ASX ANNOUNCEMENT



POTENTIAL EXTENSION TO 8 MILE DAM GOLD DEPOSIT OUTLINED BY IP SURVEY AT GIDJI JV

- IP survey outlines potential extensions to 313koz 8 Mile Dam gold deposit
- Significant aircore EOH gold results above IP anomalies offset by faulting
- Drill testing at 8-Mile planned after maiden Bangemall Ni-Cu-Co-PGE drilling campaign

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that Induced Polarisation (IP) surveys have upgraded the high-priority "8-Mile" Target within the Company's 80%-owned Gidji JV Project and adjacent to Northern Star Resources Limited's 313koz "8 Mile Dam" gold deposit.

A recently completed IP survey at the 8-MileTarget (Figure 1) has extended the chargeability anomaly offset from the northern end of the 8 Mile Dam gold deposit and which underlies multiple significant aircore end of hole (EOH) gold results (Figure 2).

Miramar's Executive Chairman, Mr Allan Kelly, said the new IP anomaly was shallower than expected.

"It appears the 8 Mile Dam deposit could continue for some distance to the north but has been offset by faulting, including at the tenement boundary," he said.

"The fact that we have multiple aircore holes ending in elevated gold over the IP anomalies strengthens this theory," he said.

"It's also pleasing to see that the northern part of the IP anomaly is shallower than expected," he added.

"We look forward to drill testing this high priority target later in the year," he said.



Figure 1. Collecting IP data at Miramar's 8-Mile target.



400mN

6,610,000mN

6,609,600mN

6,609,200mN

6,608,800mN

352,800mE

Aircore EOH Au >= 2g/t

Offset IP chargeability anomaly est. depth ~500m Aircore EOH > 2g/t Au

> 8 Mile Dam 313koz @ 1.4g/t Au

1 - 2g/t 0.25 - 1g/t 0.1 - 0.25g/t 0.05 - 0.1g/t < 0.050g/t

52.400ml

• 1.21

5.33

2.51

2.23



Figure 2. IP anomalies and aircore EOH gold results in relation to the 8 Mile Dam gold deposit.



Background

According to publicly available data, the 8 Mile Dam gold deposit (**7Mt @ 1.4g/t Au for 313,977oz**¹) comprises shallow supergene and deeper primary gold mineralisation hosted in:

- Quartz-carbonate-sulphide veins within hanging wall sediments; and
- > A hydrothermally altered mafic unit cut by quartz veins with sphalerite, chalcopyrite and visible gold

Figure 3 shows a cross section through the deposit, approximately 60m south of the tenement boundary.



Figure 3. Cross section of 8 Mile Dam gold deposit 60m south of tenement boundary (KCGM, 2017).

In 2021, Miramar drilled three diamond holes directly along strike from 8 Mile Dam and approximately 80m north of the tenement boundary. All three holes intersected the 8 Mile Dam geological sequence with visible gold in quartz veinlets within the hanging wall and massive quartz veins with coarse-grained sulphides within the highly altered mafic unit however no significant gold results were returned (Figure 4 and ASX Release 11 May 2021).



Figure 4. Altered mafic unit with quartz veins and coarse-grained sulphides (GJDD002 ~250m).

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



The Company also completed an orientation line of Dipole-Dipole IP about 20m north of the tenement boundary which highlighted a strong chargeability anomaly along strike from 8 Mile Dam but underneath Miramar's diamond drillholes (Figure 5).

Due to the perceived target depth, poor results from the diamond drilling and significant aircore results coming from several other targets at the time, the 8-Mile target was downgraded.

22 400mRL 200 Denth 400 352,000m 608.8



Figure 5. IP chargeability section (looking northwest) showing the altered mafic unit (green polygon), gold mineralisation (red hatching) and Miramar's diamond drill hole traces (approx. 80m off-section).

In early 2022, Northern Star Resources commenced diamond drilling at 8 Mile Dam, immediately south of the tenement boundary (Figure 6). The new drilling was oriented towards the southwest, opposite to most of the previous drilling conducted by KCGM, implying a different geological model.

No results have ever been reported from this drilling.



Figure 6. Looking south towards 8 Mile Dam with rigs drilling towards the southwest – March 2022.



In May 2022, Miramar completed an Offset Pole-Dipole IP survey which comprised a central transmitter line and two receiver lines spaced approximately 350m apart along strike.

The survey highlighted a chargeability anomaly offset approximately 400m to the northeast from the 8 Mile Dam IP anomaly and beneath several aircore holes which returned end of hole (EOH) results >2g/t Au.

New IP Survey

The Company has recently completed an additional Offset Pole-Dipole IP survey north of the 2022 survey lines. The new survey also comprised a central transmitter line and two receiver lines spaced approximately 400m apart along strike.

