ASX ANNOUNCEMENT



HIGH PRIORITY BEDROCK GOLD TARGET IDENTIFIED AT GIDJI JV

• Reprocessing of geophysical data increases potential for northern extension to NST's 313koz "8 Mile Dam" Deposit at Miramar's 8-Mile target

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that reprocessing of geophysical data has upgraded the 8-Mile target within the Gidji JV Project ("Gidji" or "the Project"), 15 kilometres north of Kalgoorlie, WA.

Miramar's 8-Mile target is located at the southern boundary of the Gidji JV Project and abuts Northern Star Resources Limited's 313koz "8 Mile Dam" gold deposit (Figure 1).

The reprocessed data shows a well-defined gravity and Induced Polarisation (IP) anomaly north of the 313koz "8 Mile Dam" Resource, which appears to have been offset by a SW-NE trending fault and underlies numerous significant aircore end of hole (EOH) results.

Miramar's Executive Chairman, Mr Allan Kelly, said the combination of the multiple coincident datasets increased the potential for an extension to the 8 Mile Dam deposit within the Company's Gidji JV Project.

"We have multiple high-grade end of hole aircore gold results overlying an IP and gravity anomaly which looks very similar to the 8 Mile Dam gold deposit immediately south of our tenement boundary," he said.

"The geophysical data suggests that the deposit may extend into our ground but has been offset approximately 400 metres to the northeast by a fault," he added.

"The 8-Mile offset target is within reach of RC drilling and, unlike the targets further north, there is no paleochannel covering the basement geology," he said.



Figure 1. Google Earth image showing the 8 Mile Dam Deposit in relation to the Gidji JV Project.



According to publicly available information, the 8 Mile Dam Project contains **7Mt @ 1.4g/t Au for 313,977 contained ounces**¹ with primary mineralisation hosted in a steep southwest-dipping mafic unit within volcanoclastic sediments of the Black Flag Beds. Figure 2 shows a cross section through the deposit approximately 40m south of the Gidji JV tenement boundary.

In March-April 2021, Miramar completed the second phase of aircore drilling across the Gidji JV Project, including several holes at the 8-Mile target. Significant results along strike from 8 Mile Dam included 1m @ 1.17g/t (GJAC092), 3m @ 1.22g/t Au (GJAC097) and 1m @ 1.78g/t Au (GJAC099). Other holes also intersected anomalous gold including at the end of hole (ASX Release 12 April 2021 and 29 June 2021).

In May 2021, Miramar completed three diamond drill holes targeting a strike extension to the 8 Mile Dam deposit. All three diamond holes intersected the same geological package as 8 Mile Dam but intersected only minor gold mineralisation within the mafic unit (*ASX Release 11 May 2021*).

At the same time, Miramar completed an orientation IP survey comprising one line of Dipole-Dipole IP just north of the tenement boundary. The survey highlighted a chargeability anomaly close to the projected position of the 8 Mile Dam deposit but underneath and south of Miramar's diamond holes (Figure 3).

Given the interpreted depth of the IP anomaly, the limited potential strike length north of the tenement boundary and the disappointing diamond drilling results, the target was downgraded with the Company focussing on the Marylebone target where numerous high-grade aircore gold results were being received.

The Company subsequently received assay results from EOH samples from the second phase of aircore drilling. Several holes at 8-Mile returned significant fire assay gold results (see Table 1). The best EOH results were offset to the northeast of both the diamond drilling and the IP anomaly and did not correlate well with the original aqua-regia assay results.

In early 2022, following the takeover of KCGM, Northern Star Resources Limited commenced diamond drilling at the 8 Mile Dam deposit, immediately south of the tenement boundary. Miramar staff observed that the new drilling was oriented towards the southwest, in the opposite direction to most of the drilling conducted by KCGM, implying that Northern Star were targeting a different geological model.

To date, Northern Star have not announced any results from that drilling.

In May 2022, Miramar completed a follow-up IP survey comprising a central transmitter line and two receiver lines spaced approximately 350m apart and extending for 1600m.

This Pole-Dipole IP survey highlighted a NW-trending chargeability anomaly offset approximately 400m to the northeast of the diamond holes and the orientation IP anomaly and located underneath the significant EOH aircore results (Figure 4). The new IP anomaly has a strike length of at least 250m, is approximately 400m below surface and remains open to the northwest.

The Company also reprocessed open file gravity data which highlights NW-trending gravity anomalies underlying both the 8 Mile Dam deposit and Miramar's 8-Mile target where the gravity anomaly is also offset approximately 400 metres to the northeast by a SW-NE-trending fault (Figure 5).

Miramar is reviewing options for testing the offset 8-Mile target including aircore drilling and/or RC drilling.

The Company has Programme of Work (POW) approval for drilling at this target.

For more information on Miramar Resources Limited, please visit the company's website at <u>www.miramarresources.com.au</u>, 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.

¹ Mineralisation Report, 8 Mile Dam Project, KCGM, 25 August 2017





Figure 2. Cross Section through 8 Mile Dam Deposit approximately 40m south of tenement boundary (KCGM, 2017).



Figure 3. Dipole-Dipole IP pseudo-section just north of tenement boundary and showing Miramar diamond drill hole traces (approximately 40m off-section to the north).



Figure 4. Cross Section 4000N showing Pole-Dipole IP anomaly in relation to aircore drilling.

