Quarter ending 30 June 2021

**ISSUED CAPITAL** 55,060,100 shares on issue

**52WK SHARE PRICE RANGE** \$0.17 - 0.56

MARKET CAPITALISATION \$10.2 million (@ \$0.185)

#### BOARD

Allan Kelly Executive Chairman Marion Bush Technical Director Terry Gadenne Non-Executive Director

#### PROJECTS

Eastern Goldfields Projects Gidji JV (80%) Glandore Randalls Murchison Projects Lang Well Lakeside Capricorn Orogen Whaleshark Bangemall (Ni-Cu-PGE)

#### MIRAMAR RESOURCES LTD

ACN 635 359 965 ABN 34 635 359 965 ASX code: M2R

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## **Highlights**

#### Gidji JV:

- > Phase 2 aircore drilling extends and upgrades targets
- > Diamond drilling intersects visible gold at 8-Mile target
- > Ground magnetic survey completed at Marylebone
- > RC drilling completed and Phase 3 aircore ongoing

#### **Other Projects:**

> Gravity survey and planning for initial aircore drilling at Glandore

MIRAMAR RESOURCES LTD.

- > Whaleshark surface geochemical sampling commenced
- > Planning for airborne EM survey at Mt Vernon Ni-Cu-PGE Project

**Miramar Resources Limited** (ASX:M2R, Miramar or "the Company") is pleased to provide a summary of activities completed during the Quarter ending 30 June 2021.

Miramar's Executive Chairman, Mr Allan Kelly, said the Company had been focussed on drilling campaigns at the Gidji JV Project, but had also made plans to commence work on at least two other projects.

"During the Quarter, we completed aircore, RC and diamond drilling programmes at Gidji testing a number of targets," Mr Kelly said.

"The drilling programme expanded and upgraded several targets, including Marylebone, which, when combined with the recent ground magnetic survey, is looking increasingly similar to the Paddington deposit along strike to the northwest," he added.

Towards the end of the Quarter, the Company commenced a further aircore drilling campaign at Gidji and prepared for the maiden drilling campaign at the 100%-owned Glandore Project.

In late June, Miramar mobilised a field crew to complete surface geochemical sampling at the Whaleshark Project in the Gascoyne region of Western Australia.



# **EXPLORATION**

#### EASTERN GOLDFIELDS PROJECTS

Miramar has three projects in the Eastern Goldfields with the potential for new gold discoveries within proximity to existing mining and/or processing operations (Figure 1).

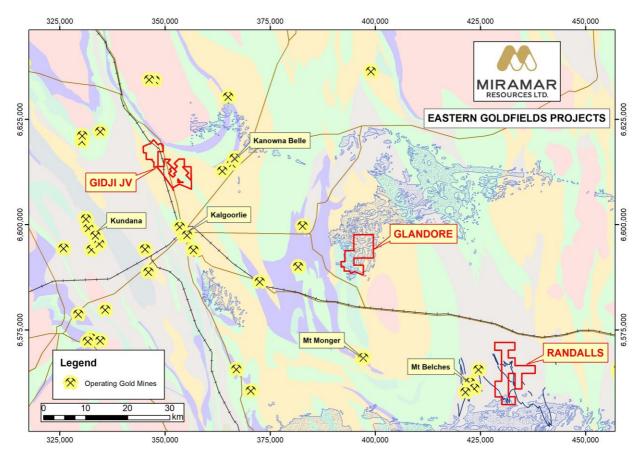


Figure 1. Eastern Goldfields Projects showing proximity to existing gold operations.

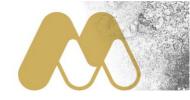
## Gidji JV (80%)

The Gidji JV Project is located approximately 15km north of Kalgoorlie.

The Project is located within a major regional structure, the "Boorara Shear Zone", which hosts gold mineralisation at Paddington, approximately 10km to the northwest, and Horizon Minerals' "Boorara" gold operation to the southeast. The project has been poorly explored despite its location in proximity to major gold deposits.

Soon after listing on the ASX in October 2020, Miramar conducted an aircore drilling campaign at Gidji which outlined four new targets and returned results up to **2m @ 7.69g/t Au** in quartz vein material from the Marylebone target.