Together, the two IP surveys have outlined an IP chargeability anomaly over a strike length of approximately 1.1km with a shallower anomaly at the northern end of the survey and beneath aircore hole GJAC288, which ended in 1.21g/t Au (Figures 7 and 8).



Figure 7. Pole-Dipole IP data for northern line showing shallow chargeability anomaly.







Next Steps

The Company is currently preparing for the maiden drilling programme at its Mount Vernon and Trouble Bore Projects, part of Miramar's 100%-owned Bangemall Ni-Cu-Co-PGE Project portfolio in the Gascoyne region of WA.

Once this programme has been completed, the Company will make plans to drill test bedrock targets at Gidji with RC and/or diamond drilling, including the 8 Mile IP anomalies.

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:

Allan Kelly Executive Chairman info@miramarresources.com.au Margie Livingston Ignite Communications margie@ignitecommunications.com.au

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



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 outlined multiple large new gold footprints with systematic aircore drilling and has defined multiple bedrock targets for deeper drilling.

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

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





128°E

18°S

22°S

26°S

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.



34°S

300

⊐km

128°E

0

100 200



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 IP Data

Section 1 Sampling Techniques and Data

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

Crite	ria ,	JORC Code explanation	Commentary
	oling niques	 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 types (eg submarine nodules) may warrant disclosure of detailed information. 	• N/A
Drilli	ng d niques	 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). 	• N/A
Drill samp recov		 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. 	• N/A
Logg	iing o	 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 	• N/A

ASX ANNOUNCEMENT



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. 	• N/A
	Whether sample sizes are appropriate to	
Quality of assay data and laboratory tests Verification	 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. 	• N/A
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. 	• N/A
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. 	IP stations located with handheld GPS
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 	 IP Survey specifications: Array - Offset Pole-Dipole (OPDIP) Tx/Rx Offset Distance - 200m Rx Dipole Spacing - 100m Tx Remote Distance - >3000m Rx Channels - 31 (1 x 16,15ch Rx) N Spacing - Max n = 14, typically n = 14



	Criteria	JORC Code explanation	Commentary
		applied.	 Base Frequency - 0.125Hz (2 second pulse) Chargeability Integration - 590-1450 mS Typical Current - 7.7 A - 2.0 A Max Current - 7.7 A Min Current - 2.0 A Open file gravity data provided by government agencies
	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. 	 IP lines orientated perpendicular to geology It is highly likely that any mineralized structures trend at a different orientation to the local geology
	Sample security	The measures taken to ensure sample security.	• N/A
	Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No audits have been undertaken
		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 	• N/A

ASX ANNOUNCEMENT



Criteria	a JOR	C Code explanation	Commentary
	○ ● If ju ni di re cl	down hole length and interception depth hole length. the exclusion of this information is stified on the basis that the information is of Material and this exclusion does not etract from the understanding of the eport, the Competent Person should early explain why this is the case.	
Data aggreg metho	yation a ds m h M V S S I C S S S S S S S T M	reporting Exploration Results, weighting veraging techniques, maximum and/or inimum grade truncations (eg cutting of gh grades) and cut-off grades are usually laterial and should be stated. /here aggregate intercepts incorporate hort lengths of high grade results and inger lengths of low grade results, the rocedure used for such aggregation hould be stated and some typical kamples of such aggregations should be hown in detail. he assumptions used for any reporting of netal equivalent values should be clearly fated.	• N/A
Relation between mineration widths interce length	en in lisation R and If ept re s na • If le cl	hese relationships are particularly nportant in the reporting of Exploration esults. the geometry of the mineralisation with espect to the drill hole angle is known, its ature should be reported. it is not known and only the down hole ngths are reported, there should be a ear statement to this effect (eg 'down ble length, true width not known').	• N/A
Diagra	ms • A so si di in di	ppropriate maps and sections (with cales) and tabulations of intercepts hould be included for any significant scovery being reported These should clude, but not be limited to a plan view of rill hole collar locations and appropriate ectional views.	 See attached Tables and Figures
Balano reporti	i ng E רפ הו סו	/here comprehensive reporting of all xploration Results is not practicable, presentative reporting of both low and igh grades and/or widths should be racticed to avoid misleading reporting of xploration Results.	 See attached Tables and Figures
Other substa explore data	ntive m ation n gu su su re gu gu gu gu	ther exploration data, if meaningful and paterial, should be reported including (but of limited to): geological observations; eophysical survey results; geochemical urvey results; bulk samples – size and pethod of treatment; metallurgical test esults; bulk density, groundwater, eotechnical and rock characteristics; otential deleterious or contaminating ubstances.	 No other relevant data
Furthe		he nature and scale of planned further ork (eg tests for lateral extensions or	 Further aircore, RC and/or diamond drilling planned

С



Criteria	JORC Code explanation	Commentary
D	 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. 	