

HIGH GRADE GOLD AT GIDJI UPGRADES AIRCORE TARGETS

- Aircore re-split assays return 2m @ 7.7g/t Au at "Marylebone" target
- Preparations underway for 10,000m phase 2 infill aircore drilling campaign
- Diamond drilling planned for 8-Mile following re-examination of historical data

Miramar Resources Limited (ASX:M2R, "Miramar" or 'the Company") is pleased to provide an update on exploration activities at the company's 80% owned Gidji JV Project ("Gidji"), 15km north of Kalgoorlie, where assays from 1 metre re-split samples have returned high-grade gold up to 2m @ 7.7g/t Au, including 1m @ 13.58g/t Au.

Re-split assays upgrade targets

Assay results from 1 metre re-splits of the original 4m composite samples have now been received and have upgraded the new targets identified from the phase 1 aircore campaign (Figure 1 and Table 1).

The new results include a high-grade result of **2m** @ **7.7g/t Au** in **GJAC096** (including **1m** @ **13.58g/t Au**) within the newly defined "Marylebone" target (Figure 2). This is the best result of any recent or historical drill hole within the granted project tenements to date.

As previously announced, **GJAC096** intersected coarse visible gold within an oxidised quartz vein at the base of a paleochannel overlying weathered ultramafic rocks (see ASX Release dated 1 February 2021).

The Marylebone target has a strike length of at least 1.6km and remains open along strike to the northwest and down dip to the west (Figure 2).

Miramar's Executive Chairman, Mr Allan Kelly said the new results justified the Company's excitement about the project and, in particular, about the newly identified Marylebone target.

"It's still early days, but Marylebone looks similar in terms of geology, structure and scale to the 10 million ounce Paddington deposit," Mr Kelly said.

"Paddington is located only 10km along strike to the northwest and within the same regional structure, the Boorara Shear Zone," he added.

In addition to the Marylebone target, the recent re-split assays have confirmed and upgraded results from the "Railway" target, on the west side of the Goldfields Highway as follows:

- GJAC084 1m @ 2.09g/t Au from 54m
- GJAC085 1m @ 0.73g/t Au from 61m

The Railway target remains open to the west, as far as the project boundary, and potentially along strike.

Preparations for Phase 2 Aircore drilling

The Company advises that final preparations are underway for the phase 2 aircore programme, which is expected to commence at the end of this month.

The programme will total approximately 10,000m with holes drilled on a nominal spacing of 200m x 50m. The second phase programme aims to refine the targets identified by the phase 1 drilling programme and to provide targets for follow-up RC drill testing of basement targets.

The programme is expected to take approximately 4 weeks to complete.





Figure 1. Gidji JV project showing summary of recent drilling results, including new re-split assays.





Figure 2. Marylebone target showing summary of recent drilling over GSWA geology.



Diamond Drilling planned for 8-Mile target

Further investigation of historical drilling data within the project has revealed that the two diamond holes previously drilled by KCGM in 2013 were apparently not assayed through the hanging wall sequence above and to the west of the Runway porphyry unit as follows (Figure 3):

- EMD0031 was apparently not assayed from 100.5m to 471m downhole
- EMD0032 was apparently not assayed from 100m to 317m downhole

The two diamond holes collared approximately 25m south of the project boundary intersected several mineralised quartz veins in the equivalent hanging wall position, some of which returned high-grade gold results including the following (Figure 4):

- EMD0028
 - o 1.3m @ 5.85g/t Au
 - o 3.98m @ 5.96g/t Au, including 0.44m @ 48.6g/t Au
 - 0.75m @ 17.45g/t Au
- EMD0029
 - o 1.0m @ 2.86g/t Au
 - 1.34m @ 2.27g/t Au
 - o 1.0m @ 2.27g/t Au

The Runway porphyry unit intersected in these two holes was effectively unmineralised.

Miramar's Executive Chairman, Mr Allan Kelly, said the lack of sampling in the hanging wall had the potential to significantly increase the prospectivity of the 8-Mile target.

"This means that the prospective hanging wall position has apparently not been properly tested for at least 400m of strike despite the presence of several quartz veins in the equivalent position within holes EMD0031 and EMD0032," Mr Kelly said.