Marylebone is characterised by widespread gold anomalism in the Boorara Shear Zone which has been crosscut by a N-S trending structure and has many similarities to the Paddington deposit to the northwest.



#### Phase 2 Aircore Drilling

The Phase 2 aircore campaign was completed on 18 April and comprised 200 holes for 11,472m. The campaign aimed to infill the drill spacing to 150-200m x 50m over key areas identified by the Phase 1 drilling.

The Phase 2 drilling extended and upgraded the four main targets at Gidji, as shown in Figure 2.

Significant results from original 4m composite samples and subsequent 1m resplits are shown in Table 1.

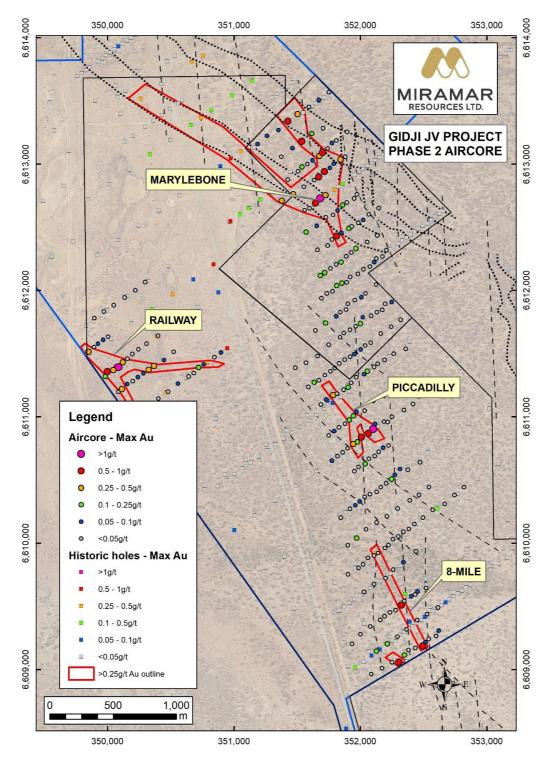


Figure 2. Gidji Project showing results of Phase 1 and 2 drilling.



## Table 1. Significant results from Phase 2 Aircore drilling<sup>1</sup>

Target		4m composites			1m resplits				
	Hole	From	То	width	(g/t)	From	То	width	(g/t)
	GJAC140	52	56	4	0.40	52	54	2	0.65
	GJAC141	52	56	4	0.57				
	GJAC146	40	44	4	0.11				
	GJAC147	44	56	12	0.32	55	56	1	0.60
	GJAC151	52	63 EOH	11	0.48	55	58	3	0.84
						60	61	1	0.52
	GJAC153	40	44	4	0.20				
	GJAC155	48	52	4	0.48	49	50	1	0.84
	GJAC158	56	60	4	0.59	56	57	1	0.98
	GJAC176	36	40	4	0.53				
		56	60	4	0.59				
Marylebone	GJAC179	52	56	4	0.28	52	53	1	0.59
	GJAC180	56	60	4	0.33				
	GJAC182	56	60	4	0.61	56	57	1	2.33
	GJAC183	52	56	4	0.41	55	56	1	1.56
	GJAC184	44	48	4	0.21				
	GJAC189	36	40	4	0.11				
		52	56	4	0.10				
	GJAC199	32	36	4	0.13				
	GJAC202	32	36	4	0.20				
	GJAC205	48	52	4	0.10	48	49	1	1.57
	GJAC206	32	36	4	0.11	35	36	1	0.57
	GJAC212	48	52	4	0.10				
	GJAC118	40	48	8	0.27	44	45	1	0.95
	GJAC120	44	52	8	0.20	44	47	3	1.94
					Incl.	44	45	1	5.21
	GJAC121	48	56	8	0.32	54	55	1	0.64
Railway	GJAC122	52	55	3	0.12				
-	GJAC124	44	46	2	0.36				
	GJAC129	32	36	4	0.27	35	36	1	0.83
	GJAC130	36	40	4	0.22				
		48	54	6	0.30	51	52	1	0.81
Piccadilly	GJAC161	44	48	4	0.24	45	46	1	0.61
	GJAC245	40	44	4	0.10				
	GJAC246	56	60	4	0.10				
	GJAC251	36	48	12	0.33	39	40	1	0.90
			1			45	48	3	0.80
			1		Incl.	46	47	1	1.96
		56	72	16	0.11				

