

## ASX ANNOUNCEMENT



### SIGNIFICANT GOLD RESULTS FROM GIDJI JV DRILLING

- **More aircore results >1g/t Au from Marylebone – remains open to NW**
- **New 1km long target zone with results up to 6m @ 1.23g/t Au (GJAC426)**
- **Significant aircore results from several other Gidji JV targets**
- **Further aircore and RC drilling planned**

**Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”)** is pleased to announce further significant aircore drilling results from its 80% owned Gidji JV Project (“Gidji” or the “Project”) in the Eastern Goldfields region of Western Australia.

Miramar’s Executive Chairman, Mr Allan Kelly, said the new results from aircore holes drilled at the Marylebone, Railway, Piccadilly and 8-Mile targets continued to reinforce the potential for one or more significant new gold discoveries at Gidji.

*“Marylebone continues to deliver significant aircore results from each programme which increases our confidence that there could be a significant new gold discovery to be outlined,” Mr Kelly said.*

*“After four aircore programmes of relatively wide-spaced holes, we still have not yet determined the full extent of the Marylebone footprint, which is currently about 2km long, and still growing,” he added.*

*“In addition, even though our focus has been mostly on defining the extents of the Marylebone target, we have also continued to test other targets that add to the developing opportunity at Gidji,” he added.*

#### **Marylebone**

The Company has now received all remaining results from holes drilled as part of the Phase 3 and 4 aircore programmes at Marylebone as well as resplits of some holes from those programmes.

The Marylebone target comprises at least four parallel zones of coherent aircore gold mineralisation, stretching over almost 2km of strike, which are related to contacts between mafic and ultramafic rocks similar to the Paddington and Panglo deposits along strike to the northwest (Figure 1).

The new drilling results have outlined a new zone of gold anomalism >0.25g/t Au, west of the previous drilling, which is at least 1km long and with **6m @ 1.23g/t Au in GJAC426** at its northern end. This target is open to the north and west.

Within the central target zone, holes **GJAC428 (1m @ 2.63g/t Au)** and **GJAC429 (5m @ 1.21g/t Au)** were drilled either side of holes **GJAC308** and **GJAC309**, that did not reach basement. In both cases the new holes intersected high-grade gold in weathered basement directly beneath the unconformity with the transported material.

The most easterly of the four zones now stretches for over 1km and contains multiple results over 1g/t Au, several associated with elevated Ag indicating proximity to a potential bedrock gold source.

The Marylebone target is now apparently closed off at the south-eastern end but remains open along strike to the northwest onto the recently granted tenement applications.

The Company plans to extend the aircore drill coverage to the northwest, as well as conducting selected infill holes, and plans to complete this drilling by the end of 2021.

The aim of the next aircore drilling campaign will be to refine targets for RC drill testing in early 2022.