"It also suggests that the regolith gold (+/- pathfinder) anomalism detected in the recent aircore holes on the two aircore lines drilled closest to the southern project boundary may be related to the untested hanging wall position instead of the porphyry unit," he added.

Miramar does not currently have access to the core from these holes and has therefore committed to completing 1-2 diamond holes targeting both the hanging wall position and the Runway porphyry as a matter of priority.

The Company has secured a suitable drill rig and drilling will commence by the end of this month.





Figure 3. Cross section 2020N showing historic diamond holes and unassayed hanging wall section.



Figure 4. Runway cross section 1600N, 25m south of Gidji JV tenement boundary, showing mineralised quartz veins in the hanging wall position (data source KCGM WAMEX report a098327).



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

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 the Gidji JV Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.



Table 1. Phase 1 aircore re-split assays

			FOU	4m	composite	s (Aqua-Re	egia)	1m r	e-splits (A	qua-Regia/	'FAA)
Hole ID	MGA E	MGA N	EOH	From	То	Interval	Au	From	То	Interval	Au
			Depth	(m)	(m)	(m)	(g/t)	(m)	(m)	(m)	(g/t)
GJAC004	352348	6609115	68	56	60	4	0.122	56	57	1	0.012
								57	58	1	0.059
								58	59	1	0.123
								59	60	1	0.203
GJAC010	352323	6609510	40	36	40 EOH	4	0.162	36	37	1	0.005
								37	38	1	0.922
								38	39	1	0.056
								39	40 EOH	1	0.014
GJAC026	351677	6613066	72	40	44	4	0.177	40	41	1	0.004
								41	42	1	0.004
								42	43	1	0.017
								43	44	1	0.016
				56	60	4	0.190	56	57	1	0.087
								57	58	1	0.257
				1				58	59	1	0.076
								59	60	1	0.038
GJAC030	351910	6612493	50	36	40	4	0.138	36	37	1	0.109
								37	38	1	0.012
								38	39	1	0.005
								39	40	1	0.006
GJAC031	351814	6612431	49	36	40	4	0.205	36	37	1	0.540
			_		_			37	38	1	0.040
								38	39	1	0.010
								39	40	1	0.009
GJAC036	351854	6612058	60	48	52	4	0.103	48	49	1	0.105
					_			49	50	1	0.022
								50	51	1	0.098
								51	52	1	0.039
GJAC044	352001	6611739	72	44	48	4	0.111	44	45	1	0.002
					_		-	45	46	1	BDL
								46	47	1	0.079
								47	48	1	0.011
GJAC048	351784	6611174	60	32	36	4	0.289	32	33	1	0.009
				_				33	34	1	0.316
				1				34	35	1	0.087
								35	36	1	0.02
GJAC052	352030	6611337	92	72	76	4	0.099	72	73	1	0.003
					-			73	74	1	0.005
				1				74	75	1	0.003
				1				75	76	1	0.003
GJAC058	352102	6610904	70	68	70 EOH	2	0.779	68	69	1	0.014
			-				_	69	70 EOH	1	0.357
GJAC059	352008	6610840	53	52	53 EOH	1	0.133	52	53 EOH	1	0.063
GJAC062	351944	6610786	54	36	44	8	0.116	36	37	1	0.019
								37	38	1	0.028



			5011	4m composites (Aqua-Regia)			1m re-splits (Aqua-Regia/FAA)				
Hole ID	MGA E	MGA N	EOH Depth	From	То	Interval	Au	From	То	Interval	Au
			Deptil	(m)	(m)	(m)	(g/t)	(m)	(m)	(m)	(g/t)
								38	39	1	0.211
								39	40	1	0.358
								40	41	1	0.354
								41	42	1	0.065
								42	43	1	0.006
								43	44	1	0.029
GJAC068	352247	6610508	52	48	52 EOH	4	0.135	48	49	1	0.132
								49	50	1	0.205
								50	51	1	0.079
								51	52 EOH	1	0.047
GJAC084	350087	6611394	63	52	56	8	0.194	52	53	1	0.076
								53	54	1	0.397
								54	55	1	2.084
								55	56	1	0.326
								56	57	1	0.032
								57	58	1	0.061
								58	59	1	0.007
								59	60	1	0.004
GJAC085	349999	6611360	56	48	56 EOH	8	0.351	48	49	1	0.008
								49	50	1	0.097
								50	51	1	0.253
								51	52	1	0.740
								52	53	1	0.728
								53	54	1	0.044
								54	55	1	0.182
								55	56 EOH	1	0.026
GJAC096	351681	6612730	73	56	64	8	0.496	56	57	1	0.003
								57	58	1	0.013
								58	59	1	13.576
								59	60	1	1.811
								60	61	1	0.387
								61	62	1	0.076
								62	63	1	0.075
								63	64	1	0.119