<sup>1</sup> For JORC Table 1 and 2, refer to ASX Announcements dated 11 May 2021 and 29 June 2021



Target	Hole	4m composites			1m resplits				
	поте	From	То	width	(g/t)	From	То	width	(g/t)
	GJAC252	44	48	4	0.18				
	GJAC260	44	48	4	0.18				
8-Mile	GJAC092					46	47	1	1.17
	GJAC097	52	60	8	0.52	54	57	3	1.22
	GJAC099	48	52	4	0.52	49	50	1	1.78
	GJAC106	48	54	6	0.20				
	GJAC107	40	44	4	0.16	42	43	1	0.88

#### **Diamond Drilling**

During March/April, three diamond holes were drilled at the 8-Mile target to test for a potential northern extension to the adjacent Runway deposit (7Mt @ 1.39g/t Au for 313koz Au).

Two holes, **GJDD001** and **GJDD002**, were drilled on section "1680N", approximately 60m north of the northernmost KCGM drill holes, EMD0028 and 29 which had sporadic high-grade gold mineralisation in quartz veins in the hanging wall sediments but no significant mineralisation in the Runway "porphyry" itself.

The two new diamond holes intersected the same geological sequence seen at Runway, along with a sulphidised quartz breccia, and established the dip of the prospective "porphyry" unit(Figure 3).

GJDD002 intersected coarse visible gold in a thin quartz-sulphide veinlet in the hanging wall sandstone at 121m downhole (Figure 4). This vein returned a result of 1m @ 2.79g/t Au.

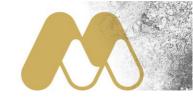
A similar vein was observed in **GJDD001** which returned a result of 1m @ 0.53g/t Au. The Runway "porphyry" itself was only weakly mineralised on this section.<sup>2</sup>

Given the observations from the first two holes, and the shorter than expected hole depths, a third hole (GJDD003) was completed approximately 50m north of GJDD001 and GJDD002.

**GJDD003** intersected a similar sequence of rocks and confirmed the strike of the west dipping "porphyry", however no significant results were obtained from this hole.

As a result, no further work is planned for the 8-Mile target at this stage.

<sup>&</sup>lt;sup>2</sup> For JORC Table 1 and 2, refer to ASX Announcement dated 11 May 2021



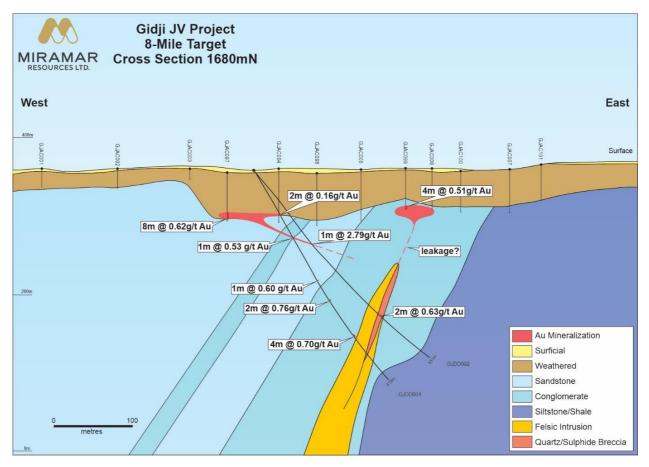


Figure 3. 8-Mile target - Cross Section 1680N showing significant results.



Figure 4. Thin low-angle quartz-sulphide veinlet in GJDD002 with specks of visible gold.



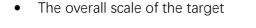
### Marylebone ground magnetic survey

Given the positive results from the first two phases of aircore drilling and the apparent similarities between the Marylebone target and Paddington, a detailed ground magnetic survey was completed during May/June with 25m spaced lines oriented perpendicular to the NW trending stratigraphy.

The survey helped refine the local geology and structure and highlighted an area of apparent magnetite destruction of mafic/ultramafic rocks adjacent to the best drilling results (Figure 5).