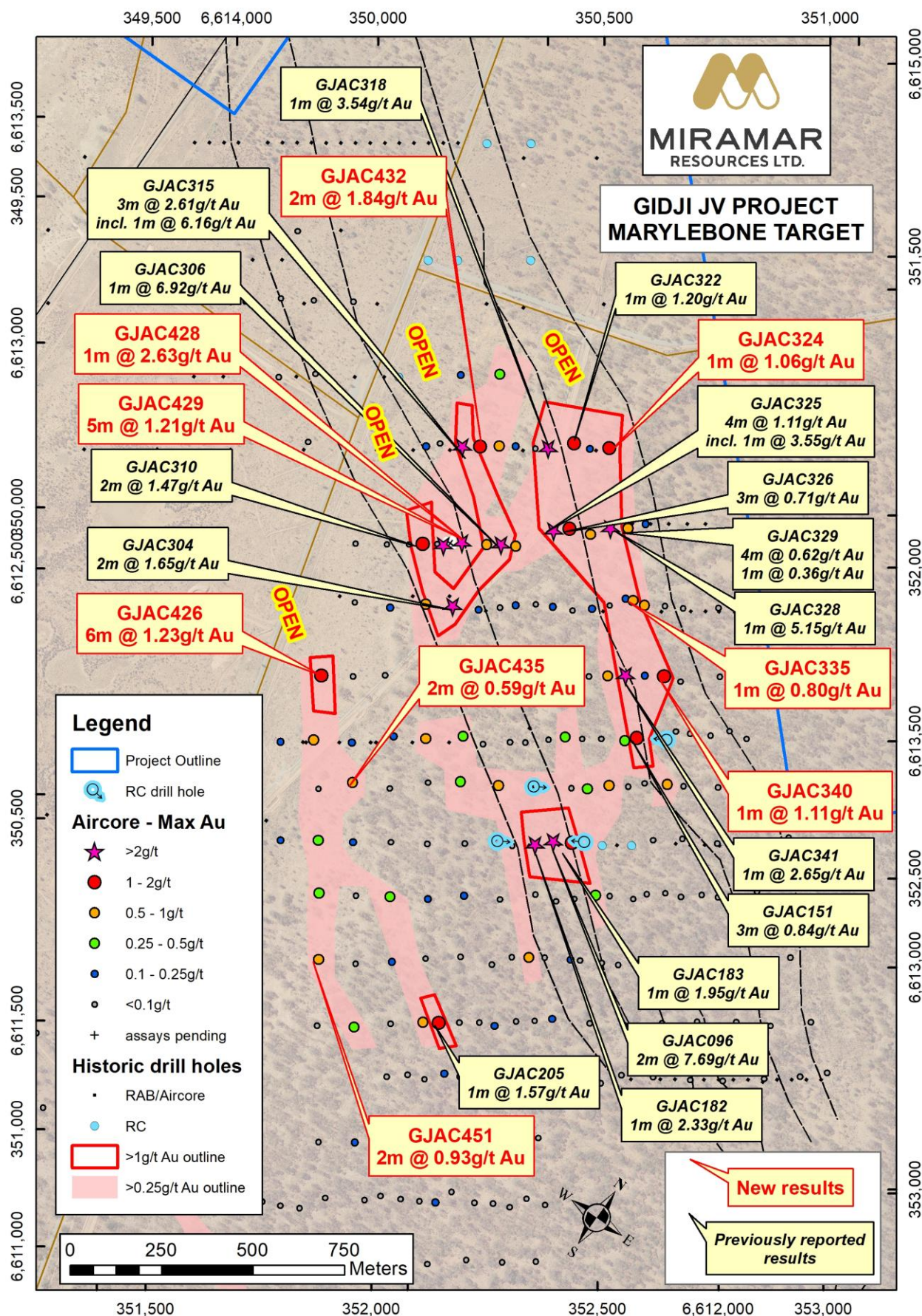


Figure 1. Marylebone Target showing new and previous drill results (map rotated to grid north)