Hole ID	Au g/t	Ag g/t	Target
GJAC109	5.33	1.39	
GJAC111	2.51	0.67	8-Mile
GJAC113	2.23	0.90	
GJAC115	1.33	0.37	
GJAC117	1.15	0.33	
GJAC119	1.01	0.22	
GJAC121	1.40	0.21	
GJAC122	0.56	0.11	Railway
GJAC124	0.56	0.17	
GJAC126	0.64	0.16	
GJAC128	1.58	0.09	
GJAC130	0.44	0.46	
GJAC144	1.22	0.23	Manulahana
GJAC158	0.31	0.36	Ivial ylebolie
GJAC175	0.75	BDL	Blackfriars
GJAC187	0.37	0.22	Mandahana
GJAC208	0.31	0.07	warylebone
GJAC239	0.33	0.09	Piccadilly
GJAC288	1.21	0.21	8-Mile

Table 1.	Gidii Phase 2 aircore EOH results	(above 0.25a/t Au cutoff)



353500

6610500

9006099



Figure 5. Gravity image showing gravity and IP anomalies offset by SW-NE trending fault.

353,500



About the Gidji JV Project

The Gidji JV Project (Miramar 80%) is located approximately 15 kilometres north of Kalgoorlie-Boulder in Western Australia's world-class Eastern Goldfields Gold Province.

The Project sits within the Boorara Shear Zone but has been underexplored previously due to extensive shallow transported cover and the Gidji Paleochannel which crosscuts the prospective basement geology.

Since commencing exploration in late 2020, Miramar has made multiple large new gold discoveries with systematic aircore drilling and has defined multiple bedrock targets for deeper drilling.

The Project is located in close proximity to multiple existing gold mining and processing operations and straddles the Goldfields Highway.

Miramar believes there is potential for the discovery of a new gold camp, with multiple gold deposits, within the Gidji JV Project.





About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, copper and Ni-Cu-PGE deposits in the Eastern Goldfields 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.





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 exploration results at the Gidji JV Project, including drill hole collar information, is contained in the following ASX Announcements:

- 3/5/2024 Gidji JV Exploration Update Amended
- 22/4/2024 Goldfields Exploration Update
- 9/4/2024 Gold & Nickel Exploration Update
- 2/2/2023 Large Exploration Target Highlights Gidji JV Gold Potential
- 10/8/2022 Significant gold results from "Highway" Target
- 1/8/2022 Further High-Grade Gold Results from Gidji JV
- 30/6/2022 Multiple High-Grade Gold Results from Gidji JV
- 29/6/2022 Gidji JV Project Exploration Update
- 26/5/2022 Gidji JV Exploration Update
- 3/5/2022 Miramar to accelerate Gidji drilling following \$2.4M raising
- 13/4/2022 Potential for Multiple Large Deposits at Gidji JV
- 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



JORC 2012 Table 1 – Gidji JV Aircore EOH samples

Section 1 Sampling Techniques and Data

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

Cri	iteria J	ORC Code explanation	Commentary
	mpling chniques	 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. 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 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. 	 Representative samples collected from last metre of each hole Samples average 50-100g in weight
Dritec	illing • chniques	Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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).	 Aircore drilling with blade and/or hammer
	ill • mple covery •	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.	Comments recorded for samples with low recovery
Lo	gging •	 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. The total length and percentage of the 	 Samples were logged for colour, weathering, grain size, geology, alteration and mineralisation where possible

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	Criteria	JORC Code explanation	Commentary
		relevant intersections logged.	
	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. 	Samples collected from last metre of hole to achieve approximately 50g of sample
7		Whether sample sizes are appropriate to the grain size of the material being sampled.	
	Quality of assay data and laboratory tests Verification of sampling	 the grain size of the material being sampled. The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres 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 (ie lack of bias) and precision have been established. The verification of significant intersections by either independent or alternative company personnel. 	 Samples were assayed using a 25g fire assay for gold and a four-acid digest followed by ICP-OES for multi-elements No QAQC samples were submitted with the EOH samples
	and assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protected. 	
		 protocols. Discuss any adjustment 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. 	 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	 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 	 Aircore holes drilled at spacings from 400 x 100m to 100 x 25m Hole type and spacing is not sufficient to estimate a Resource



	Criteria	JORC Code explanation	Commentary
		applied.	
	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. 	 Drill lines were completed perpendicular to the trend of the main geological units and parallel to previous drill lines. It is highly likely that the mineralized structures trend at a different orientation to the regional geology
1	Sample security	 The measures taken to ensure sample security. 	 Samples were transported from site directly to the laboratory by Miramar staff
4	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	 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. 	 The exploration was conducted on E26/214 which is 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	 Acknowledgment and appraisal of exploration by other parties. 	Exploration has been previously completed by other companies including Goldfields and KCGM, and included auger drilling, RAB, aircore and limited RC drilling.
	Geology	 Deposit type, geological setting and style of mineralisation. 	 The target is Archaean greenstone-hosted mesothermal gold mineralisation.
	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: 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. 	 See Table 1 and Figure 5 which shows all drilling completed to date.



Criteria	JORC Code explanation	Commentary
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. 	Significant results reported in Table 1
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'). 	 No assumptions about true width or orientation of mineralisation can be made from the current programme
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. 	 See attached Tables and Figures
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. 	 All holes shown in Figure 5 Table 1 lists all significant EOH assays from Phase 2 aircore drilling above 0.25g/t lower cutoff
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 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 aircore, RC and/or diamond drilling planned