The survey has reinforced the similarities between Marylebone and Paddington as follows:

- The geological sequence of (from SW to NE) sediment-mafic-ultramafic-sediments
- The NW trending stratigraphy and Boorara Shear Zone crosscut by later N-S structures
- The apparent sinistral shearing of the NW trending stratigraphy



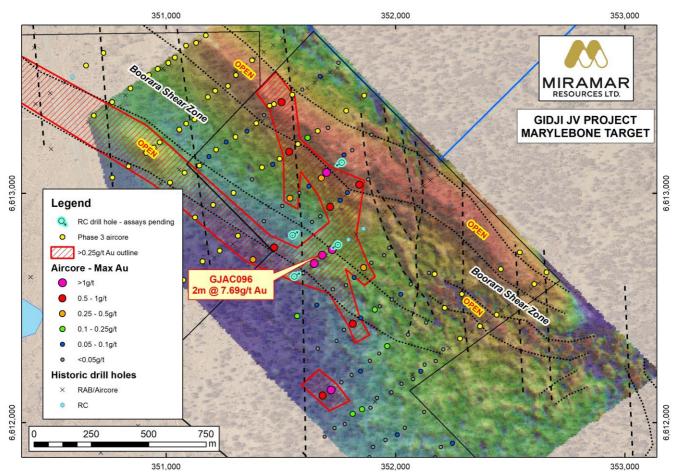


Figure 5. Marylebone target showing drilling results over new ground magnetic image.



## **RC** drilling

Following completion of the Phase 2 aircore programme, a series of RC holes were planned to test the center of the Marylebone target where aircore drilling was ineffective due to a silcrete layer.

A RC rig was secured at short notice and an initial programme of 6 holes, totaling 900m, was completed testing the Piccadilly, Marylebone and Railway targets.

Results were pending at the end of the Quarter.

## Phase 3 Aircore Drilling

The third phase of aircore drilling at Gidji commenced during June and aims to:

- Infill the existing Marylebone drill spacing to 150-200m x 50m
- Extend the Marylebone target to the NW and SE
- Infill and/or extend other targets

Samples from about 50% of the holes were submitted for analysis during the Quarter and results are awaited.

#### Glandore (M2R 100%)

The Glandore Project is located within the Eastern Goldfields, approximately 40km east of Kalgoorlie, Western Australia and covers approximately 42 square km. The Project consists of 10 Prospecting Licences and one Exploration Licence, all of which are granted.

The highest priority western part of the project is underlain by a layered mafic sill intruding into basalt and sedimentary rocks. The sill comprises varieties of dolerite and gabbro analogous to the Golden Mile Dolerite.

The local geology has been folded into a north-plunging antiform with the Project located on the eastern limb, southeast of the hinge zone which has been intruded by a granodiorite and felsic porphyry dykes.

The prospective geology is overlain by up to 50m of recent playa lake sediments which thin towards the west. Exploration has been mostly limited to the western part of the project, within the Prospecting Licences, and has been sporadic since the late 1980's.

Previous exploration including aircore drilling outlined a significant area of anomalous gold on the eastern side of the late granite pluton (Figure 6). Limited diamond drilling returned significant results including **8m @ 22.5g/t Au**, however most sections have no systematic bedrock testing.

The western side of the granite pluton has not been tested for over 2.5km of strike despite significant aircore results to the south of Lake Yindarlgooda and apparent similarities to the eastern target.

Final planning for the first phase of exploration was completed during Quarter, including pegging and clearing of a series of aircore holes to be completed south of the lake.

The Company commenced a gravity survey and this continued in-between periods of wet weather which restricted access to the lake surface.

The Company's maiden aircore drilling campaign is scheduled to commence early in the Sept Quarter, in conjunction with the Phase 3 aircore drilling at Gidji.