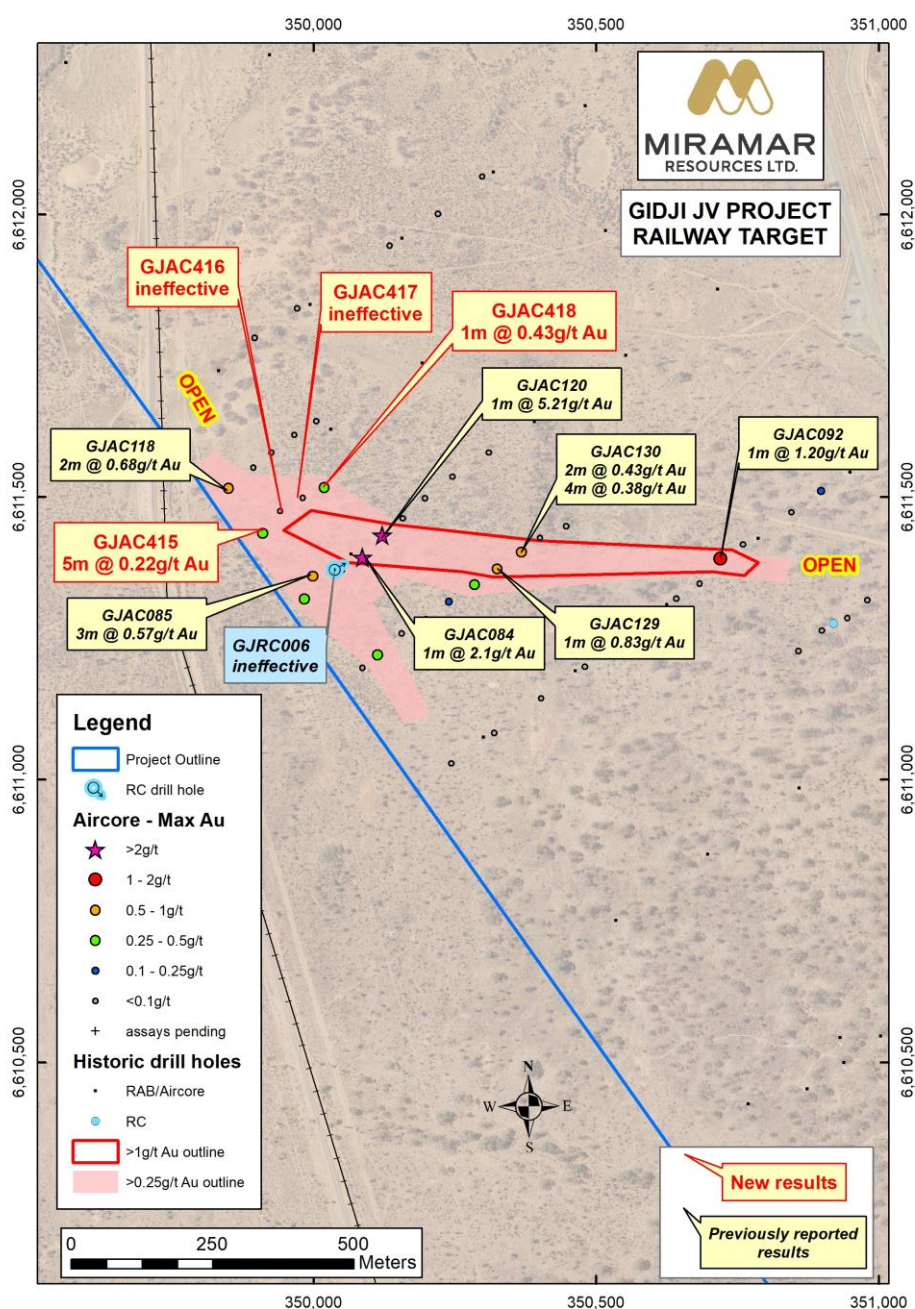
## Railway

The Railway target is characterised by a linear aircore gold anomaly in Black Flag sediments that stretches for almost 1km and remains open along strike to the northwest.

Notably, the RC hole drilled in June (GJRC006) did not test beneath the high-grade results as the rods became bogged in overlying transported clays before the hole was abandoned.

Recent aircore drilling (**GJAC415** and **418**) intersected strongly anomalous gold along strike from the two best results, however two of the holes on that section (GJAC416 and 417) did not reach basement.

Further drilling is planned for this target.