Notes:

- All re-split assays shown
- Samples assayed by Aqua-Regia/ICPMS with samples >2000ppb Au re-assayed by Fire Assay.
- All holes drilled vertically to "blade refusal" (i.e. Dip -90, Azimuth 000)
- Collar coordinates recorded in MGA Zone 51S with handheld GPS
- Collar RL nominally 360mASL
- BDL Below Lower Detection Limit



ABOUT MIRAMAR RESOURCES LIMITED

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

The Company's Board has a track record of successful discovery, development and production within Australia, Africa, and North America and aims to create shareholder value through acquisition, exploration and monetisation of high-quality mineral assets.

ABOUT THE GIDJI JV PROJECT

The Gidji JV Project is located approximately 15km north of Kalgoorlie and consists of 3 granted 14 tenements and applications covering а strike length of approximately 12km. Miramar purchased an 80% interest in the Gidji JV project tenements as part of the recent IPO.

The Gidji JV Project is located with the Boorara Shear Zone, a major mineralised structure that hosts the Paddington gold deposit along strike to the north.

The project has been poorly explored despite its location close to a number of major gold deposits.

Miramar believes the project therefore contains a number of opportunities for the discovery of an economic gold deposit within close proximity to existing mining and processing infrastructure.





JORC 2012 Table 1 – Gidji JV Aircore Drilling (including resplits)

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. 	 Sampling conducted by scooping material from individual 1 meter sample piles and combining to form 4-meter composite samples Samples with results over 100ppb Au were resampled from individual 1m sample piles using a scoop.
Drilling techniques	 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). 	 Vertical aircore drilling to "blade refusal" Hammer bit was used occasionally where the rig encountered hard material within the regolith profile that was not interpreted to be "bedrock"
Drill sample recovery	 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. 	 Not recorded
Logging	 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 dry and wet sieved and logged for colour, weathering, grain size and interpreted geology



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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 4-meter composite samples were compiled from spear sampling of individual 1 meter sample piles Samples were generally dry Field duplicate samples were randomly collected with a frequency of 2 duplicates per 100 samples Samples with results over 100ppb Au were resampled from individual 1m sample piles using a scoop.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 Samples were assayed by an aqua-regia digest followed by analysis using ICPMS The analytical method is considered appropriate for this type of drilling QAQC samples were added at a frequency of 4 samples per 100 samples (ie 2 standards/blanks and 2 duplicate samples) Resplit samples were assayed by the same technique Samples returning results above the 2000ppb Au upper detection limit were reassayed by the 25g Fire Assay technique
Verification 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. 	 No verification has been undertaken to date except for resplits of anomalous samples above 100ppb Au
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 were recorded 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 	 Initial drilling was conducted at a nominal spacing of 400m x 100m which is appropriate for the first pass nature of this programme. Infill drilling will be required to determine the orientation and/or continuity of mineralisation



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	 applied. 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 likely that the mineralized structures trend at a different orientation to the regional geology
Sample security	The measures taken to ensure sample security.	 Samples were transported directly from the drill site to the assay laboratory by Miramar field staff
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			
<i>Mineral tenement and land tenure status</i>	 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, P26/4221 and P26/4222 which are 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 	 Figure 1 shows locations of all drill holes Table 1 shows all resplit assays compared with original 4m composite results 			



Criteria	JORC Code explanation	Commentary
Data aggregation methods	 clearly explain why this is the case. 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. 	 All resplit results shown Intervals reported over 0.25g/t Au
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 drill collars and maximum Au in hole shown in Figure Table lists significant intersections Holes not tabulated contained no significant results
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 diamond drilling planned