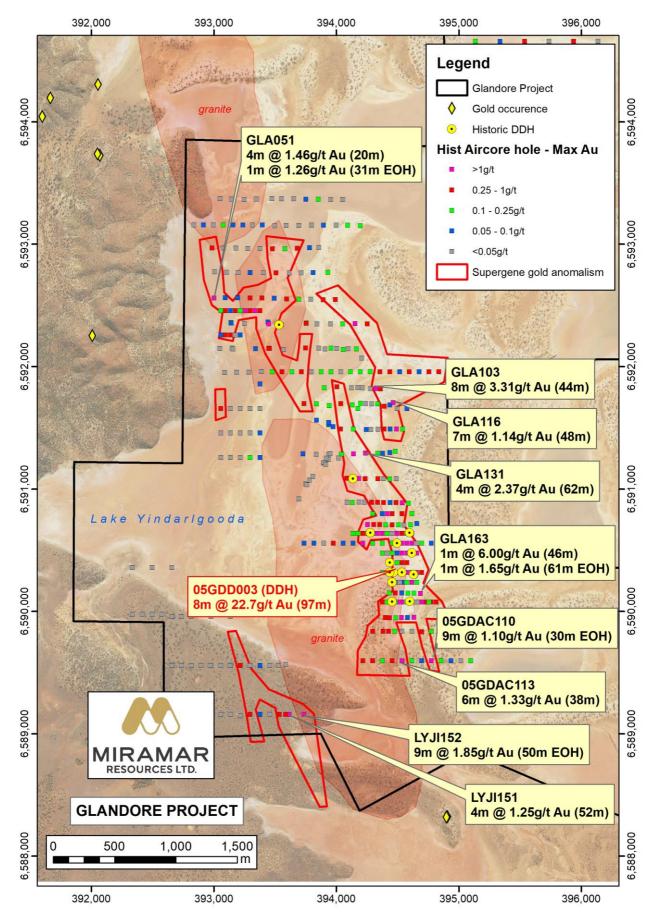


Figure 6. Glandore Project showing significant historical drill results.



#### Randalls

The Randalls project is located immediately east of Silver Lake Resources Limited's Maxwell's and Cockeyed Bob gold mines, approximately 70km east of Kalgoorlie (Figure 7).

The project consists of a single Exploration Licence Application (E25/596) and covers the same folded Banded Iron Formation and sediments that host the gold mineralisation currently being mined by Silver Lake.

No work was completed during the Quarter as the Company waits for the tenement to be granted.

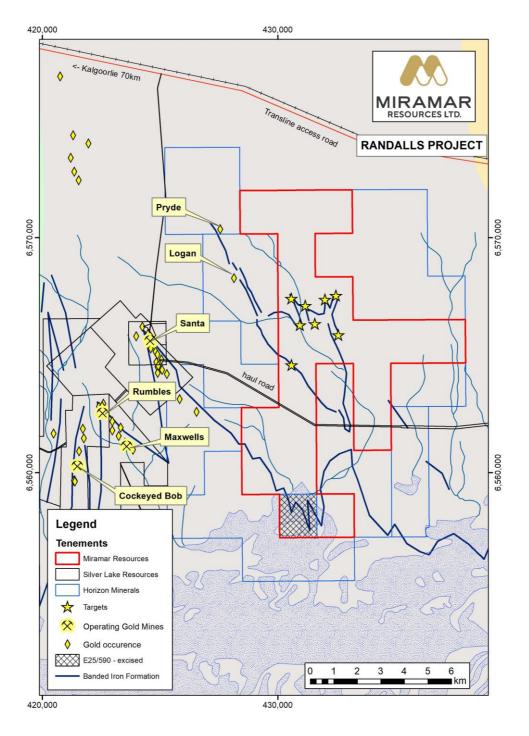
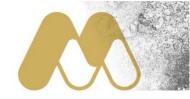


Figure 7. Randalls Project showing proximity to Silver Lake Resources gold operations.



#### MURCHISON REGION PROJECTS

Miramar has two exploration projects in the Murchison region within proximity of existing mining operations.

#### Lang Well

The Lang Well Project consists of a single Exploration Licence covering a large, complexly folded remnant greenstone belt located between the Deflector, Golden Grove and Rothsay gold operations (Figure 8).

Historical rock chip sampling returned results from 0.10g/t up to 16g/t Au whilst subsequent auger drilling in 2010 identified several large +5km long gold +/-pathfinder anomalies which have not been drill tested.

The Company plans to complete aircore drilling at Lang Well within the second half of 2021.