**Figure 2.** Railway target showing new and previous results.



## Piccadilly

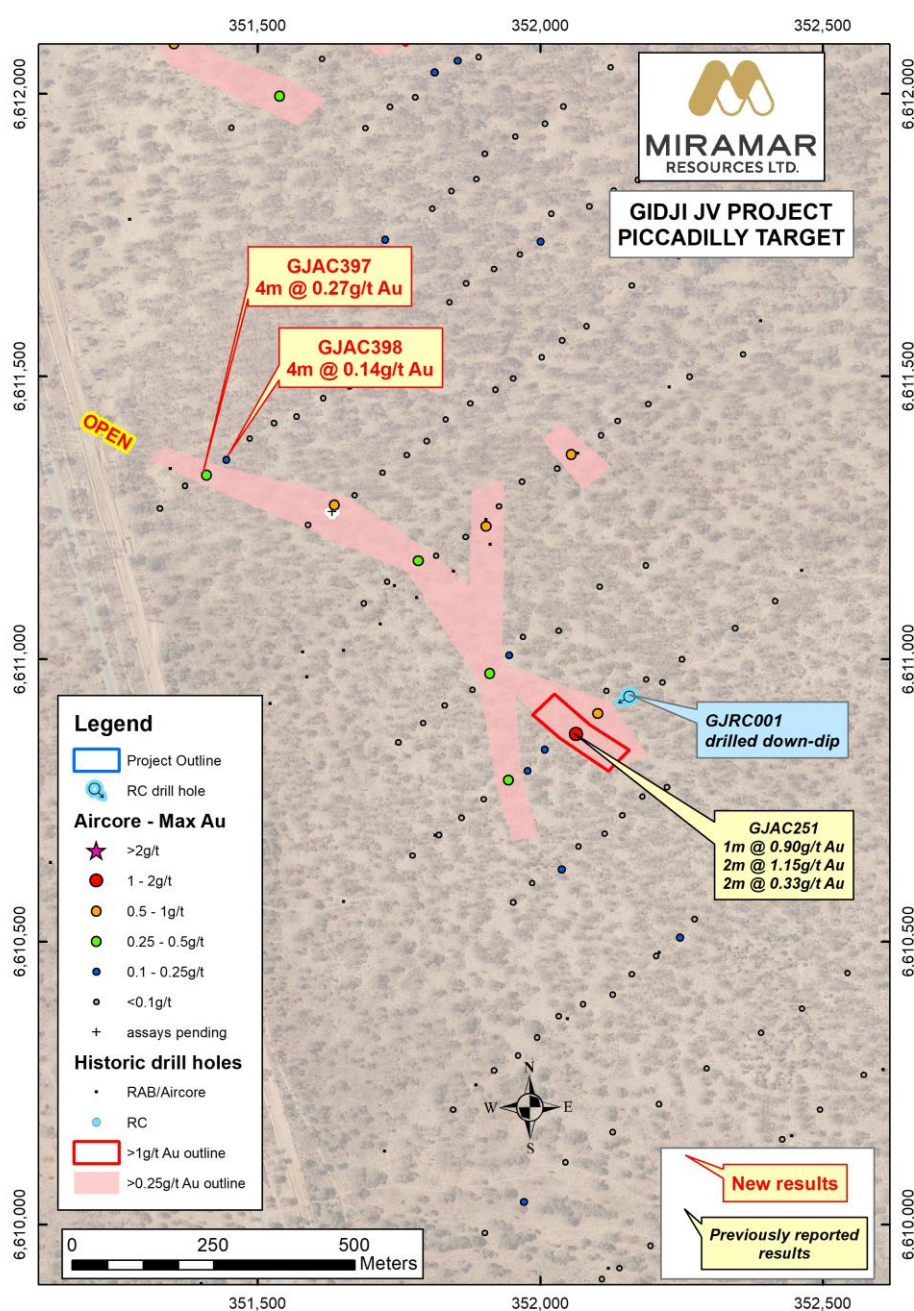
The Piccadilly target is located approximately halfway between the 8-Mile and Marylebone targets and is characterised by a cross-shaped aircore gold anomaly apparently related to the intersection of NW - trending and N-S trending structures.

**GJAC251** previously intersected several zones of anomalous gold  $>0.1\text{g/t}$  in black shale with abundant quartz veining and sulphides, along with highly anomalous As (up to 0.5%), Mo and Sb.

A single RC hole (GJRC001) was drilled towards the southwest and was not a conclusive test of the target.

Two recent aircore holes (**GJAC397** and **398**) intersected anomalous gold at the northern end of the target, which remains open along strike towards the Railway target.

A single RC hole is planned to test underneath GJAC251.



**Figure 3. Piccadilly Target showing new and previous drilling results.**





For more information on Miramar Resources Limited, please visit the company's website at [www.miramarresources.com.au](http://www.miramarresources.com.au), follow the company on LinkedIn and/or Twitter @MiramarRes or contact:

