ASX ANNOUNCEMENT



GOLDFIELDS EXPLORATION UPDATE

- RC drill hole completed under high-grade Blackfriars gold prospect (Gidji JV)
- New Exploration Licence application expands land position along Randall Fault

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to provide an update on gold exploration activities within the Company's strategic Eastern Goldfields project portfolio.

The Company has completed a single RC drill hole at the high-priority Blackfriars Prospect, within the Gidji JV Project ("Gidji") (Figure 1).

The Blackfriars Target is located at the contact between the Black Flag Group and mafic and ultramafic rocks within the Boorara Shear Zone and shares the same geological setting as the >2 million ounce Paddington gold deposit along strike to the north.

Given the apparent similarities to Paddington, Blackfriars is a high priority target within the Gidji JV Project.

The Blackfriars aircore gold footprint stretches for at least 1 kilometre at greater than 1g/t Au and remains open along strike to the northwest on the other side of the Goldfields Highway.

The recent RC hole, GJRC028, tested beneath the high-grade result in aircore hole **GJAC627**, which ended in black shale with quartz-carbonate veining and sulphides and returned a result of **1m @ 11.8g/t Au and 6g/t Ag** (46-47m EOH) (see ASX Release dated 8 April 2022).

GJRC028 intersected black shale and silicified dolerite with sulphide mineralisation and quartz stringers but was terminated at 130m due to difficult drilling conditions associated with running sands in the overlying Gidji Paleochannel.

Miramar's Executive Chairman, Mr Allan Kelly, said the Gidji JV Project had the potential to host a new gold camp with multiple deposits but was significantly underexplored.

"Gidji is in a fantastic location within a major mineralised structure, between two major gold camps, Kalgoorlie and Paddington," Mr Kelly said.

"Despite this, and the record gold price, the Project has had minimal effective historic exploration, and virtually no deep drilling, as evidenced by our ability to discover high-grade bedrock gold mineralisation with shallow aircore drilling only 150 metres from a major highway," he said.

Samples from the RC hole have been sent for analysis and further aircore and RC drilling is planned.

The Company is also working towards obtaining approvals for drilling of other high-priority targets at Gidji including:

- Marylebone multiple high grade gold results including GJAC562 (6m @ 2.2g/t Au and up to 28g/t Ag) associated with massive sulphide mineralisation in black shale
- Roaster 2m @ 3.3g/t Au in GJAC577 open along strike
- **Eight-mile** potential northern extension of Northern Star Resources Limited's 300,000-ounce "Runway/8 Mile Dam" deposit
- The Jog gravity anomaly and magnetic depletion within jog in the Boorara Shear Zone

New Application

The Company has also further expanded its strategic Eastern Goldfields tenement portfolio with a new Exploration Licence Application south of the recently acquired Lake Yindarlgooda Project (Figure 2).

The "Venetian" Target, E25/649, covers a package of mafic rocks immediately adjacent to the Randall Fault and contains historic RAB drill holes with anomalous gold results within and along strike of E25/649.

Miramar will compile all historical data and work towards grant of the tenement.





Figure 1. Central portion of Gidji JV Project showing location of the Blackfriars Prospect.



Table 1. Blackfriars RC hole summary

Hole ID	Easting	Northing	RL	Dip	Azimuth	Total Depth
GJRC028	350846	6612796	350	-60	054	130*

Table 2. Blackfriars RC hole summary log

From	То	Lithology	Mineralisation
0	3	Red soil and colluvium	
3	5	White/pink mottled clays	
5	36	paleochannel clays	
36	55	paleochannel sands	
55	58	coarse paleochannel sands/gravel	
58	60	mixed coarse paleochannel sand/gravel and black shale fragments	
60	80	Black shale	
80	103	Black shale with coarse pyrite cubes	2% pyrite
103	106	Black shale with coarse pyrite cubes	5% pyrite
106	108	Blocky silicified dolerite with vuggy silica fragments	10% pyrite
108	113	Black shale with coarse pyrite cubes	10% pyrite
113	121	Blocky silicified dolerite with quartz stringers	10% pyrite
121	130	Blocky silicified dolerite with quartz stringers, fine disseminated pyrite	15% pyrite
		along fractures and coarse pyrite cubes	

Cautionary statement: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

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



Figure 2. Randall Fault Projects over GSWA geology.



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 GJAC627 is contained in the following ASX Announcement:

• 8 April 2022 – "MULTIPLE HIGH-GRADE GOLD RESULTS FROM GIDJI JV"



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.