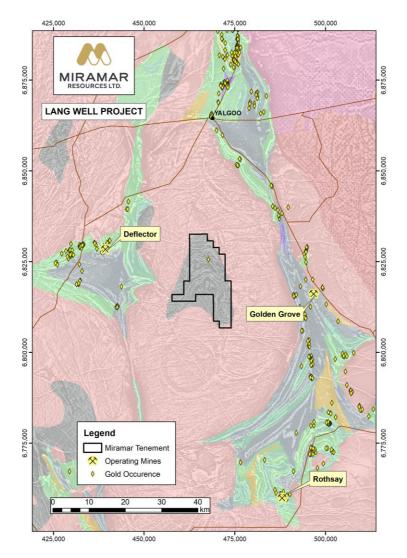


Figure 8. Lang Well Project location and regional geology.

#### Garden Gully

During the Quarter, the Company completed the sale of the three tenements that make up the Garden Gully Project to Sipa Resources (see ASX Announcement dated 22 June 2021).

#### Lakeside

No work was completed as the Company waits for this tenement to be granted.



#### GASCOYNE REGION PROJECTS

Miramar has two projects within the Proterozoic Capricorn Orogen, in the Gascoyne region of Western Australia (Figure 9):

- Whaleshark folded BIF complex under Carnarvon Basin sediments
- **Bangemall** multiple applications over areas prospective for Ni-Cu-PGE mineralisation

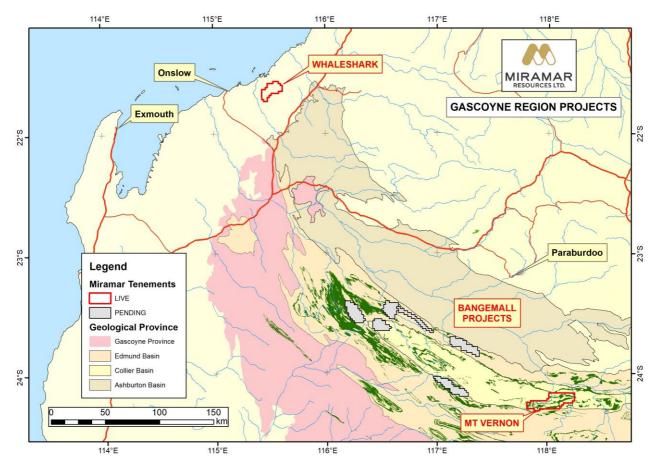


Figure 9. Location map for Miramar's Gascoyne region projects.

#### Whaleshark

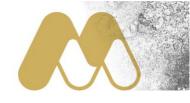
The Whaleshark project is located 40km east of Onslow, WA, and consists of a single Exploration Licence, E08/3166.

The project is located within the north-western extension of the Proterozoic Capricorn Orogen and is characterised by a folded Banded Iron Formation (BIF) complex under approximately 100m of Carnarvon Basin sediments (Figure 10).

Previous exploration included limited diamond drilling which intersected anomalous gold in the BIF.

The Project has potential for Proterozoic BIF-hosted Au (e.g. Homestake) and Iron Oxide Cu-Au mineralisation.

At the end of the Quarter, the Company commenced a programme of surface geochemical sampling over the BIF.



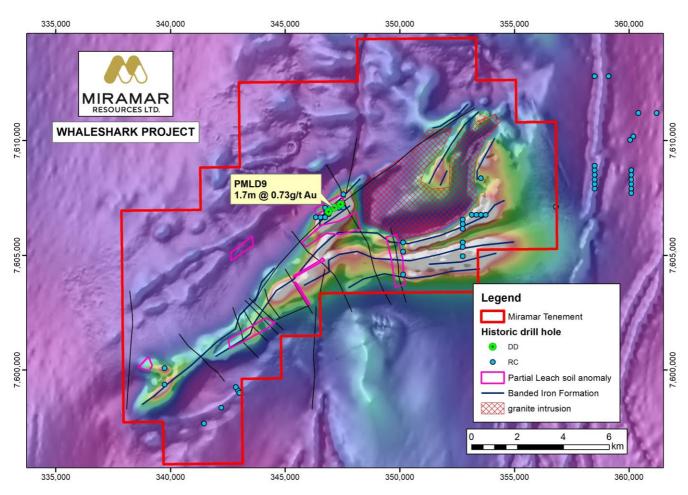


Figure 10. Magnetic image for Whaleshark Project showing geological interpretation and previous drilling.

## Bangemall Ni-Cu-PGE Project

The Bangemall Project covers a series of major crustal-scale structures in the Capricorn Orogen between the Yilgarn and Pilbara cratons (Figure 11).