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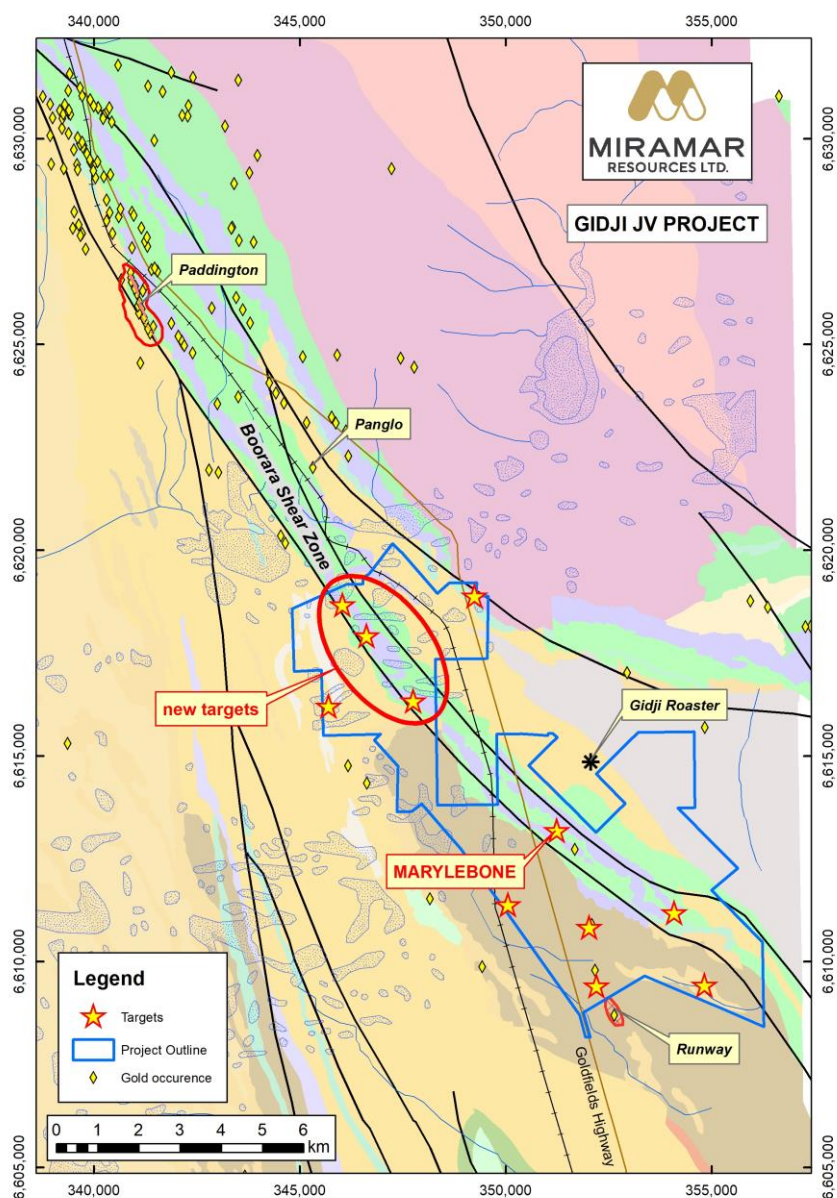
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This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

## ABOUT MIRAMAR RESOURCES LTD

Miramar Resources Limited is a WA-focused mineral exploration company actively exploring projects in the Eastern Goldfields, Murchison and Gascoyne regions and listed on the ASX in October 2020, following a heavily oversubscribed \$8 million IPO.

Miramar'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 discovery of high-quality mineral deposits.



**Table 1.** Significant aircore results from recent Gidji JV aircore drilling (including resplits)

Target	Hole	Easting	Northing	EOH Depth	From (m)	To (m)	Interval (m)	Au (g/t)	Notes
Marylebone	<b>GJAC324</b>	<b>351173</b>	<b>6613688</b>	<b>54</b>	<b>40</b>	<b>41</b>	<b>1</b>	<b>1.06</b>	<b>resplit</b>
	GJAC329	351343	6613541	51	24	28	4	0.62	previously reported
					42	43	1	0.36	resplit
	<b>GJAC335</b>	<b>351470</b>	<b>6613389</b>	<b>57</b>	<b>53</b>	<b>54</b>	<b>1</b>	<b>0.80</b>	<b>resplit, 1.9g/t Ag</b>
	<b>GJAC340</b>	<b>351661</b>	<b>6613271</b>	<b>61</b>	48	52	4	0.17	previously reported
					<b>54</b>	<b>55</b>	<b>1</b>	<b>1.11</b>	<b>resplit, 0.53g/t Ag</b>
	<b>GJAC426</b>	<b>350901</b>	<b>6612721</b>	<b>75</b>	<b>44</b>	<b>50</b>	<b>6</b>	<b>1.23</b>	<b>2.84g/t Ag</b>
				Incl.	<b>44</b>	<b>48</b>	<b>4</b>	<b>1.54</b>	
	<b>GJAC428</b>	<b>350998</b>	<b>6613245</b>	<b>58</b>	<b>48</b>	<b>49</b>	<b>1</b>	<b>2.63</b>	<b>8.14g/t Ag</b>
	<b>GJAC429</b>	<b>350962</b>	<b>6613209</b>	<b>72</b>	<b>43</b>	<b>48</b>	<b>5</b>	<b>1.21</b>	
				Incl.	<b>43</b>	<b>44</b>	<b>1</b>	<b>3.79</b>	
	<b>GJAC432</b>	<b>350885</b>	<b>6613484</b>	<b>81</b>	<b>48</b>	<b>50</b>	<b>2</b>	<b>1.84</b>	<b>1.82g/t Ag</b>
	GJAC433	350812	6613675	63	52	56	4	0.38	
	<b>GJAC435</b>	<b>351142</b>	<b>6612536</b>	<b>78</b>	<b>48</b>	<b>50</b>	<b>2</b>	<b>0.59</b>	<b>0.86g/t Ag</b>
	GJAC444	351245	6612237	71	50	52	2	0.30	0.75g/t Ag
	<b>GJAC446</b>	<b>351409</b>	<b>6612342</b>	<b>61</b>	<b>48</b>	<b>51</b>	<b>3</b>	<b>0.15</b>	
					52	56	4	0.34	
	GJAC447	351497	6612398	50	40	44	4	0.20	
	GJAC449	351518	6612202	54	44	52	8	0.18	
	<b>GJAC451</b>	<b>351352</b>	<b>6612089</b>	<b>66</b>	40	44	4	0.15	
					<b>46</b>	<b>48</b>	<b>2</b>	<b>0.93</b>	<b>0.8g/t Ag</b>
	GJAC453	351539	6611996	63	46	48	2	0.32	
Piccadilly	GJAC397	351410	6611326	48	36	40	4	0.27	
	GJAC398	351445	6611353	52	40	44	4	0.14	
8-Mile	GJAC403	352057	6609657	51	48	51EOH	3	0.20	
Railway	GJAC415	349910	6611436	57	48	53	5	0.22	
	GJAC418	350019	6611517	63	48	52	1	0.43	0.78g/t Ag

