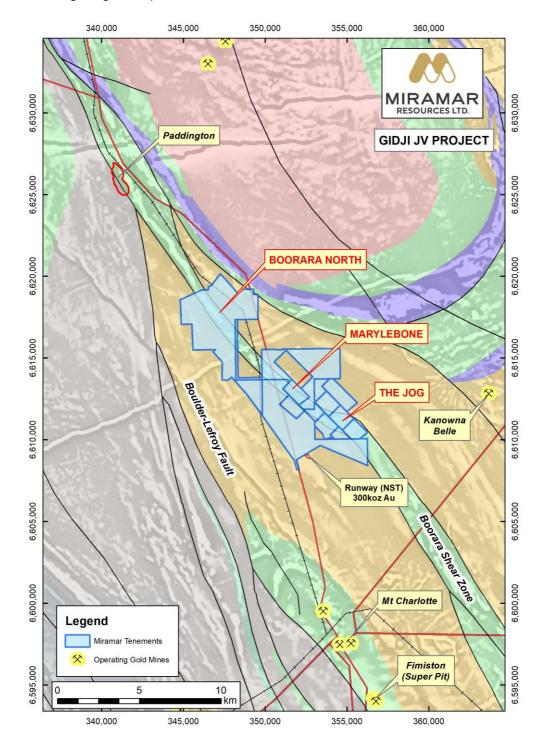


### **About the Gidji JV Project**

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 a number of tenements along the Boorara Shear Zone, as part of the October 2020 IPO.

The Project is underexplored due to a layer of transported material over 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.

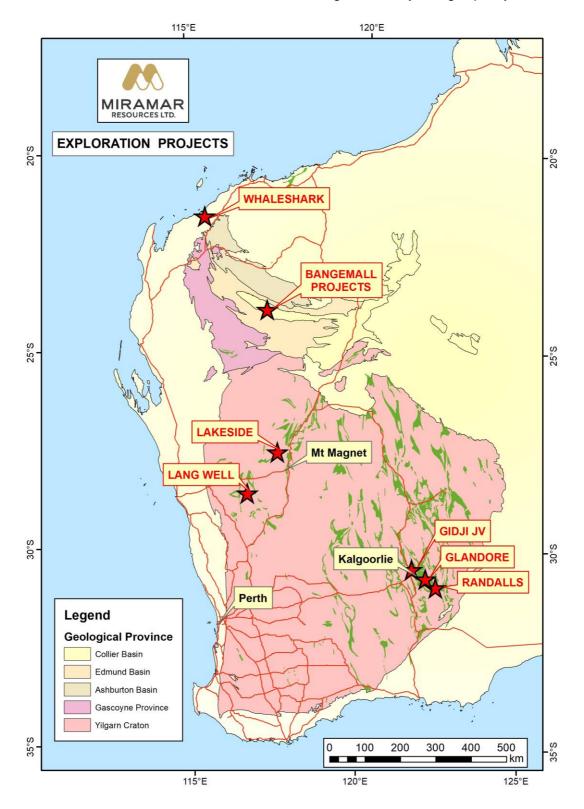




#### **About Miramar Resources Limited**

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 Aircore drilling

## **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>1m samples composited to 4m intervals with approximately 2.5-3kg sample collected</li> <li>Samples intervals are splt across the uniformity between the paleochannel sediments and underlying basement where possible</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, openhole 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).</li> </ul>	<ul> <li>Aircore drilling to blade refusal</li> <li>All holes drilled vertically</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Sample recovery was recorded where applicable.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the</li> </ul>	Samples were logged for colour, weathering, grain size, geology, alteration and mineralisation where possible



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples collected for each meter and composited to 4m intervals</li> <li>Samples split across unconformity between paleochannel and basement where possible</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples were assayed for gold and multi-element by aqua-regia digest followed by reading by ICPMS</li> <li>Samples with Au&gt;2000ppb are re-assayed by fire assay analysis</li> <li>Analytical technique is suitable for this style of exploration with the caveat that the sample size is relatively small if coarse gold is encountered</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No verification undertaken at this stage
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Hole collar locations were recorded with a handheld GPS in MGA Zone 51S</li> <li>RL was also recorded with handheld GPS but accuracy is variable</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been</li> </ul>	Drilling is limited and not suitable for resource estimation



	Criteria	JORC Code explanation	Commentary		
		applied.			
	Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drill holes were designed at right angles to the prevailing strike of the local geology</li> <li>The dip of prospective geology and/or mineralisation is unknown at this stage</li> </ul>		
1	Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>Samples were transported from site directly to the laboratory by Miramar staff</li> </ul>		
I	Audits or reviews	The results of any audits or reviews of sampling techniques and data.	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> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>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</li> <li>Miramar Goldfields Pty Ltd is a wholly owned subsidiary of Miramar Resources Limited</li> <li>Miramar has an exploration JV with Thunder Metals Pty Ltd</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration has been previously completed by other companies including Goldfields and KCGM, and included auger drilling, RAB, aircore and limited RC drilling.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The target is Archaean greenstone-hosted mesothermal gold mineralisation.
Drill hole Information	<ul> <li>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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See Figure 1 for all hole locations and Table 1 for all significant results >0.25g/t Au



Criteria	J	ORC Code explanation	Commentary
Data aggrega method		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.	Intervals reported over 0.25g/t Au with maximum of 1 sample of internal dilution
Relation between mineral widths a intercep lengths	n lisation and • ot	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').	No assumptions about true width or orientation of mineralisation can be made from the current programme
Diagran	ns •	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.	<ul> <li>Figure 1 shows all drill holes</li> <li>Table 1 lists all significant results</li> </ul>
Balance reportin		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.	Table 1 lists significant results
Other substan explora 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 relevant 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.	Further RC and Diamond drilling planned