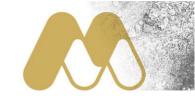
The area has been highlighted by both the GSWA and Geoscience Australia as having high prospectivity for Proterozoic craton margin Ni-Cu-PGE mineralisation like that seen in the Albany-Fraser Province (e.g. Nova-Bollinger), the West Musgraves (e.g. Nebo-Babel) and the giant Voisey Bay and Norilsk deposits.

The Project consists of several Exploration Licence applications that cover areas with:

- proximity to major crustal-scale faults confirmed by seismic traverses
- numerous Proterozoic-aged dolerite dykes/sills with the same age as the West Musgraves
- regional-scale stream sediment Ni-Cu-Pt-Pd anomalism from GSWA sampling
- regional-scale airborne EM conductors

The area has seen substantial exploration for Cu-Pb-Zn but minimal exploration for Ni-Cu-PGE's.

The Company is planning to conduct an airborne EM survey over the Mt Vernon target as soon as practicable following discussions with the local pastoralist.



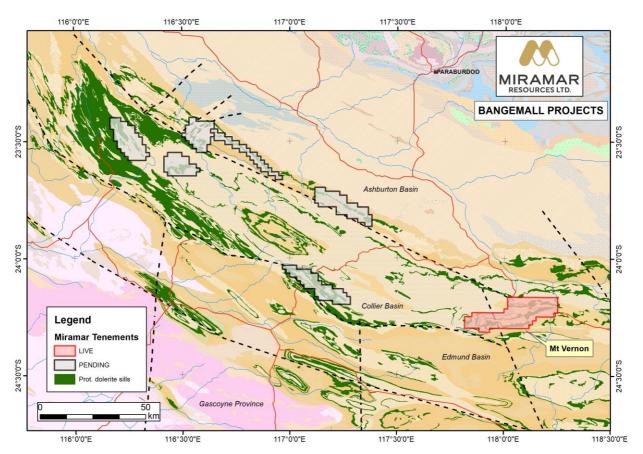


Figure 11. Regional geological setting for the Bangemall Project tenements.

# CORPORATE

## Financial

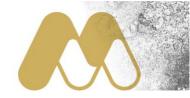
The Company had cash on hand as of 30 June 2021 of approximately \$5.0 million.

Related Party payments for the Quarter, as outlined in the Appendix 5B at section 6.1, total \$121,000 and include amounts paid to directors including salary, directors' fees and statutory superannuation.

Refer to the Appendix 5B for an overview of the Company's financial activities during the Quarter.

## Capital Structure on 30 June 2021

Description	Number
Fully paid ordinary shares	55,060,100
Unlisted options exercisable at \$0.20 on or before 22 October 2022	8,210,000
Unlisted options exercisable at \$0.48 on or before 6 January 2023	50,000
Unlisted options exercisable at \$0.25 on or before 9 October 2023	6,000,000
Unlisted options exercisable at \$0.20 on or before 26 June 2025	3,000,000



## Use of Funds<sup>3</sup>

Miramar provides the following disclosures required by ASX Listing Rule 5.3.4 regarding a comparison of its actual expenditure to date since listing on 21 October 2020 against the 'use of funds' statement in its Prospectus dated 4 September 2020.

Expenditure	Funds allocated under Prospectus	Actual to 30 June 2021	Variance
Vendor payments	\$282,500	\$232,500	\$50,000
Exploration	\$4,430,000	\$1,476,713	\$2,953,287
Working capital	\$2,868,855	\$790,898	\$2,077,957
Cost of Offer	\$670,000	\$695,785	-\$25,785
TOTAL	\$8,251,355	\$3,195,895	\$5,055,460

#### Marketing and Investor Relations

During the Quarter, the Company conducted interviews with mining publications in relation to the Company's exploration programmes. The Company also attended and presented at the following events:

- AMEC Investor Briefing
- RIU Sydney Resources Roundup
- Gold Coast Investment Showcase

#### Planned Activities for Quarter ending 30 September 2021

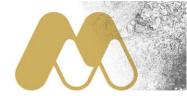
- Aircore +/- RC drilling at Gidji JV
- Maiden aircore drilling programme at Glandore
- Complete surface geochemical sampling at Whaleshark
- Schedule maiden Lang Well aircore drilling programme
- Attend Diggers and Dealers Conference

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

#### For further information, please contact:

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

<sup>&</sup>lt;sup>3</sup> The Use of Funds table is a statement of current intentions. Investors should note that the allocation of funds set out in the table may change depending on a number of factors including the results of exploration, outcome of development activities, regulatory developments and market and general economic conditions.