## 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.



## JORC 2012 Table 1 – Gidji JV Aircore Drilling

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>4m composite samples compiled from individual 1m sample piles</li> <li>Samples average 3kg in weight</li> <li>Samples with significant results are resplit by taking individual 1m samples for re-assay</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole 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).</li> </ul>	<ul style="list-style-type: none"> <li>Aircore drilling to "blade refusal"</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comments recorded for samples with low recovery</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the</li> </ul>	<ul style="list-style-type: none"> <li>Samples were logged for colour, weathering, grain size, geology, alteration and mineralisation where possible</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>4m composite samples combined from individual 1m samples piles to achieve approximately 3kg of sample</li> <li>Where possible sample intervals are split across the transported/basement boundary</li> <li>Samples with significant results are resplit by taking individual 1m samples for re-assay</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were assayed using an aqua-regia digest followed by analysis of gold and multi-elements by ICPMS with lower detection limit of 1ppb Au</li> <li>QAQC samples inserted at frequency of 4 QAQC samples (i.e. standard, blank duplicate) per 100 samples</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Samples with &gt;0.25g/t Au will be re-assayed as 1m re-splits</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Hole collar locations were recorded with a handheld GPS in MGA Zone 51S</li> <li>RL was also recorded with handheld GPS but accuracy is variable</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was planned to infill phase 1 aircore drilling to achieve an average spacing of 150-200m x 50m</li> <li>The spacing is appropriate for the stage of exploration</li> <li>1m sample piles were composited over 4m</li> <li>Samples with significant results are resplit by taking individual 1m samples for re-assay</li> </ul>





Criteria	JORC Code explanation	Commentary
	<i>applied.</i>	
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill lines were completed perpendicular to the trend of the main geological units and parallel to previous drill lines.</li> <li>It is likely that the mineralized structures trend at a different orientation to the regional geology</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were transported from site directly to the laboratory by Miramar staff</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits have been undertaken</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Miramar Goldfields Pty Ltd is a wholly owned subsidiary of Miramar Resources Limited</li> <li>Miramar has an exploration JV with Thunder Metals Pty Ltd</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration has been previously completed by other companies including Goldfields and KCGM, and included auger drilling, RAB, aircore and limited RC drilling.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The target is Archaean greenstone-hosted mesothermal gold mineralisation.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See Table 1 and various Figures which show all drilling completed to date.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Intervals reported over 0.25g/t Au with maximum of 1 sample of internal dilution</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No assumptions about true width or orientation of mineralisation can be made from the current programme</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See attached Tables and Figures</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All Marylebone holes shown in Figure 1</li> <li>Other figures show all holes completed at each target</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No other relevant data</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Further aircore, RC and/or diamond drilling planned</li> </ul>