## ASX Releases during the Quarter

DATE	DESCRIPTION				
29/06/2021	New Aircore Results Upgrade Gidji Targets				
28/06/2021	Application for quotation of securities - M2R				
28/06/2021	Release of Escrow				
23/06/2021	Change of Director's Interest Notice (AK)				
23/06/2021	Investor Presentation				
22/06/2021	M2R: Completion of Garden Gully Sale				
15/06/2021	Release of Escrow				
03/06/2021	Investor Presentation				
03/06/2021	RC and Aircore Drilling Underway At Gidji JV				
11/05/2021	Aircore Drilling Extends and Upgrades Marylebone				
06/05/2021	Investor Presentation				
06/05/2021	Gidji JV Project Exploration Update				
30/04/2021	Quarterly Activities Report				
30/04/2021	Quarterly Cashflow Report				
19/04/2021	Change of Director's Interest Notice				
16/04/2021	Investor Presentation				
15/04/2021	Gidji Diamond Drilling - Additional Information				
12/04/2021	Gidji Drilling Extends Runway and Hits Visible Gold				



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

Miramar Resources Limited is a WA-focused mineral exploration company with highly prospective gold exploration projects in the Eastern Goldfields, Murchison and Gascoyne regions of Western Australia.

Miramar listed on the ASX in October 2020, following a heavily oversubscribed IPO, and has a Board with a track record of successful discovery, development and production within Australia, Africa, and North America. Miramar's aim is to create shareholder value through the acquisition, exploration and monetisation of high-quality mineral assets.

#### **Competent Person Statement**

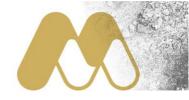
The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a "Competent Person" who is a Member of The Australian Institute of Geoscientists.

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 presentation of the matters based on his information and in the form and context in which it appears.

Information on historical exploration results for all Miramar's projects, including JORC Table 1 and 2 information, is included in the Miramar Resources Limited Prospectus dated 4 September 2020.



### **Tenement Schedule**

			Ownership		
Project	Tenement	Status	Start of Quarter	End of Quarter	
	E24/225	Application	0%	0%	
	E26/214	Live	80%	80%	
	E26/221	Application	0%	0%	
	E26/225	Application	0%	0%	
	P24/5439	Application	0%	0%	
	P26/4527	Application	0%	0%	
	P26/4528	Application	0%	0%	
Gidji JV	P26/4529	Application	0%	0%	
	P26/4530	Application	0%	0%	
	P26/4531	Application	0%	0%	
	P26/4532	Application	0%	0%	
	P26/4534	Application	0%	0%	
	P26/4221	Live	80%	80%	
	P26/4522	Live	80%	80%	
	E25/544	Live	100%	100%	
	P25/2381	Live	100%	100%	
	P25/2382	Live	100%	100%	
	P25/2383	Live	100%	100%	
	P25/2384	Live	100%	100%	
Glandore	P25/2385	Live	100%	100%	
	P25/2386	Live	100%	100%	
	P25/2387	Live	100%	100%	
	P25/2430	Live	100%	100%	
	P25/2431	Live	100%	100%	
	P25/2465	Live	100%	100%	
Randalls	E25/596	Application	0%	0%	
Lang Well	E59/2377	Live	100%	100%	
Lakeside	E21/212	Application	0%	0%	
	E51/1932	Live	100%	0%	
Garden Gully⁴	E51/1972	Live	0%	0%	
_	E51/1972	Live	0%	0%	
Whaleshark	E08/3166	Live	100%	100%	
	E08/3176	Application	0%	O%	
	E08/3177	Application	0%	O%	
	E08/3195	Application	0%	O%	
Bangemall	E08/3196	Application	0%	0%	
-	E08/3284	Application	0%	O%	
	E09/2484	Application	0%	0%	
	E52/3893	Live	100%	100%	

<sup>&</sup>lt;sup>4</sup> Sold to Sipa on 22 June 2021